

# Practical Evidence and Actions for *Rapid Results* to Protect America's Futures



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why?



Thinking about nurturing every child in this state & US

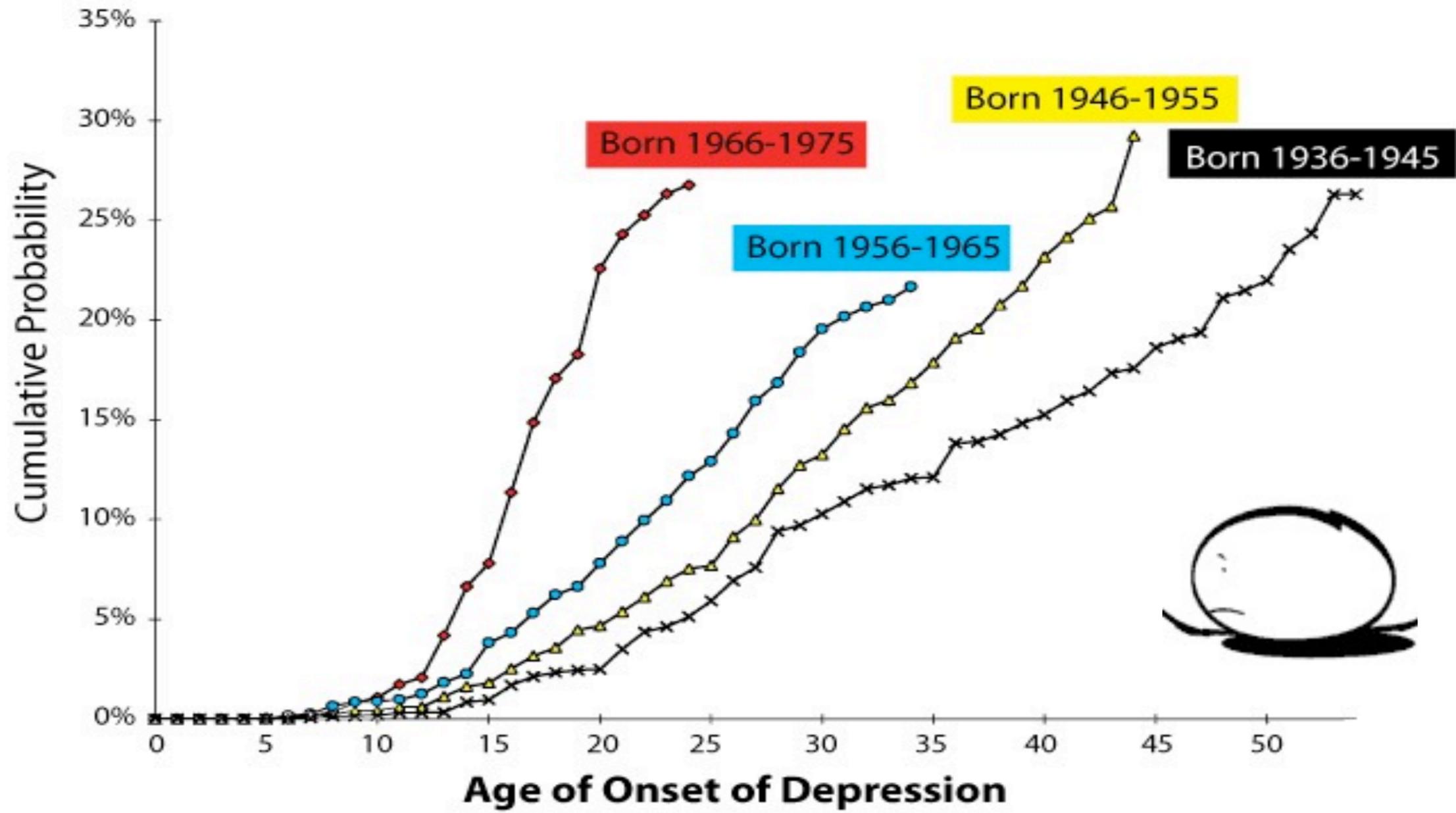


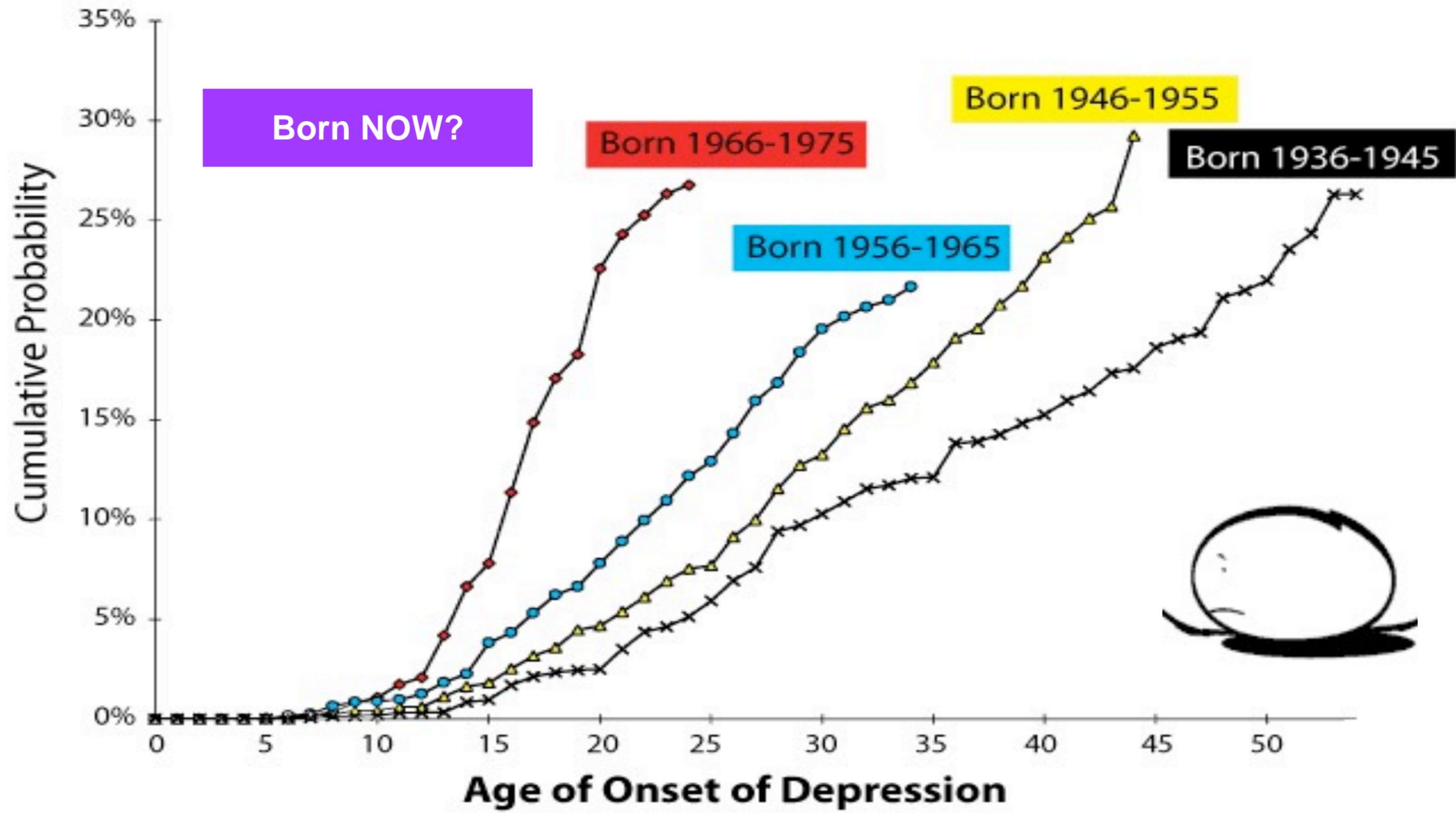
What do you wish to pack in our  
suitcases for life?



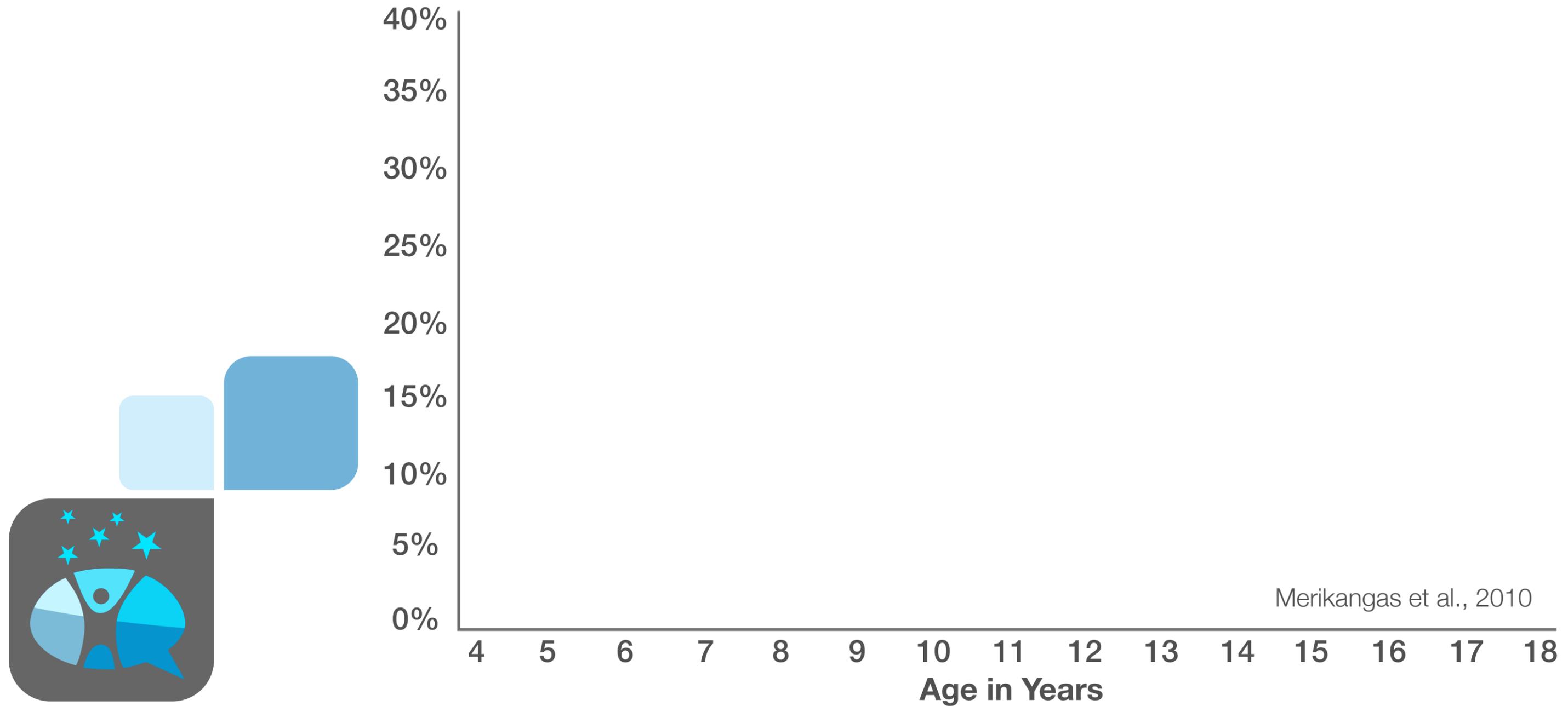
# Surveying the Past Foretells Our Futures



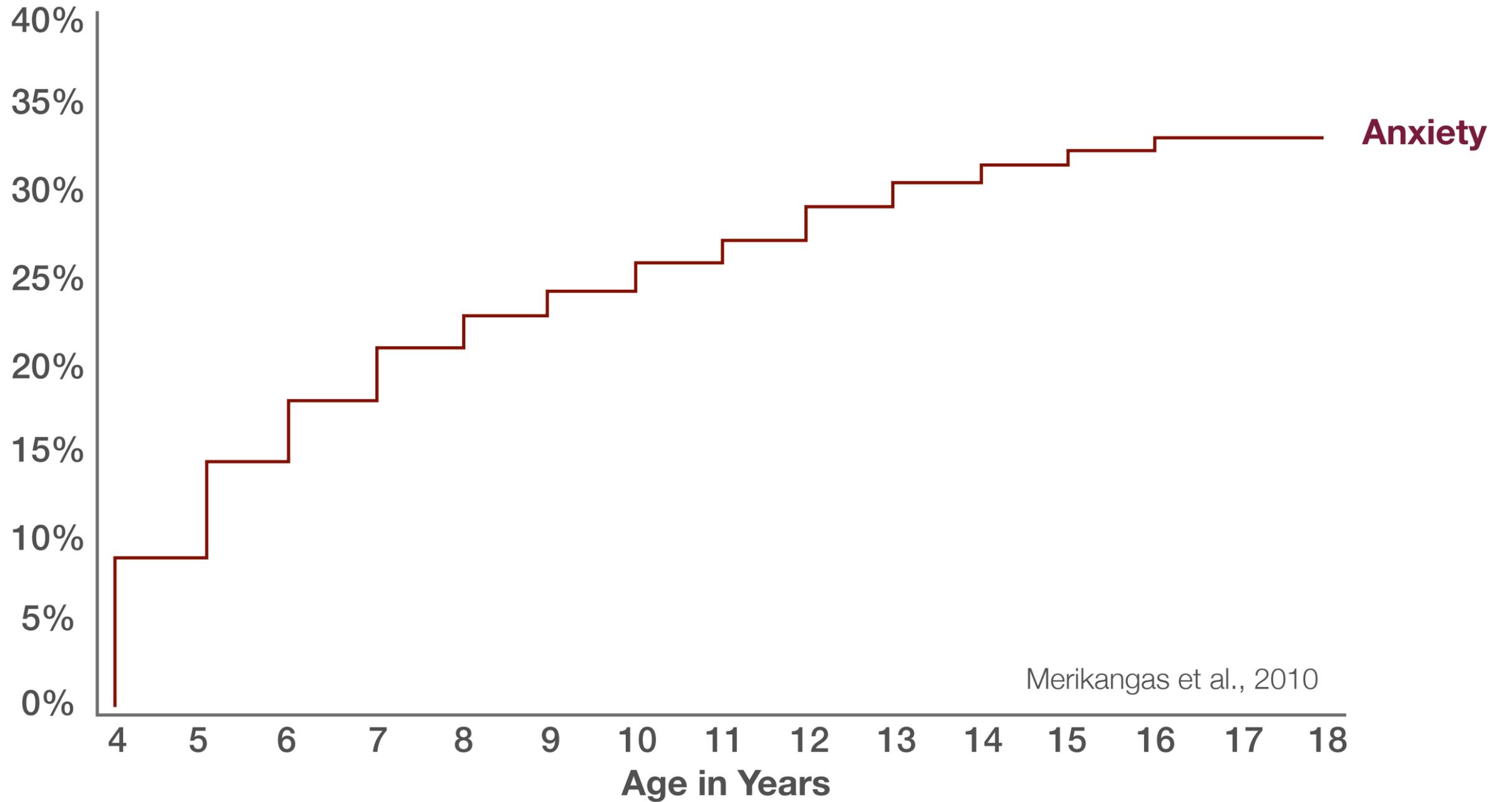
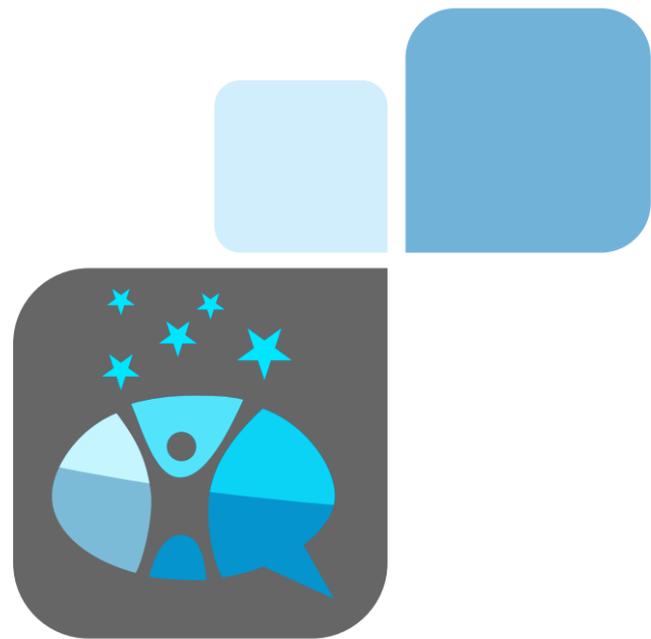




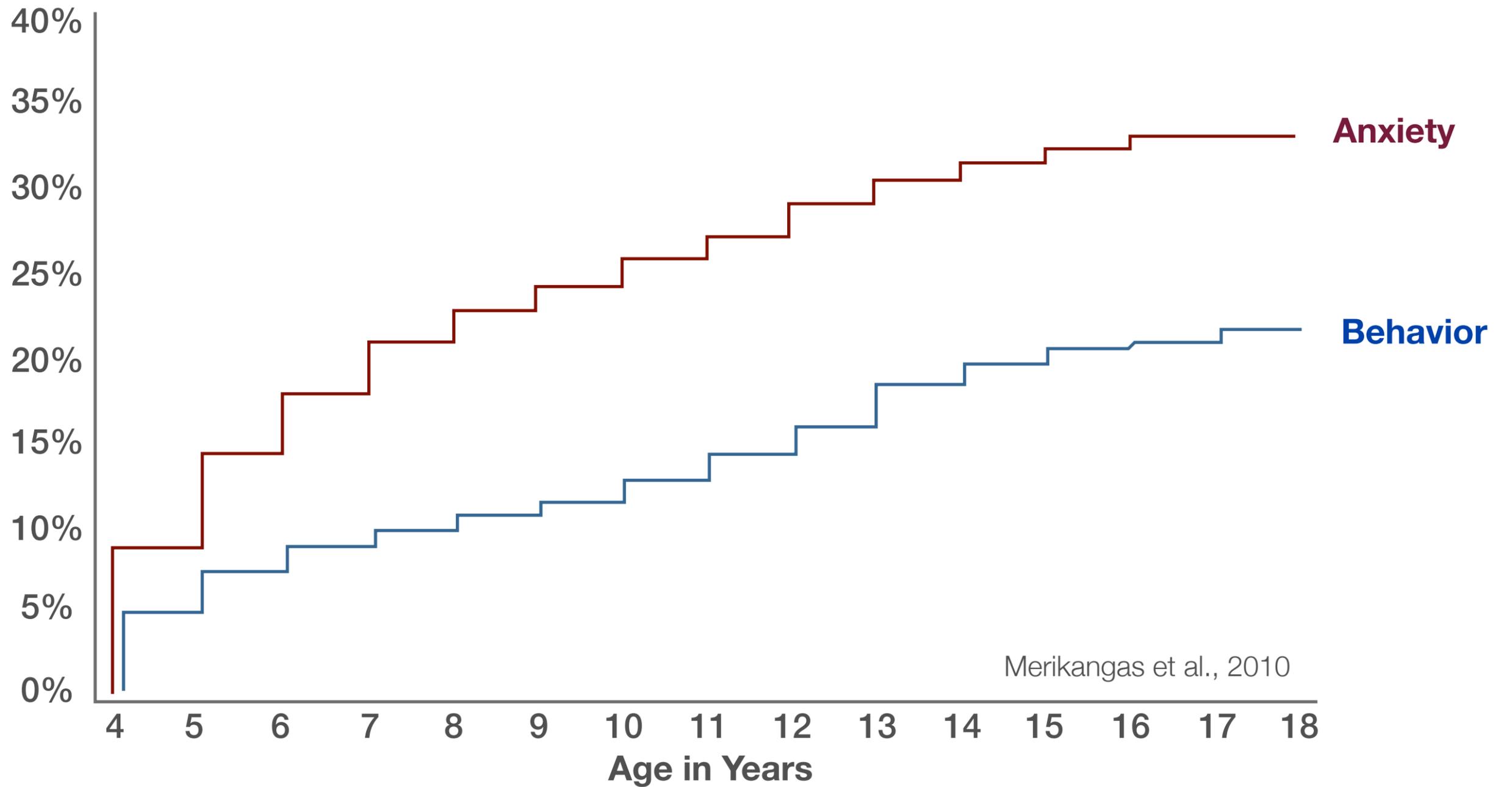
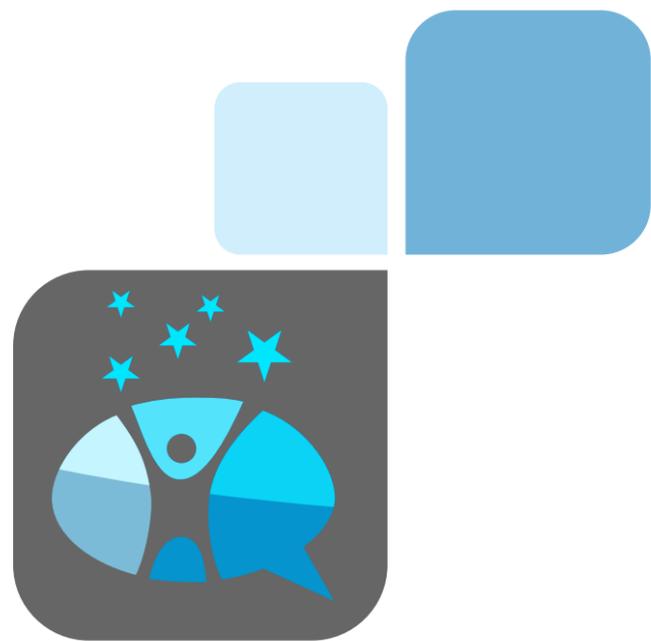
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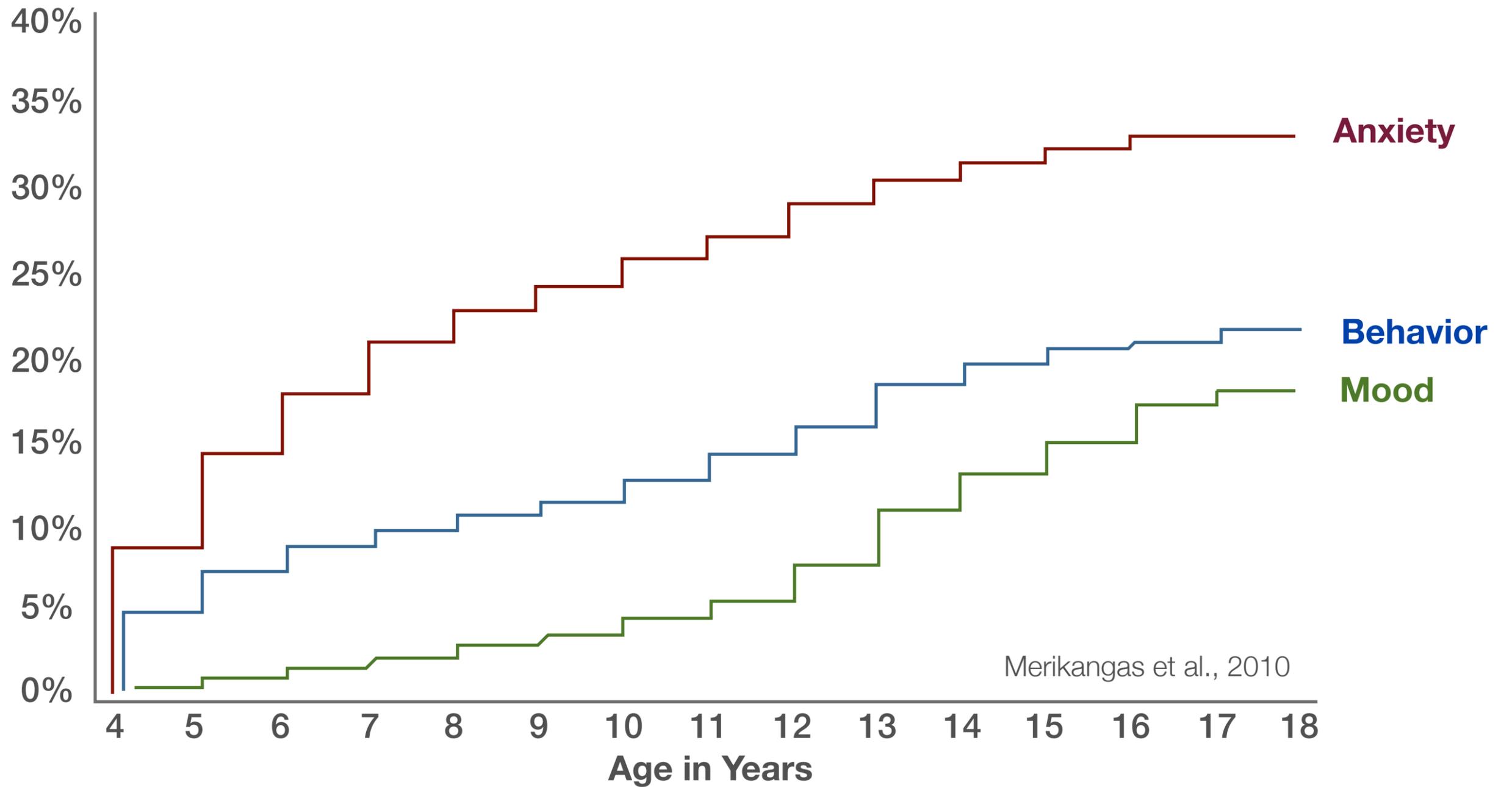
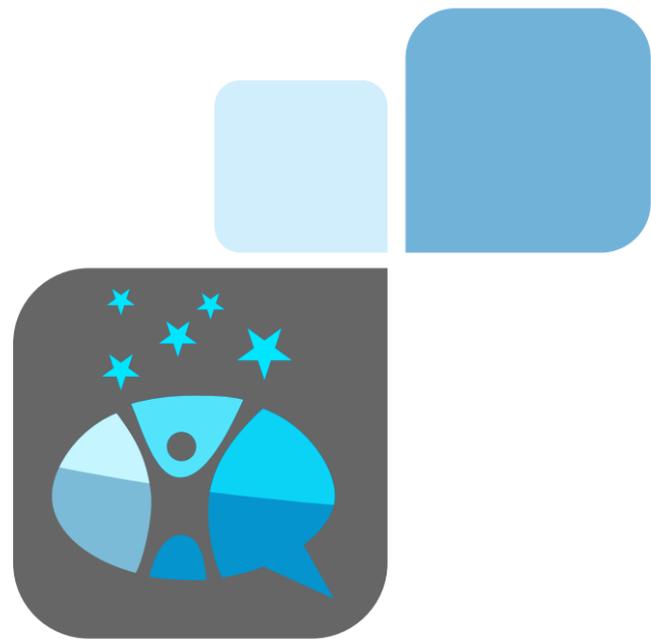
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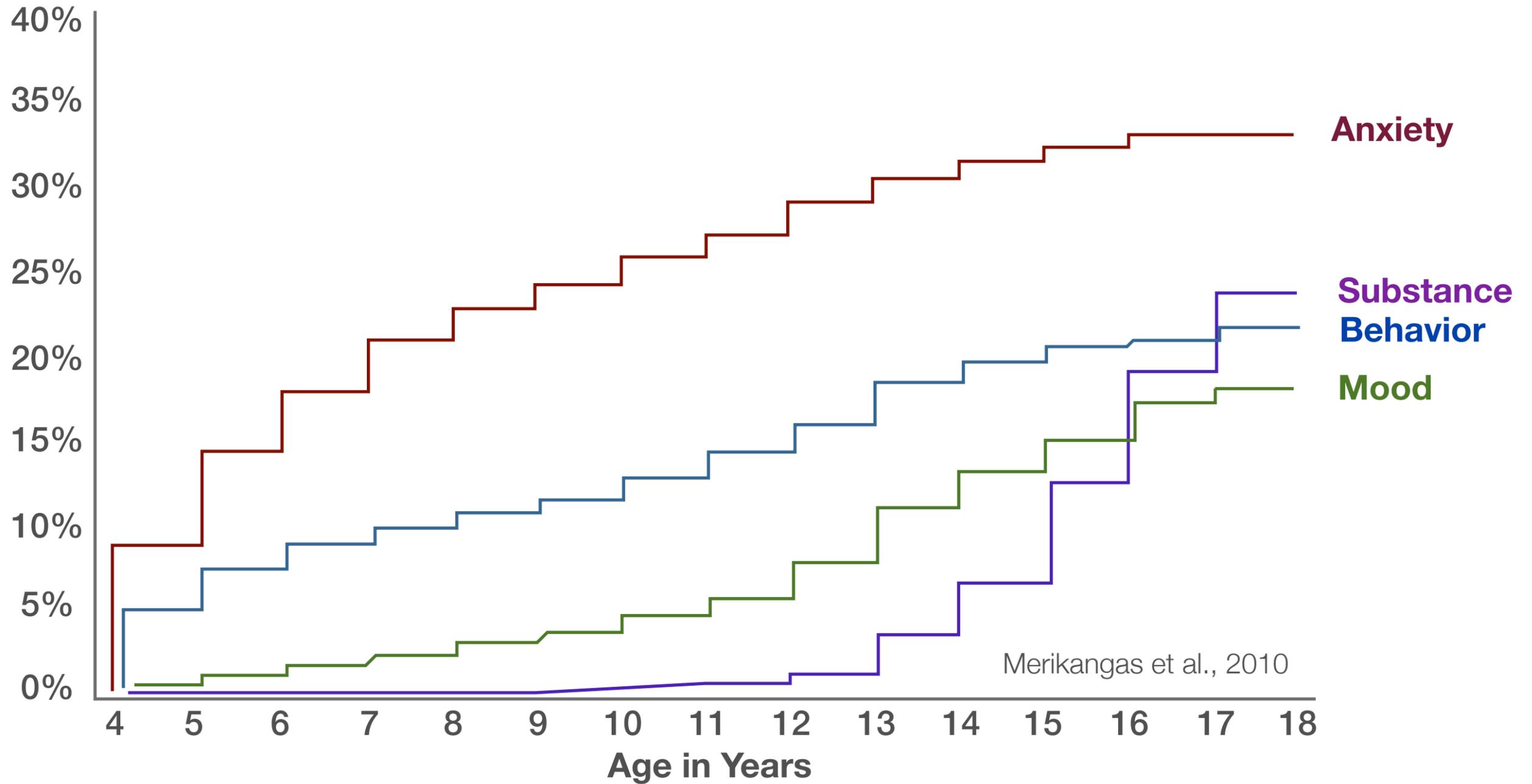
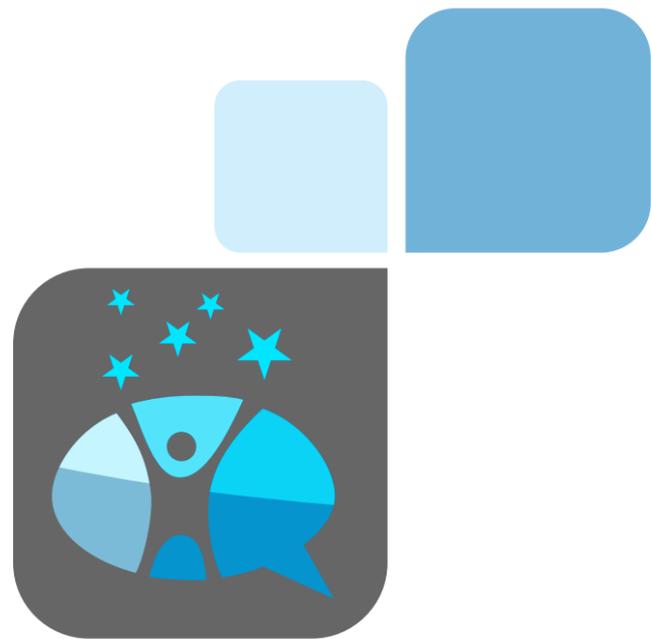
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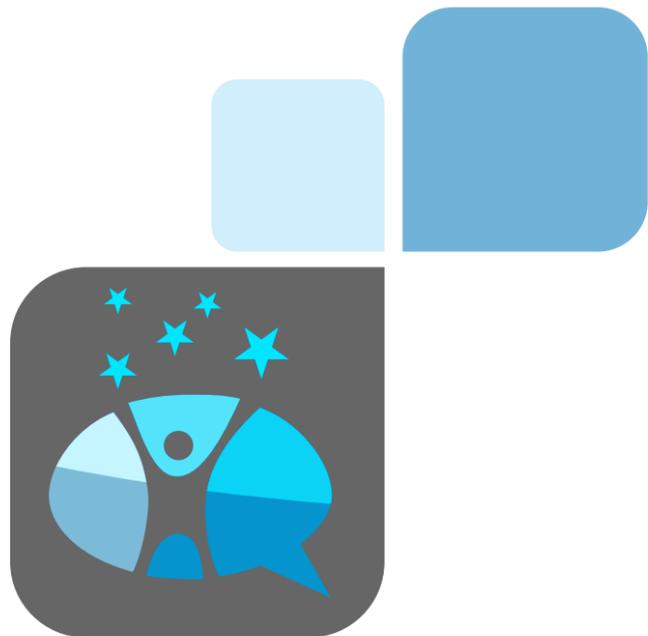
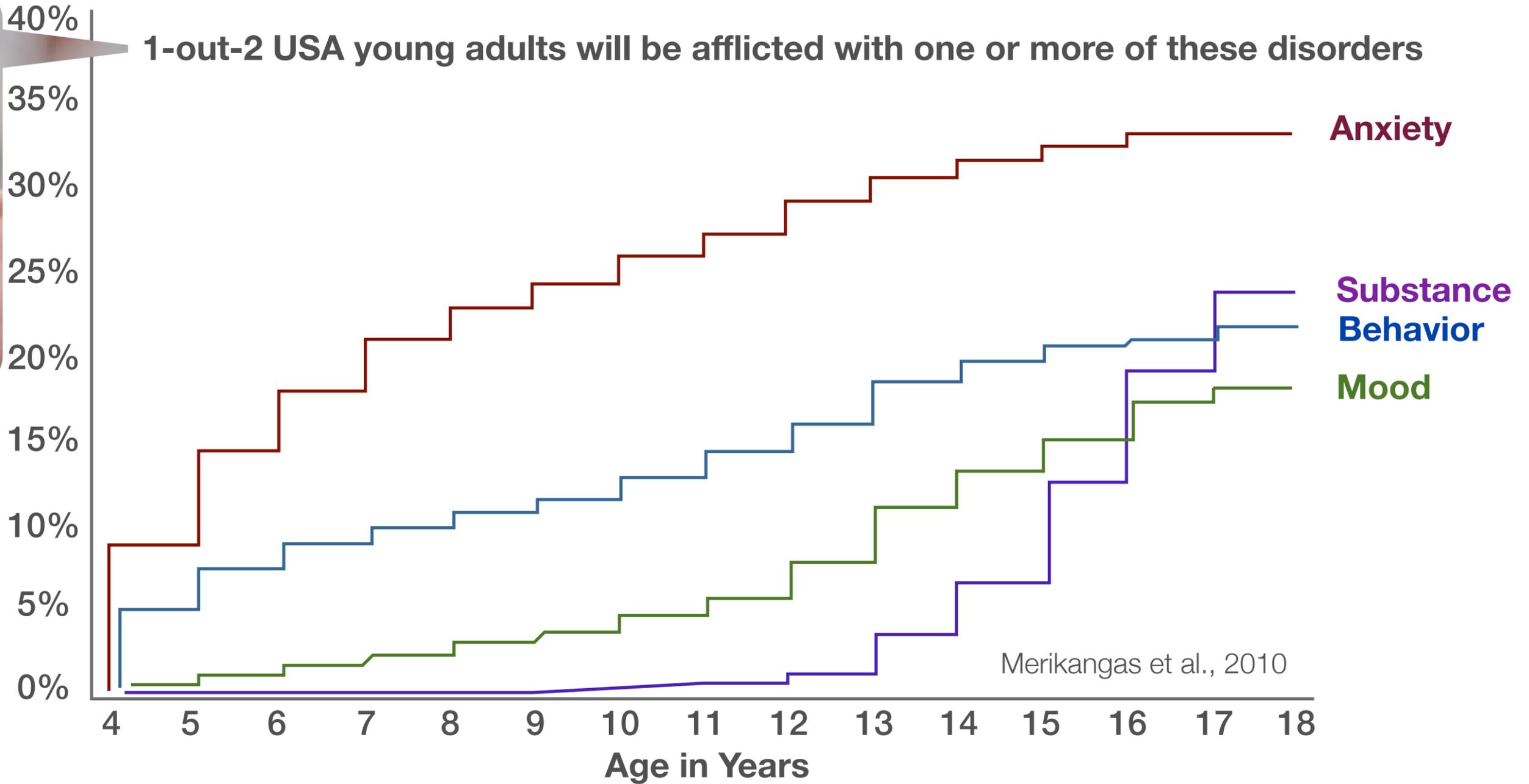
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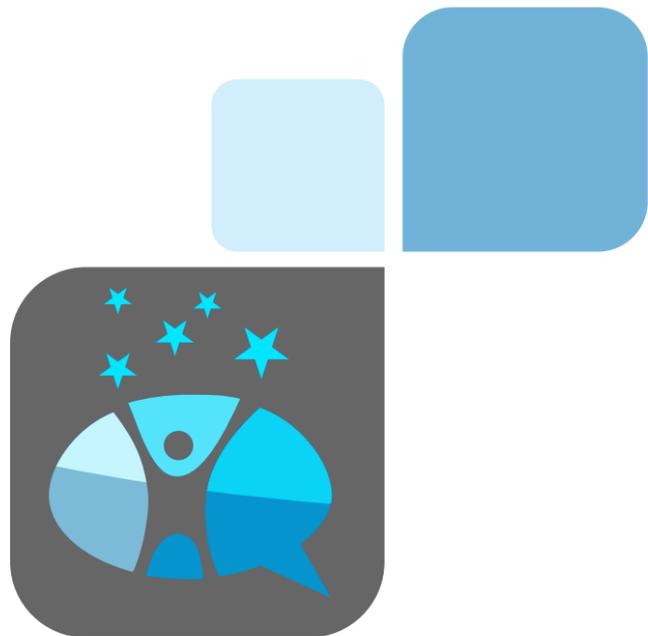


# Nearly 3 out of 4 of the nation's 17- to 24-year-olds are ineligible for military service for based on national epidemiological data



- Medical/physical problems, *35 percent.*
- Illegal drug use, *18 percent.*
- Mental Category V (the lowest 10 percent of the population), *9 percent.*
- Too many dependents under age 18, *6 percent.*
- Criminal record, *5 percent.*

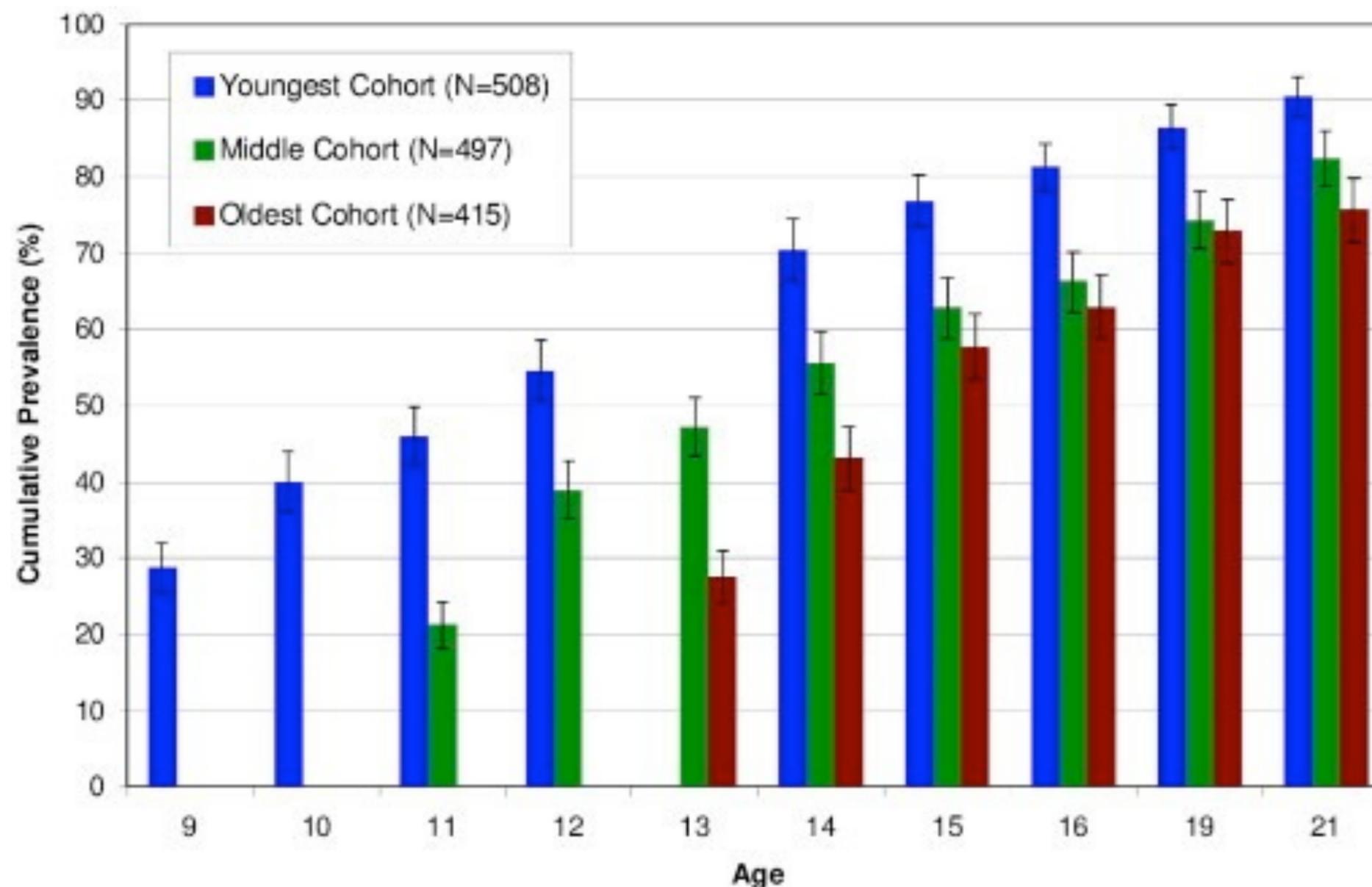
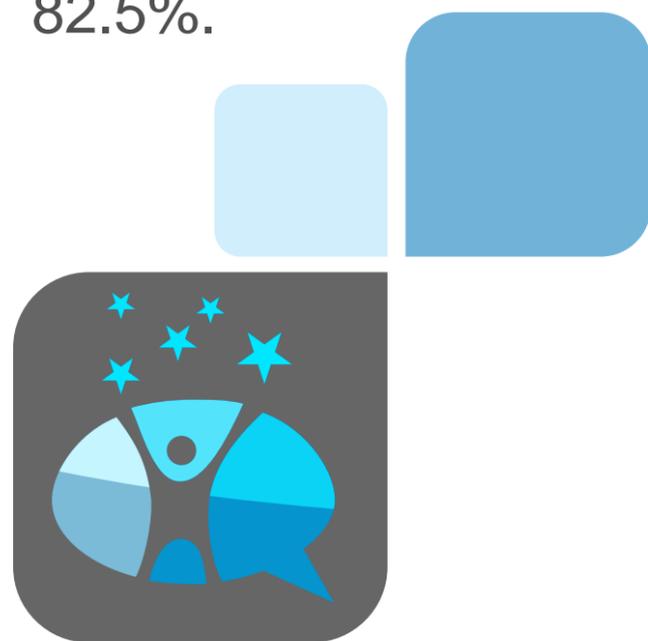
Army Times, Nov 5, 2009 • [www.missionreadiness.org/PAEE0609.pd](http://www.missionreadiness.org/PAEE0609.pd)



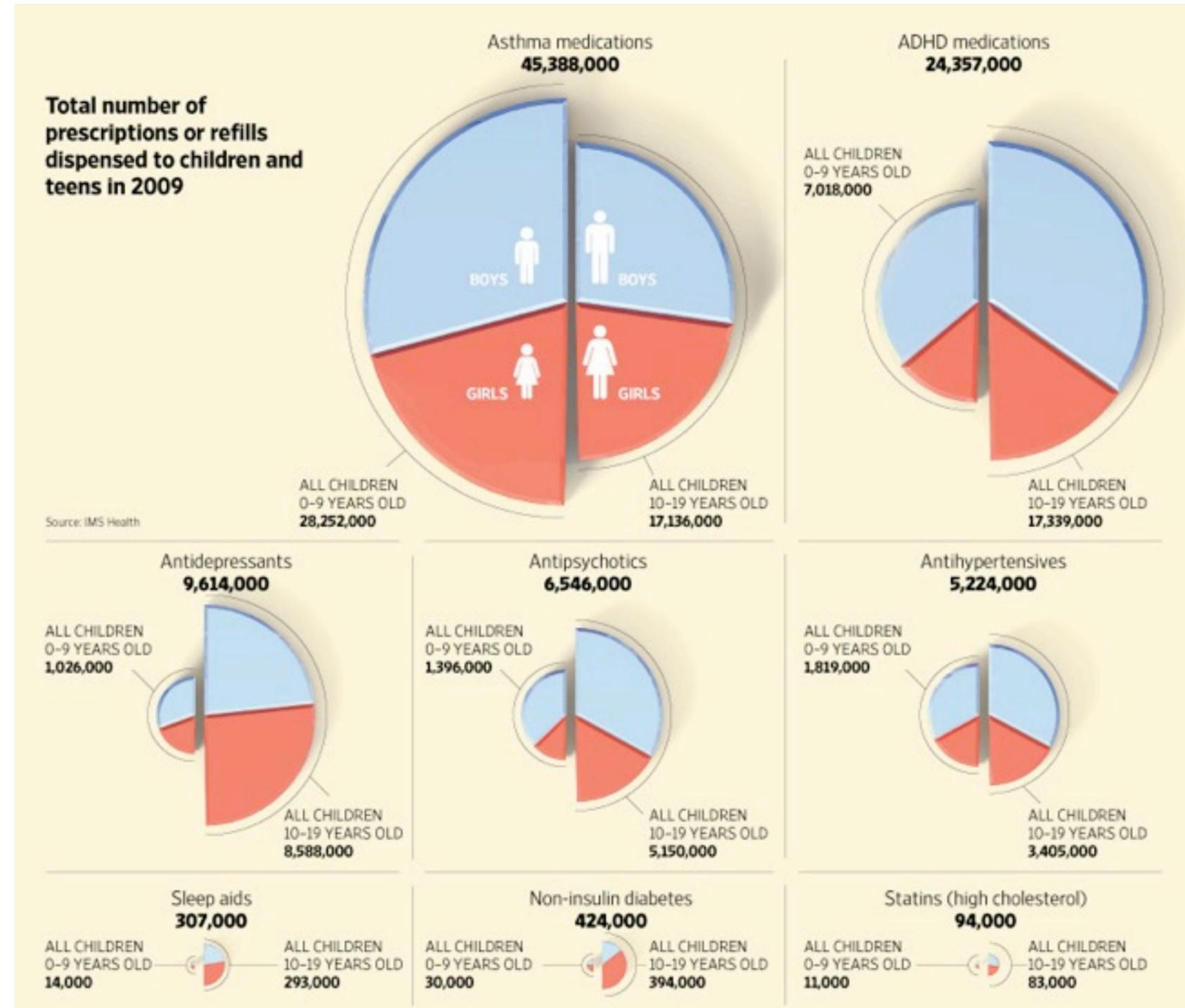
# Cumulative prevalence of psychiatric disorders by young adulthood: a prospective cohort analysis from the Great Smoky Mountains Study.

By 21 years of age, 61.1% of participants had met criteria for a well-specified psychiatric disorder.

An additional 21.4% had met criteria for a “*not otherwise specified disorder*” only, increasing the total prevalence for any disorder to 82.5%.

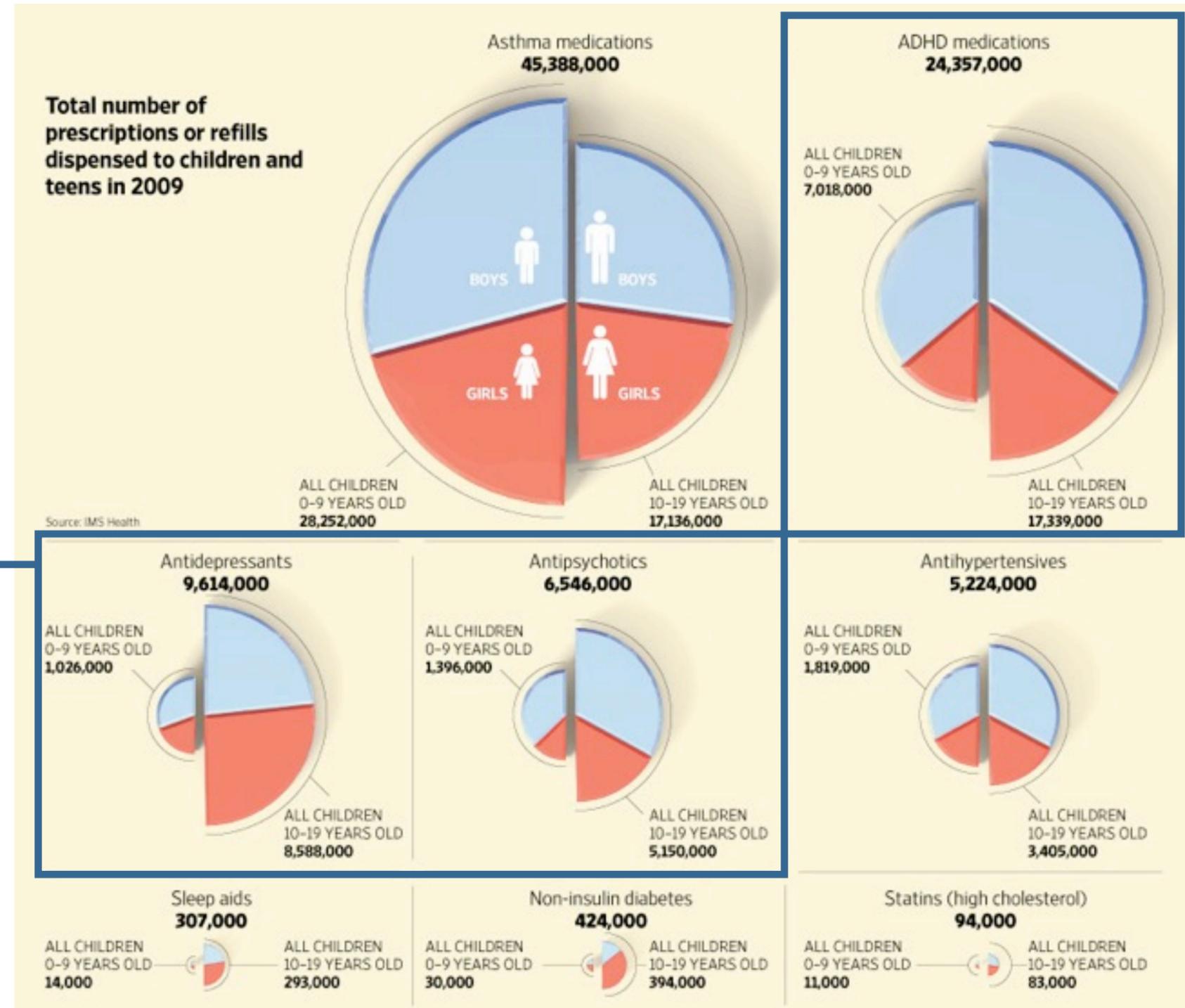


The US has 75 million children and teens.



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40.4 million kids had one psychotropic med in 2009





How many of you know a blue-collar, middle-class, or upper-class family who is reasonably intact...





How many of you know a blue-collar, middle-class, or upper-class family who is reasonably intact...

with a child, teen, or adult child with a mental, emotional, or behavioral disorder?



What will the impact of these data be on Federal & State Governments on:

- Health care costs?
- Public safety & national security costs?
- Social Security?
- Global Competitiveness?



Adolescent Depression Lowers Later-Life Earning Power by an average of \$300K

So what?



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With collective lost lifetime income of... **\$25 billion loss**

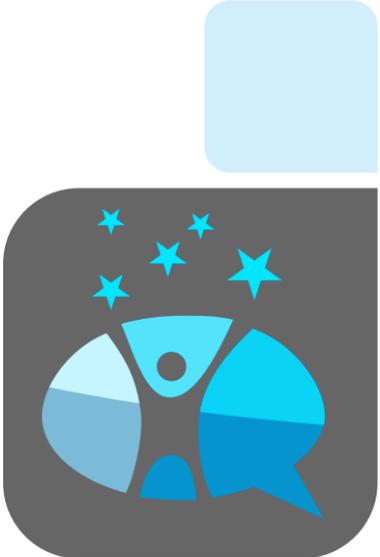


Adolescent Depression Lowers Later-Life Earning Power by an average of \$300K

# Which is true for Connecticut:

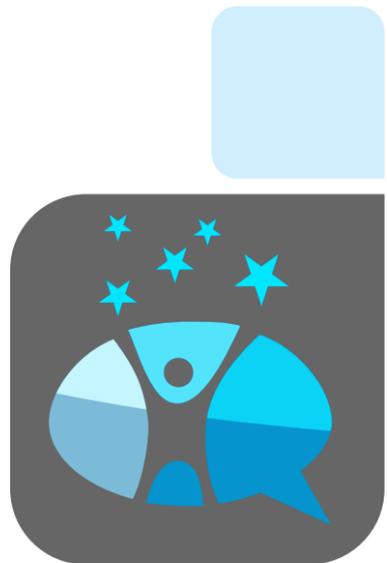
1. Every family is being harmed by these trends;
2. Every business is being harmed by these trends;
3. Every taxpayer will suffer a bigger tax bill by these trends;
4. Every government agency is harmed by these trends;
5. Every family needs support to counteract these trends.







Child and adolescent depression and related disorders can be averted.

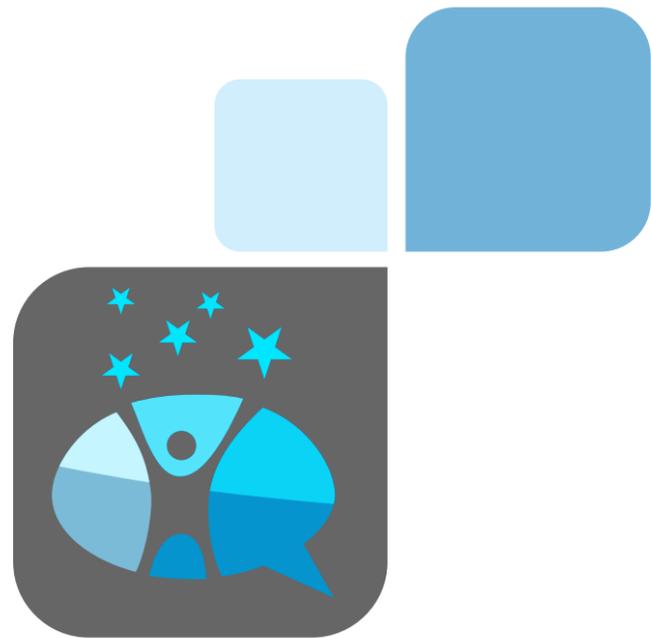




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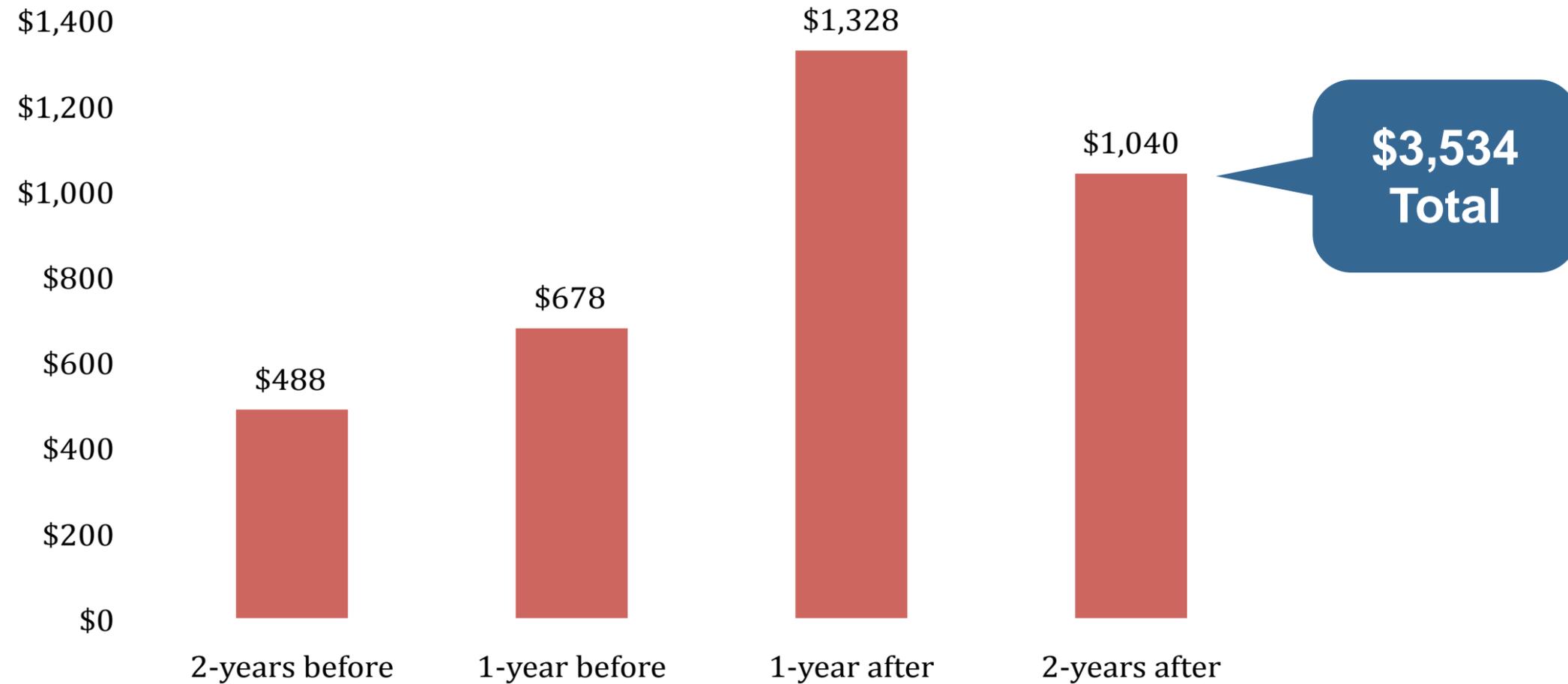


There are protective *behavioral* vaccines...

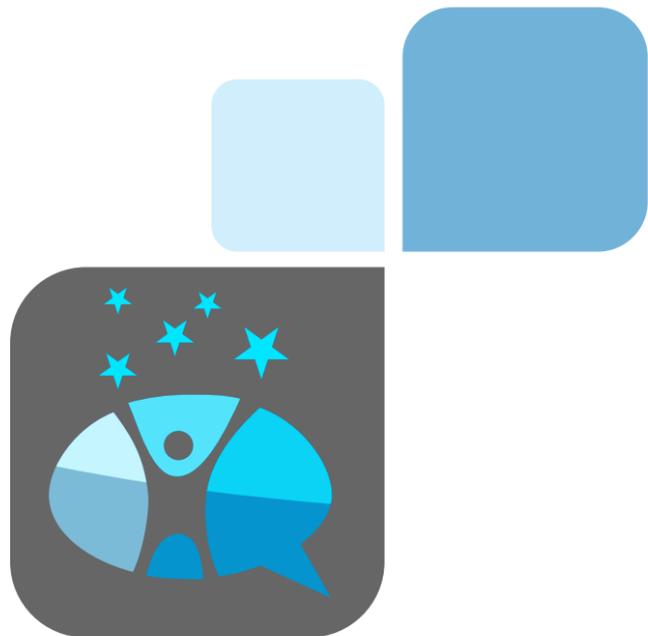


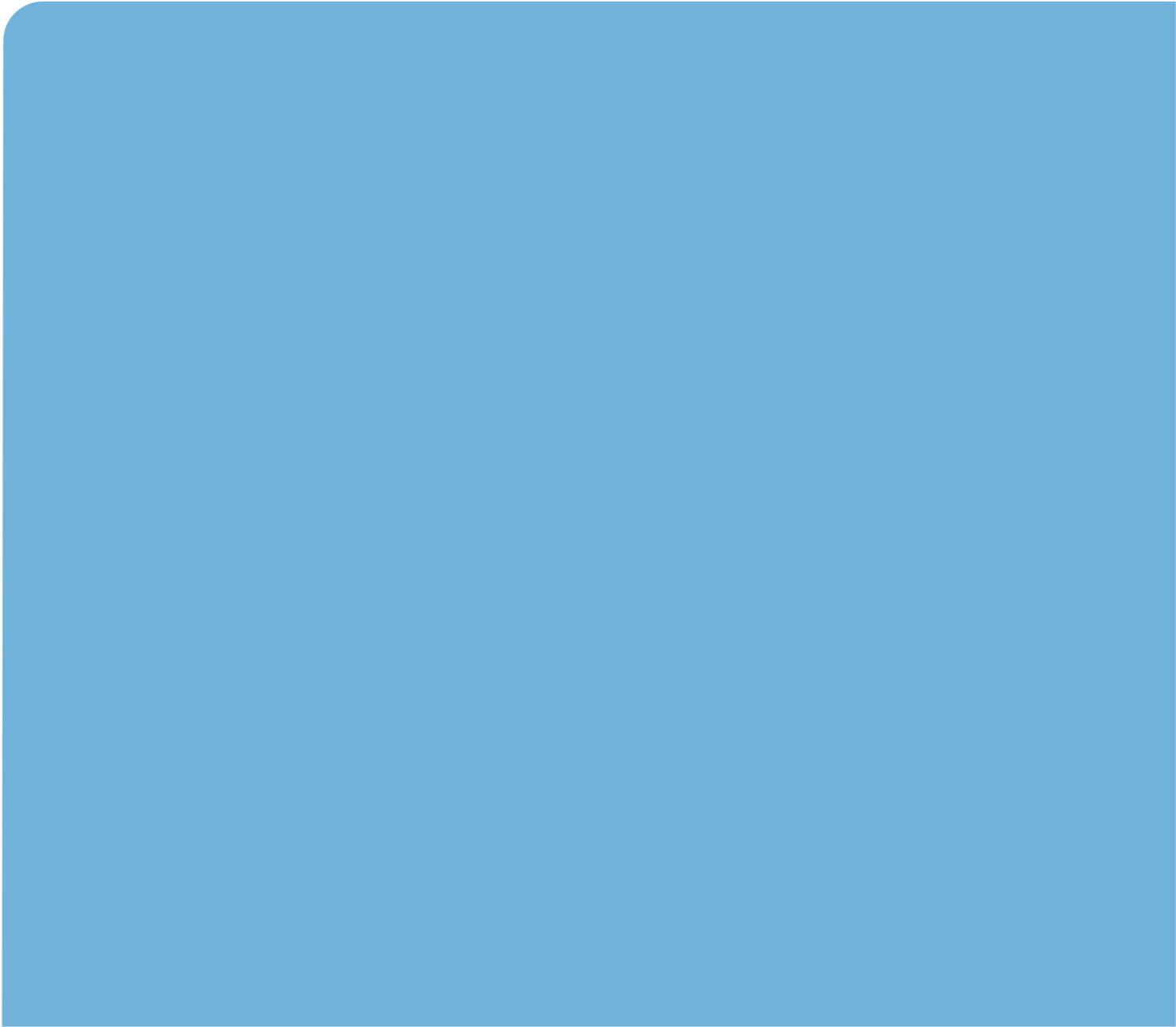
Think about the cost of ADHD?

# Excess Healthcare costs of ADHD



These four years cost \$3,534—which could be used avert ADHD and other Psychiatric Diagnoses in 75-100 children.





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That alone will cost...



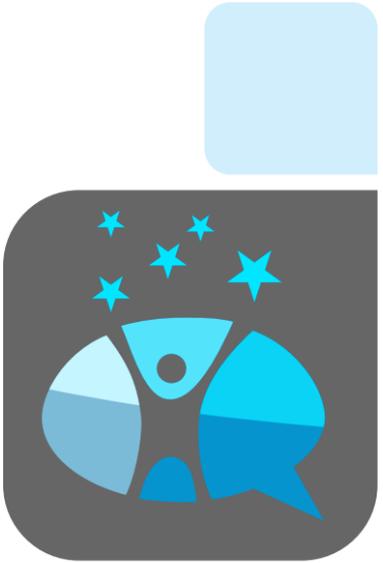
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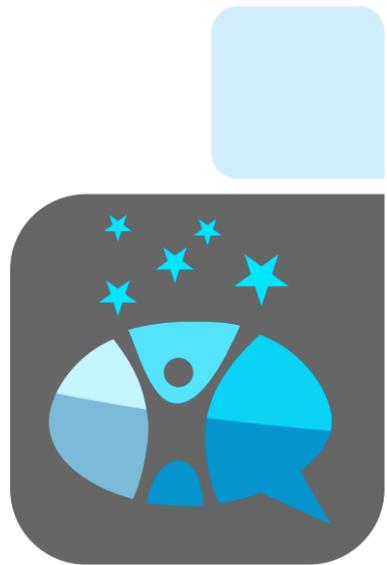
That alone will cost... **\$18.9 billion**







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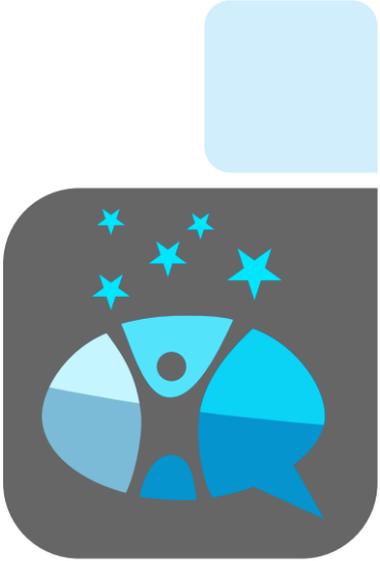
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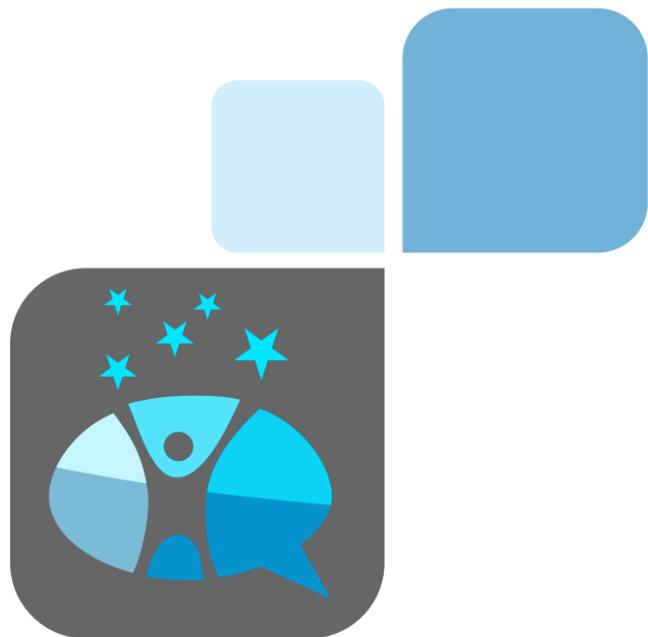
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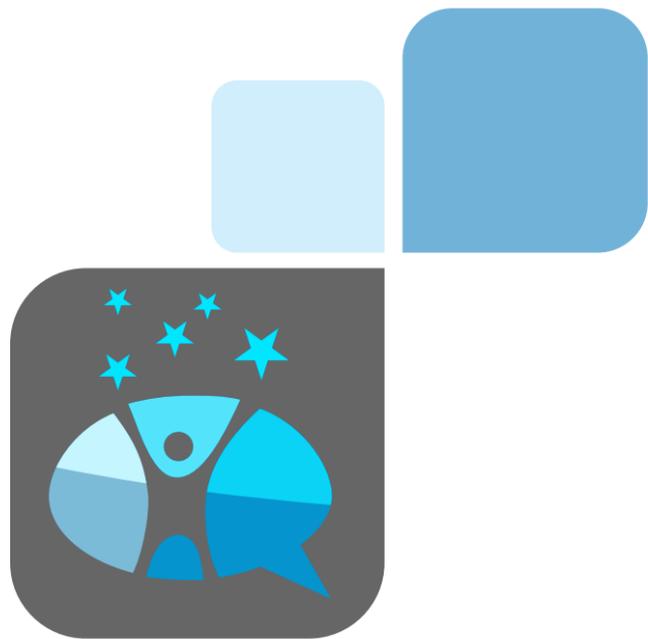
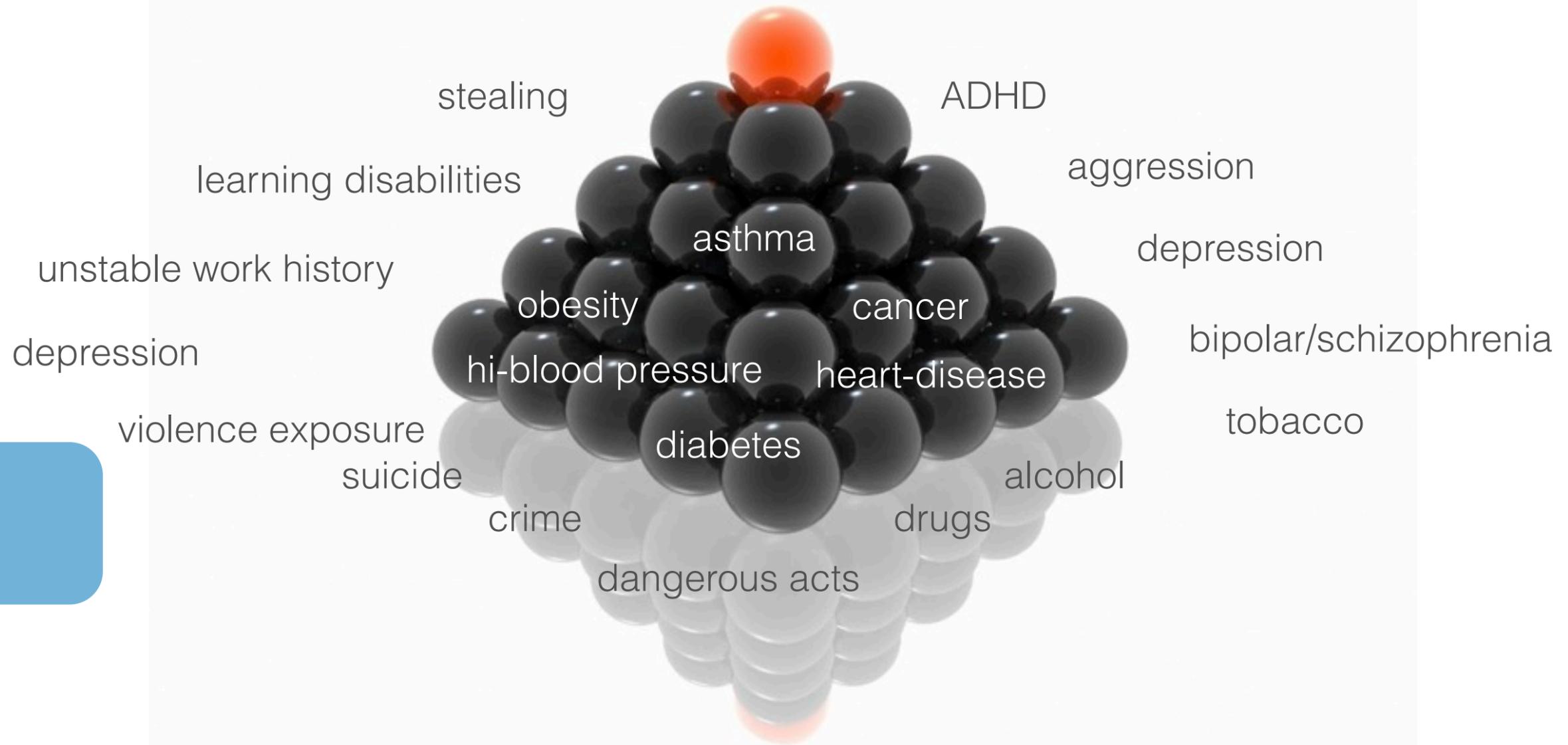
Our Futures depend...



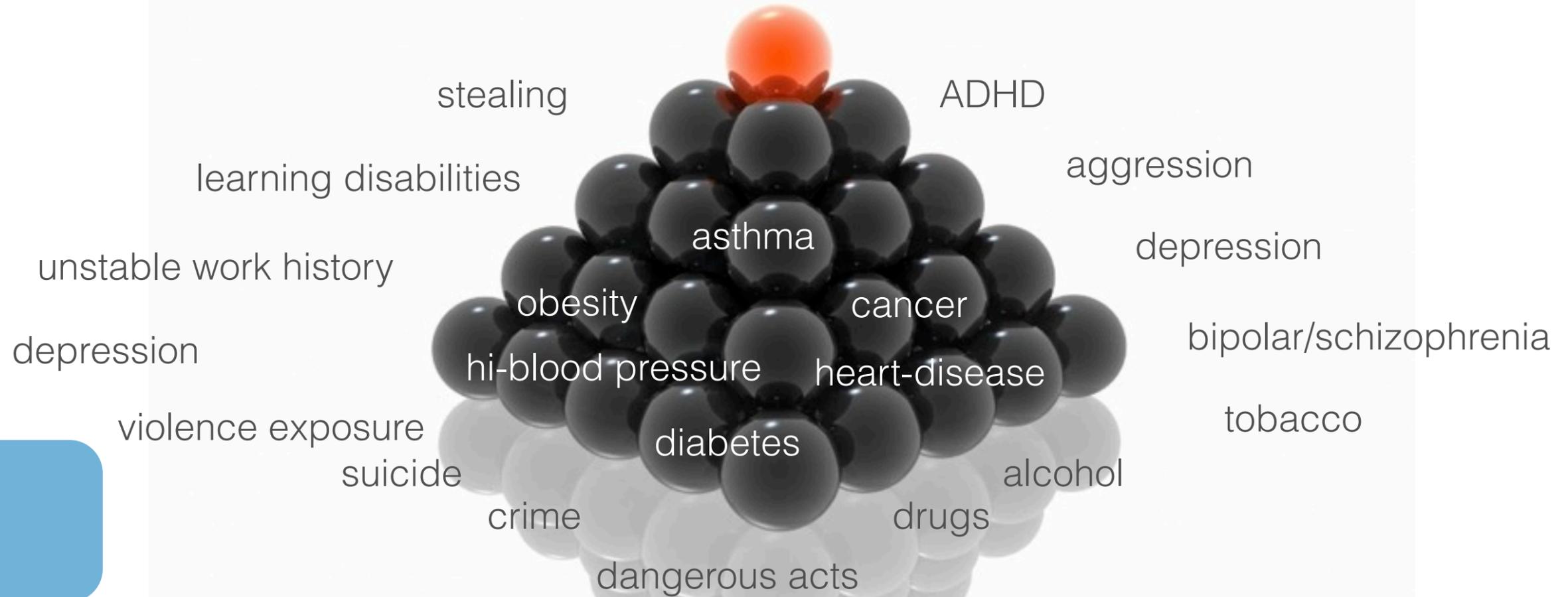
On **ALL** Our Children's futures having few barriers to productive lives...



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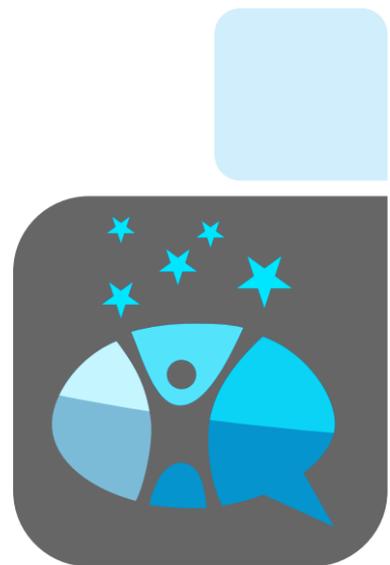


# On **ALL** Our Children's futures having few barriers to productive lives...



All these disorders have almost the same preventable causes that can be rapidly changed...

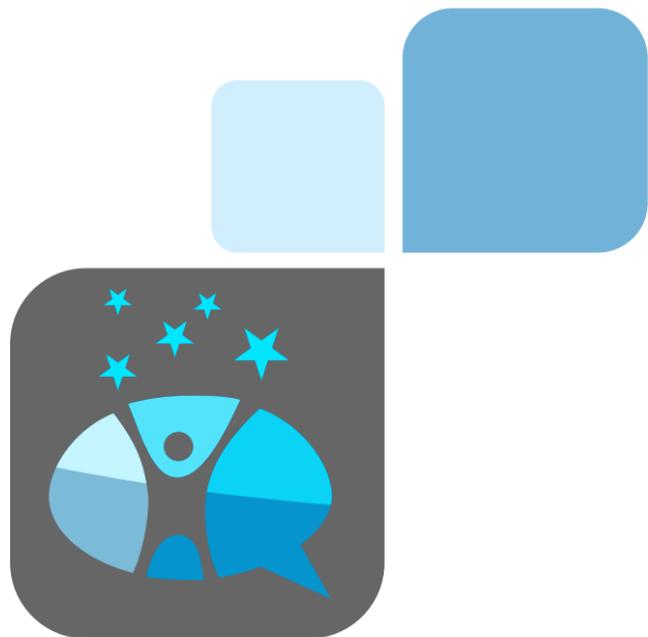




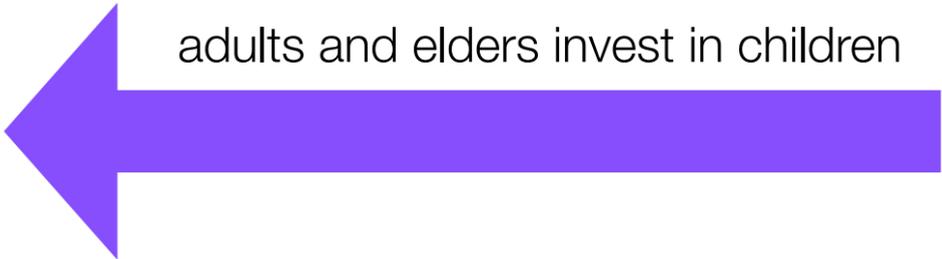
# Youthanasia

*Here lies the future of America.*

Humans are the only species with bi-directional wealth and wellbeing transfer across generations



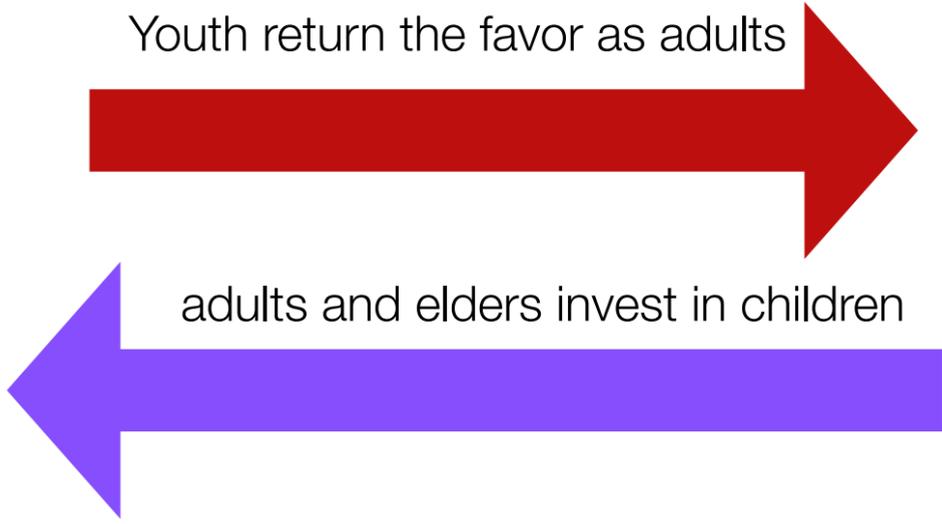
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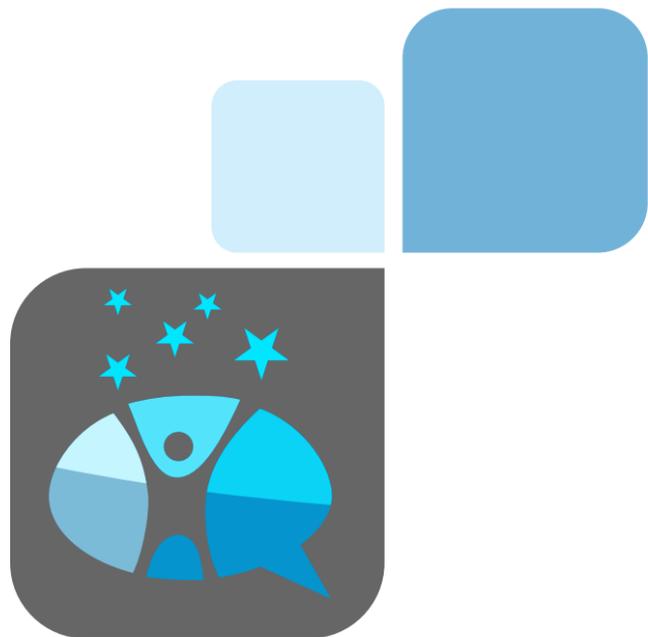
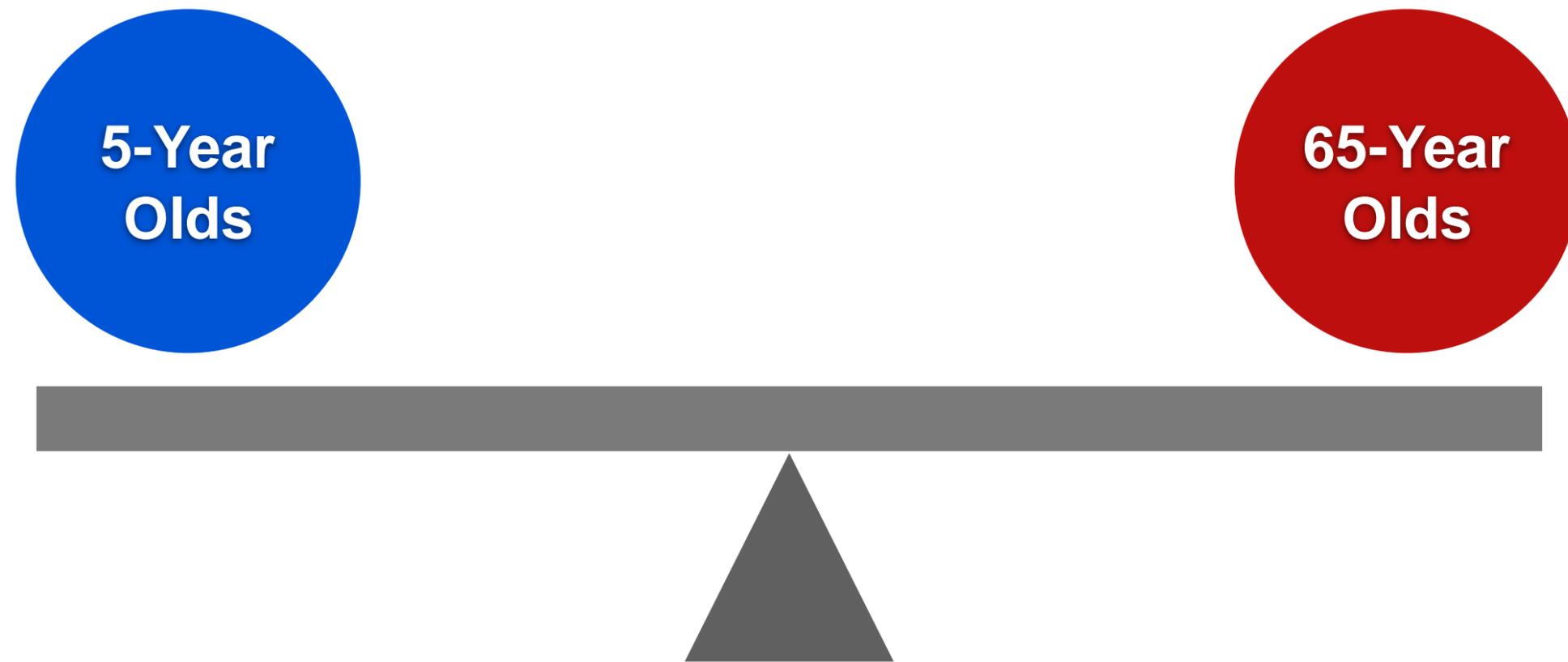


**Our Children**

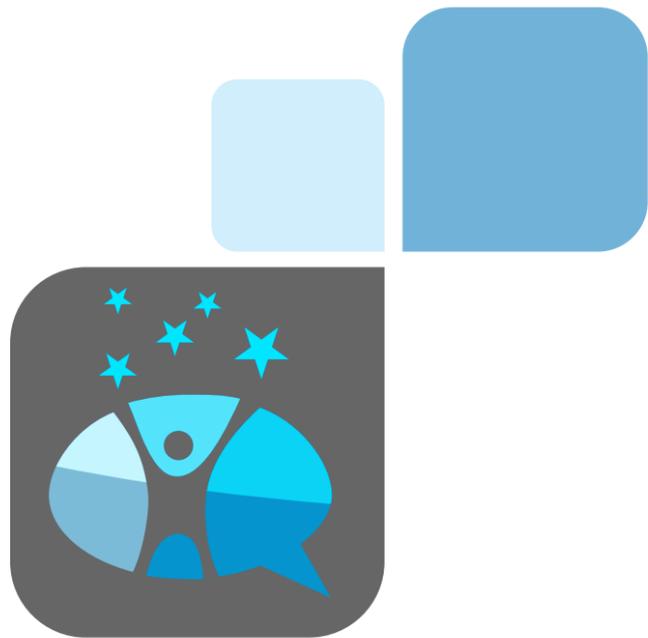
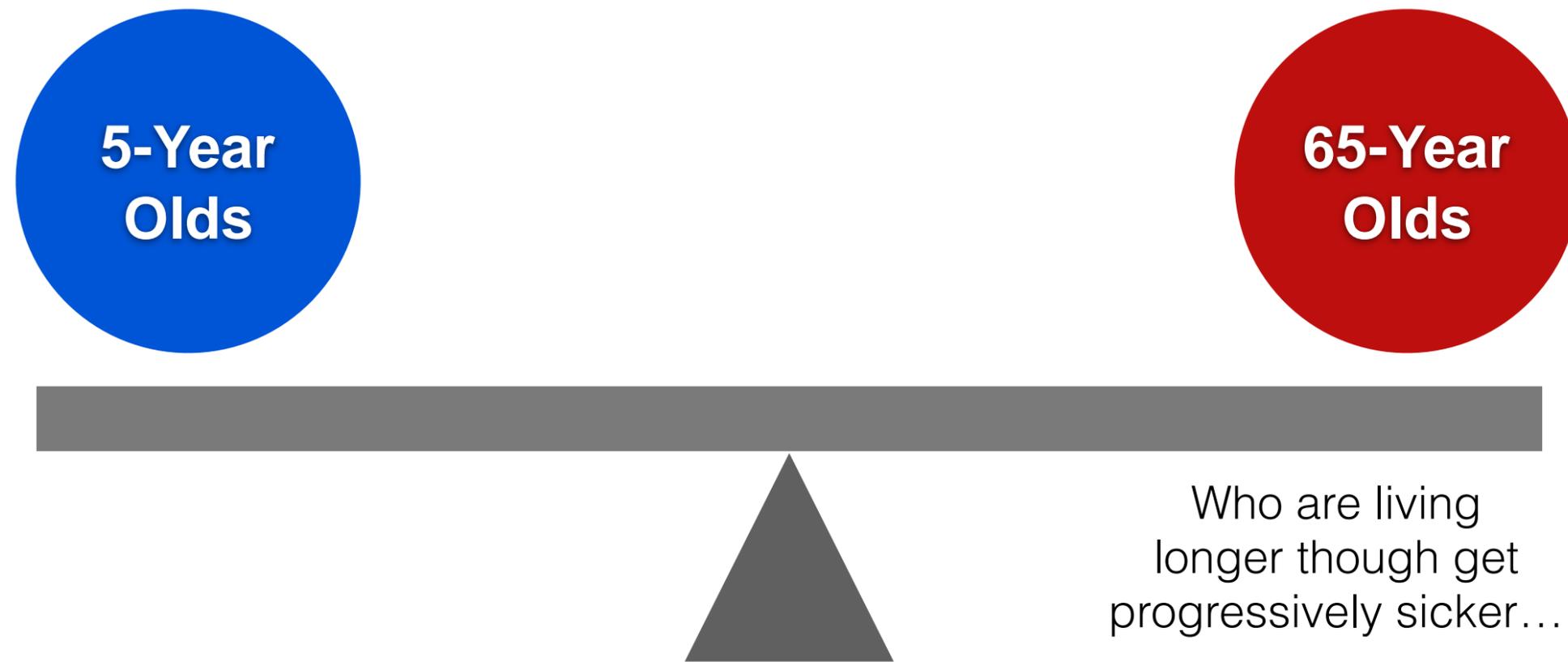


**Our Adults & Elders**

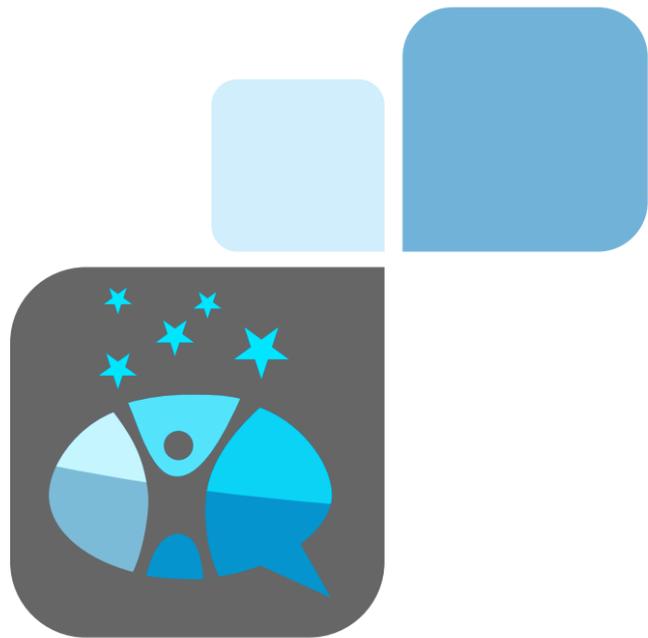
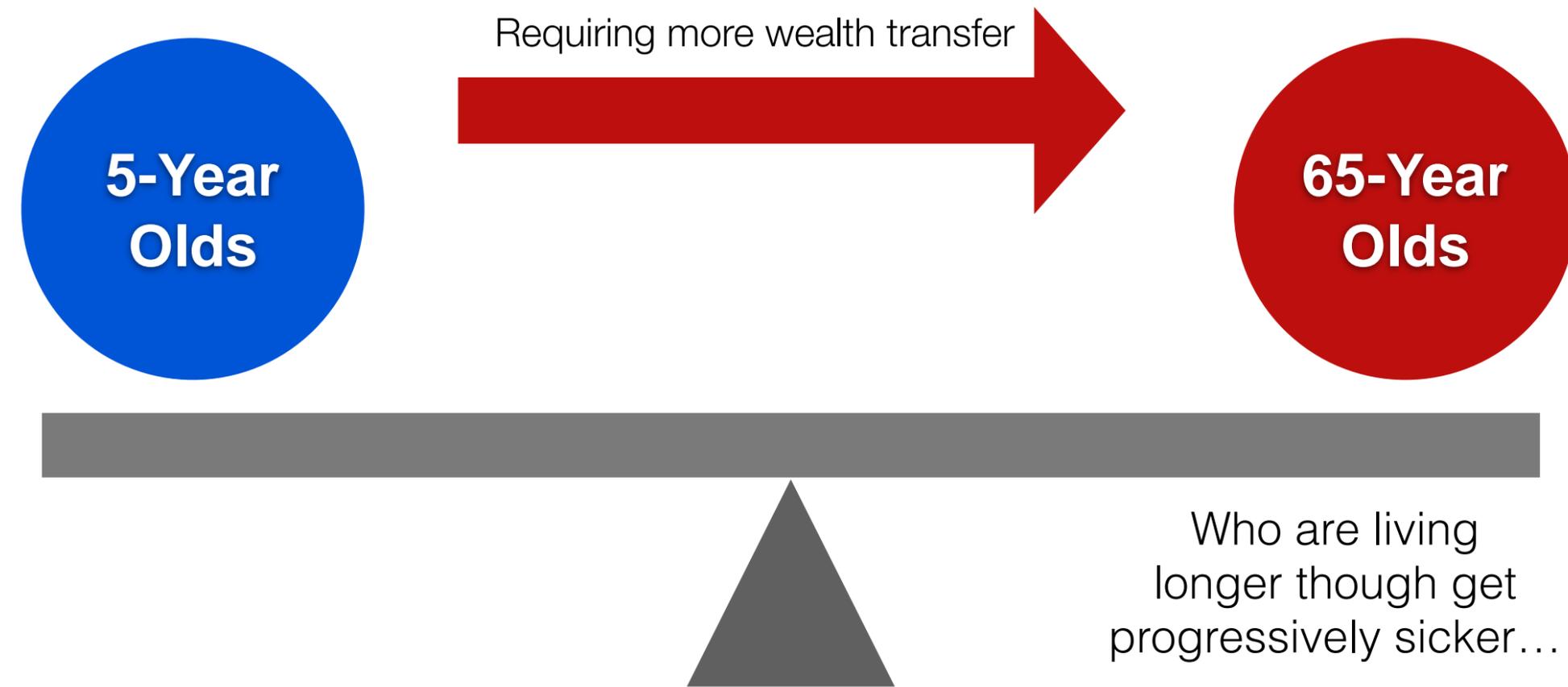
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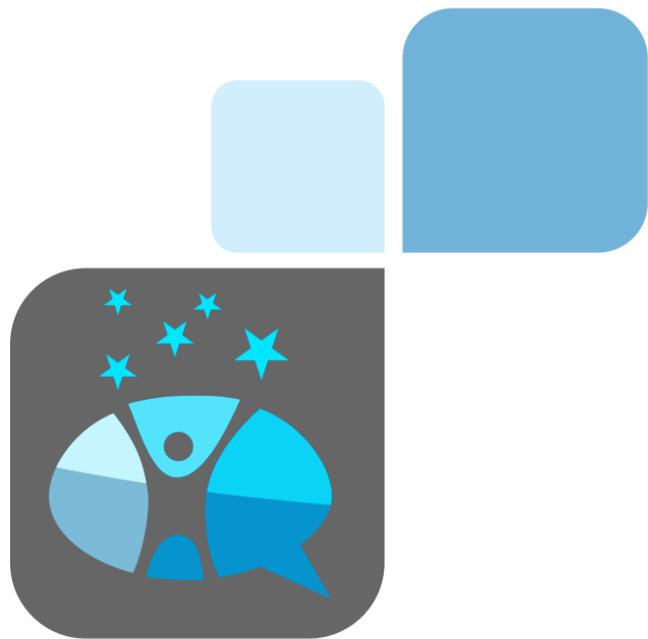
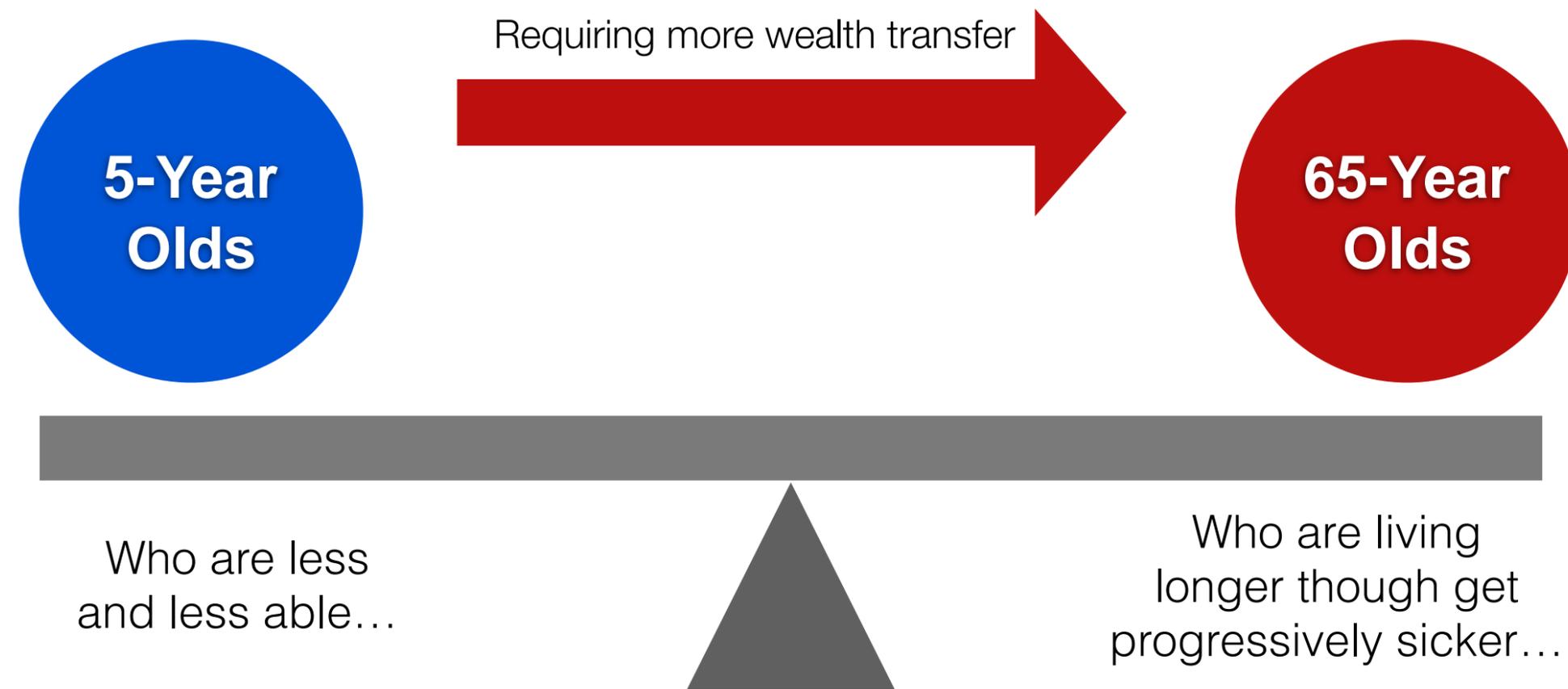
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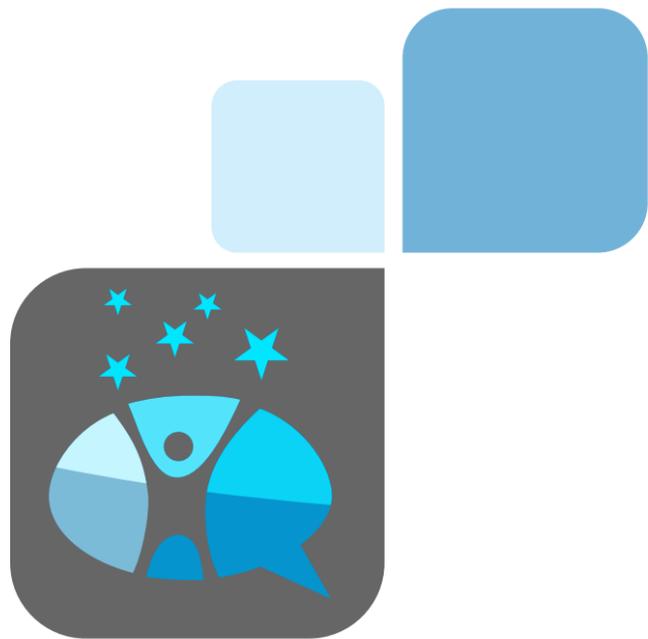
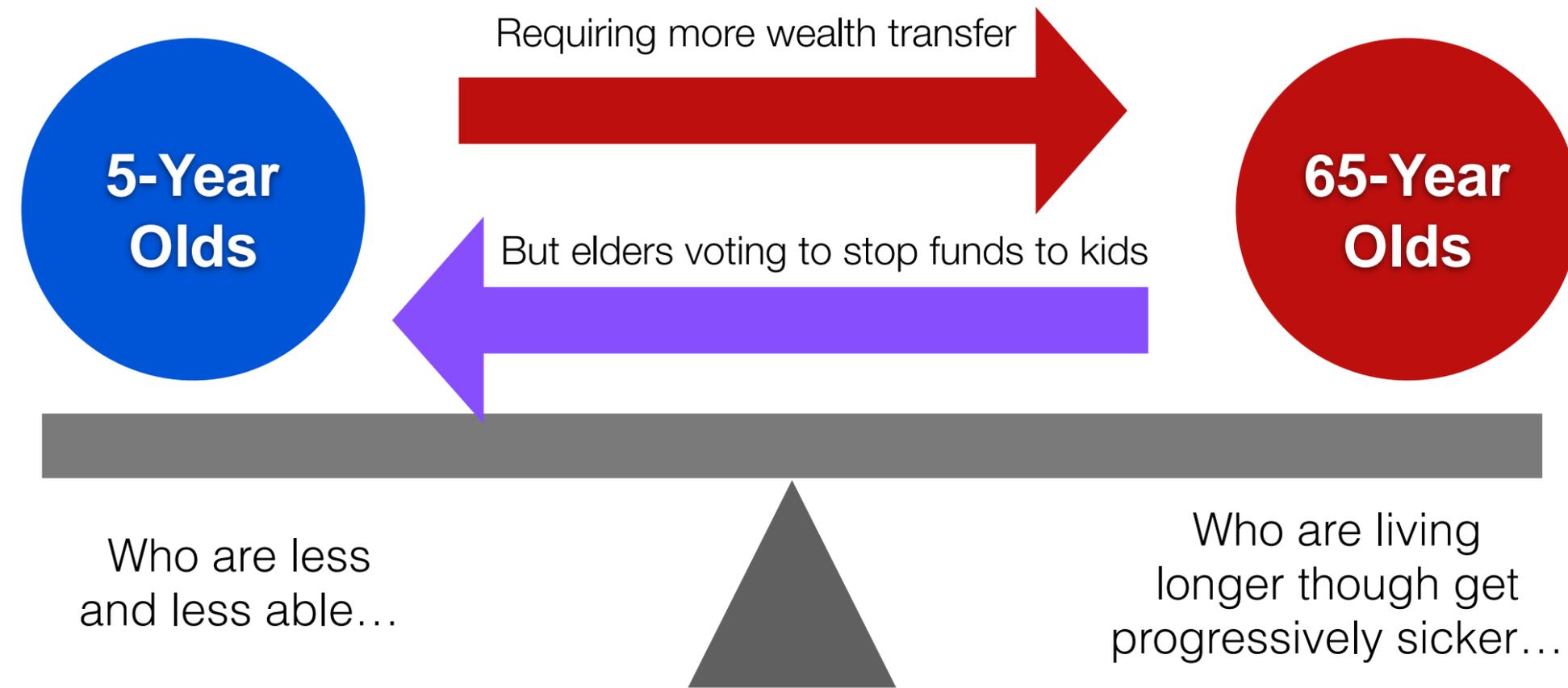
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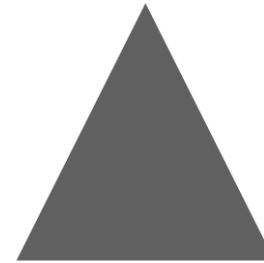
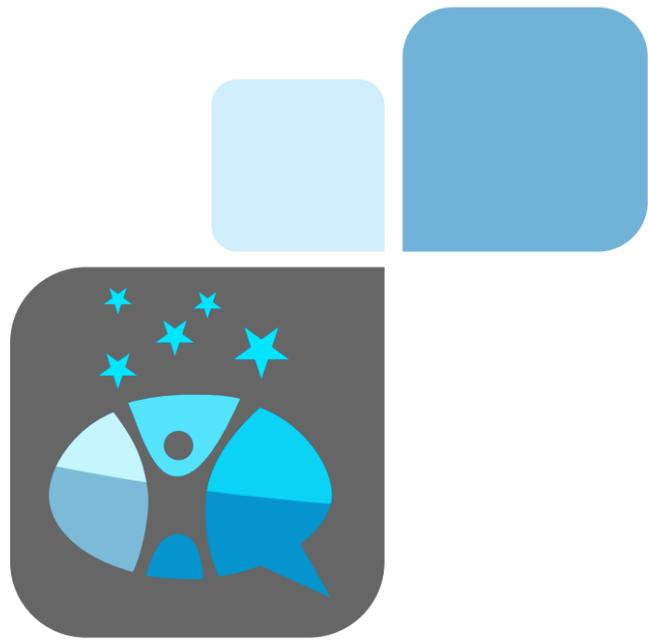
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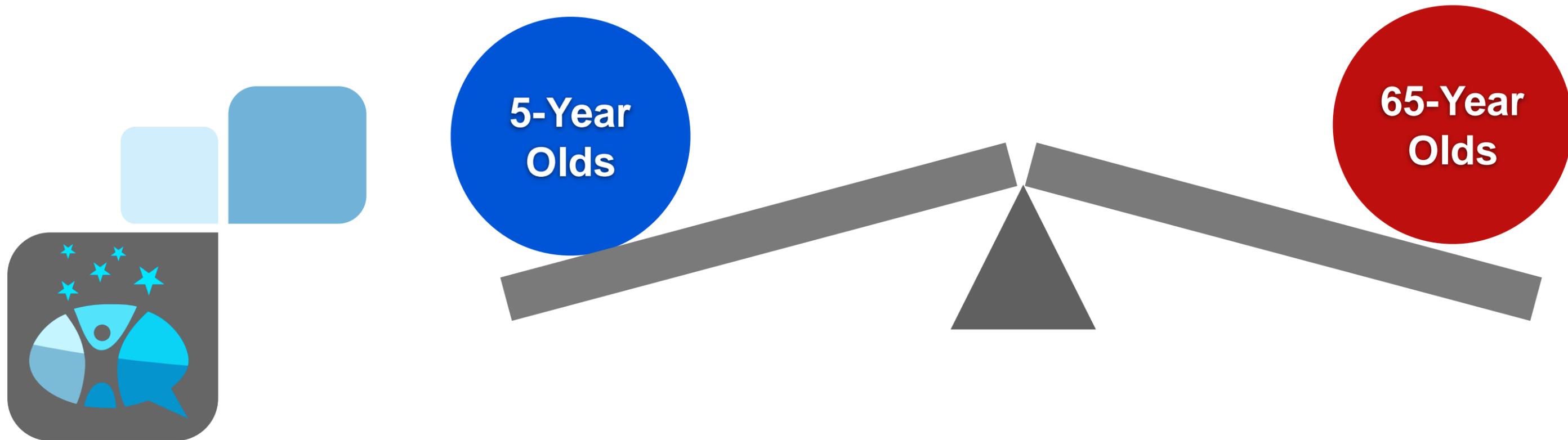
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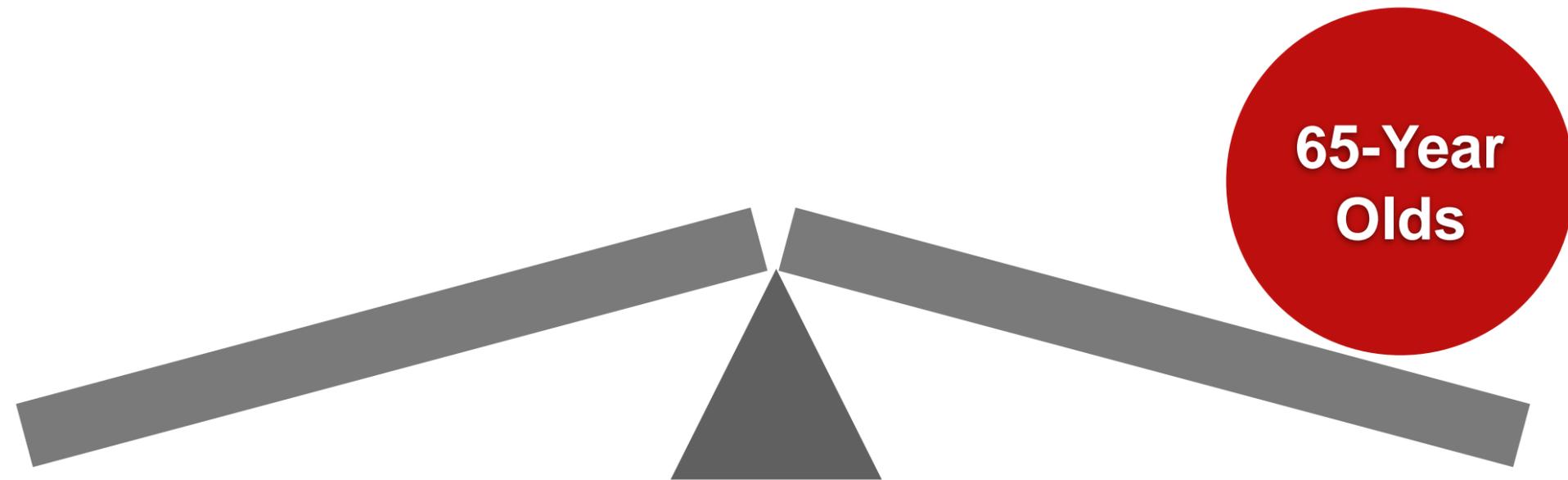
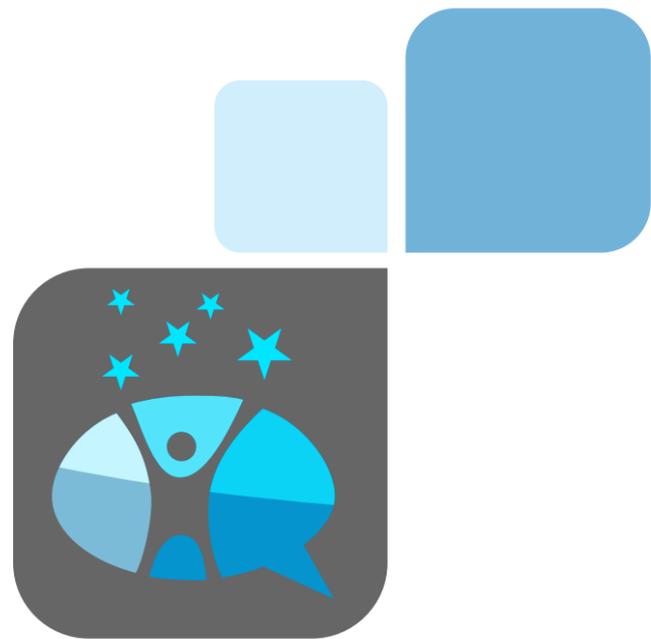
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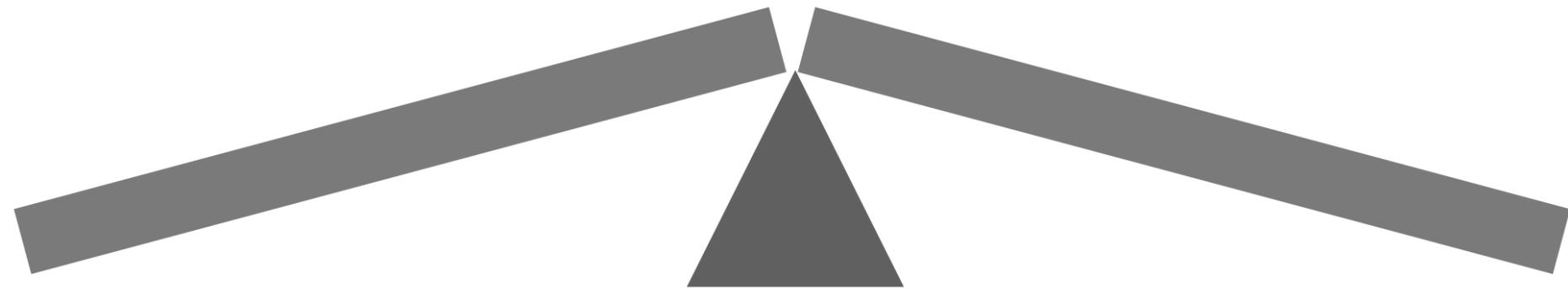
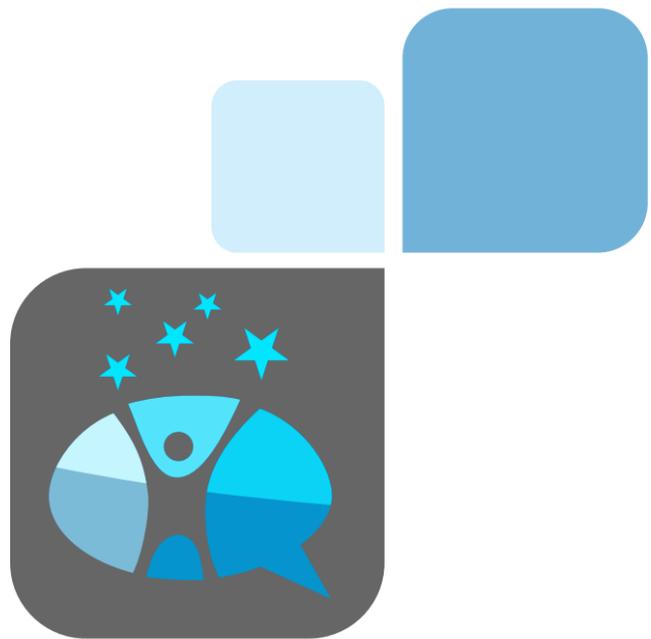
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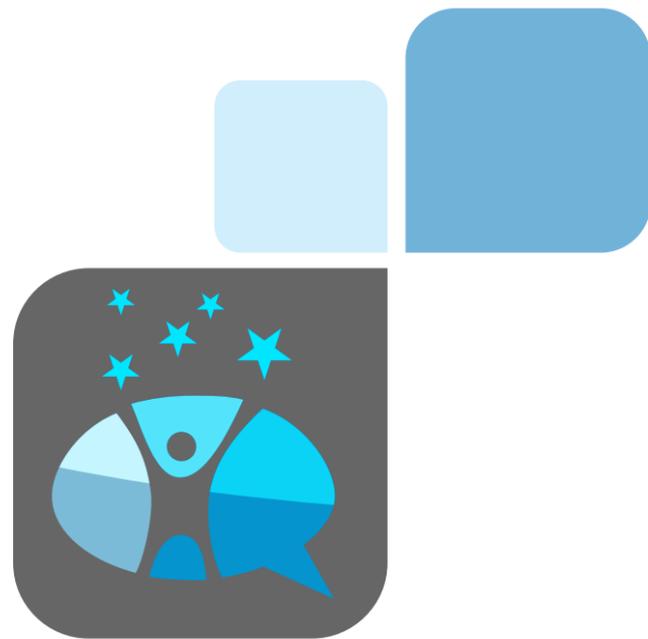


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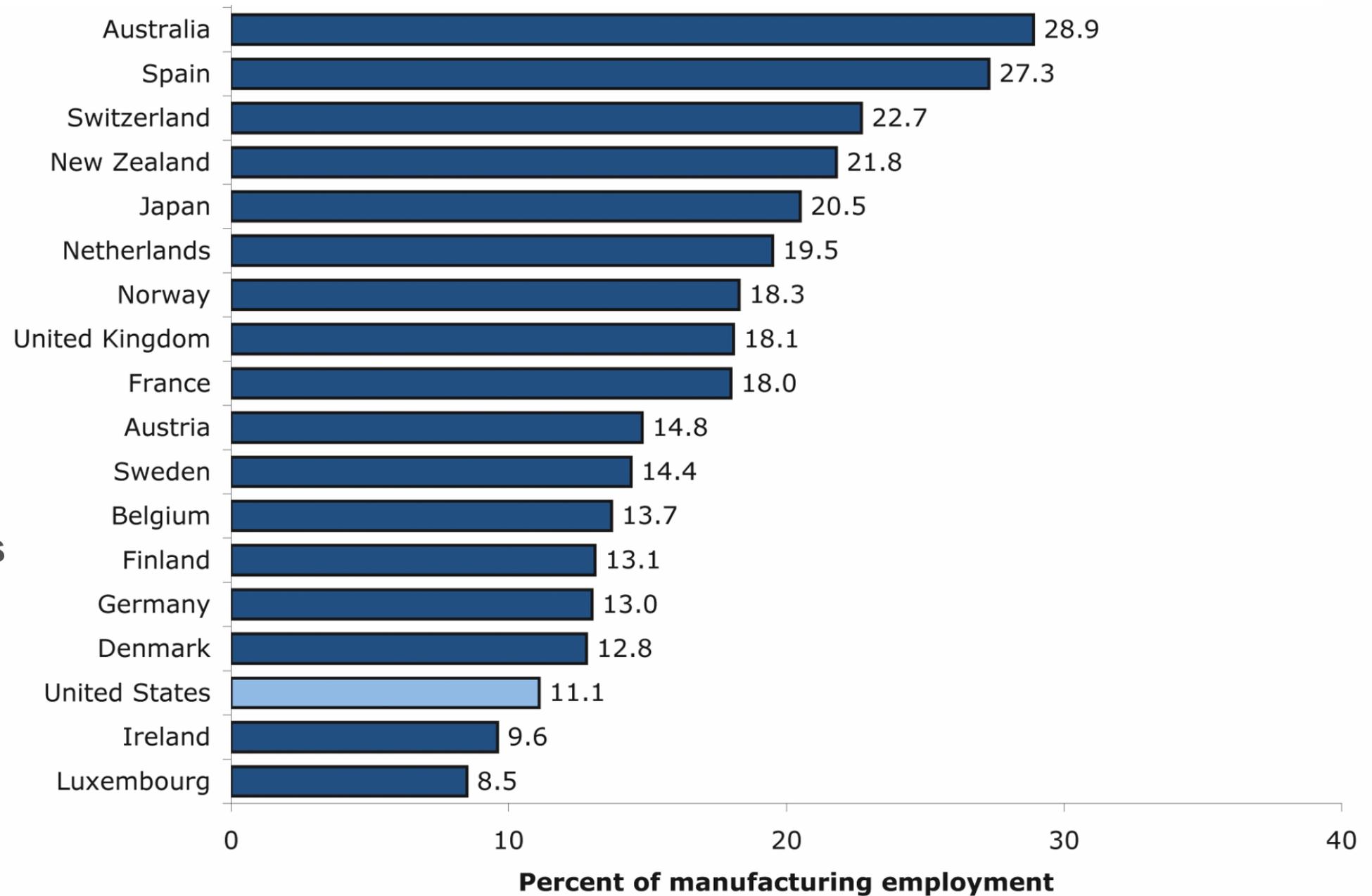


# Key message about global competition...

**Manufacturing, Employment in Enterprises with <= 20 Employees, 2006  
Among Rich Democracies Using OECD Data**

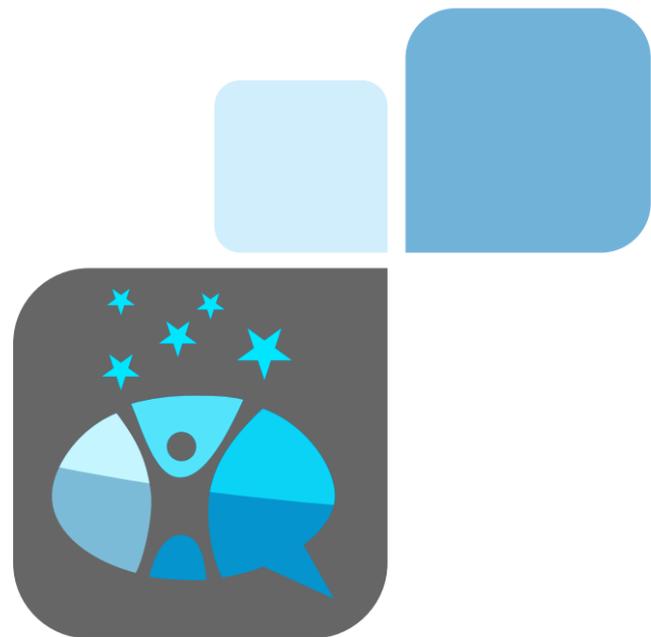
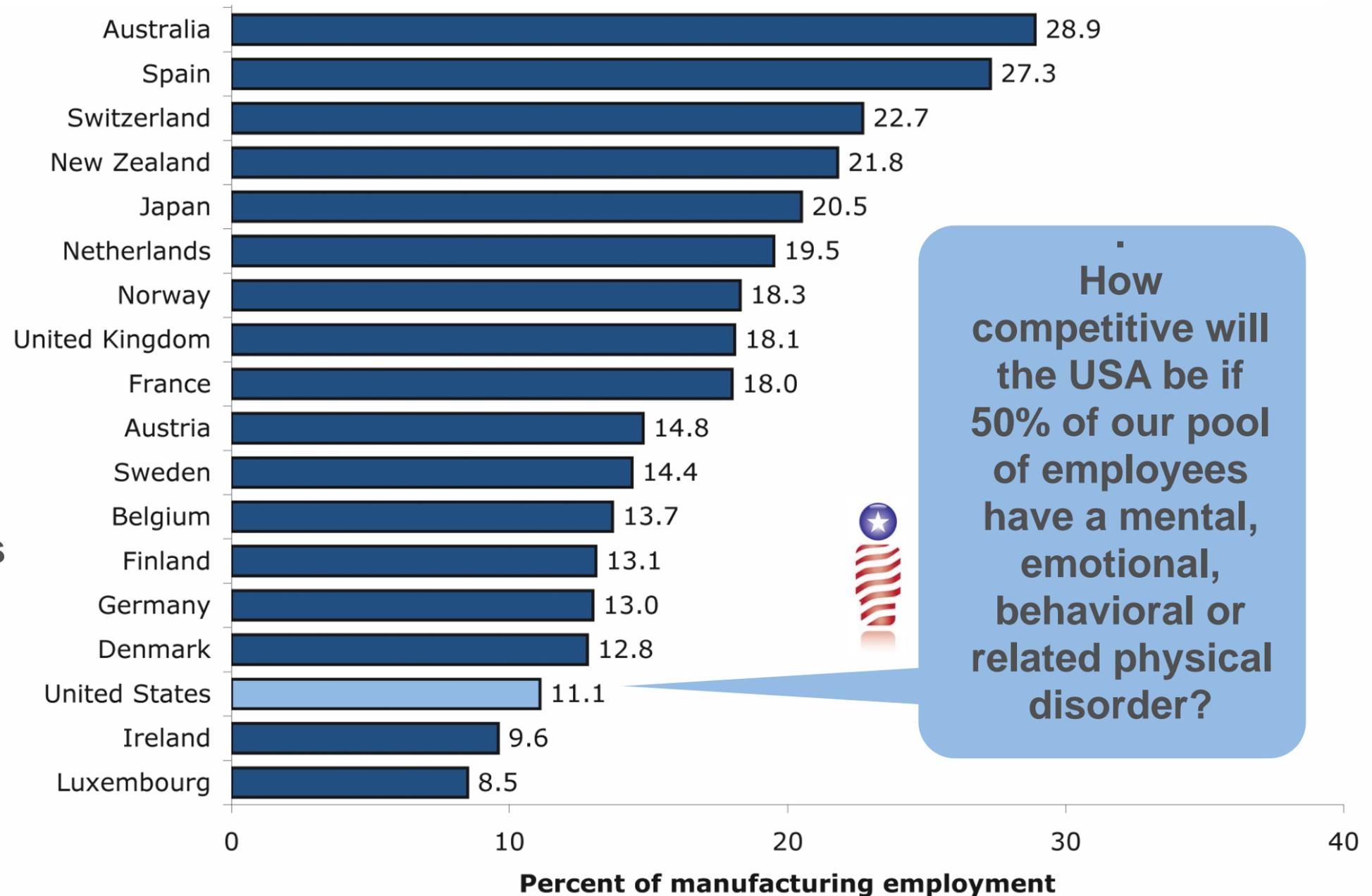


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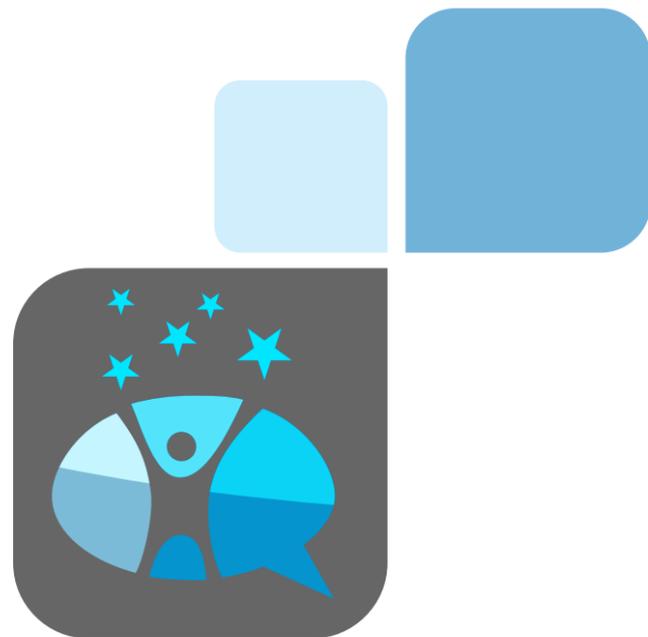
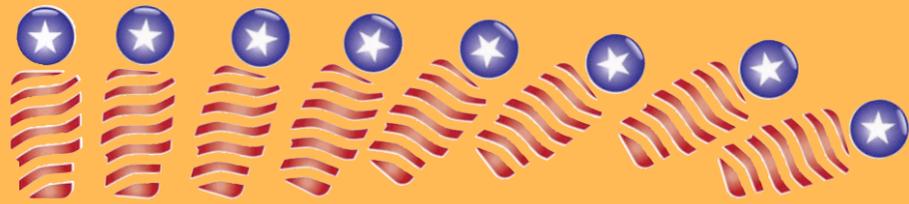
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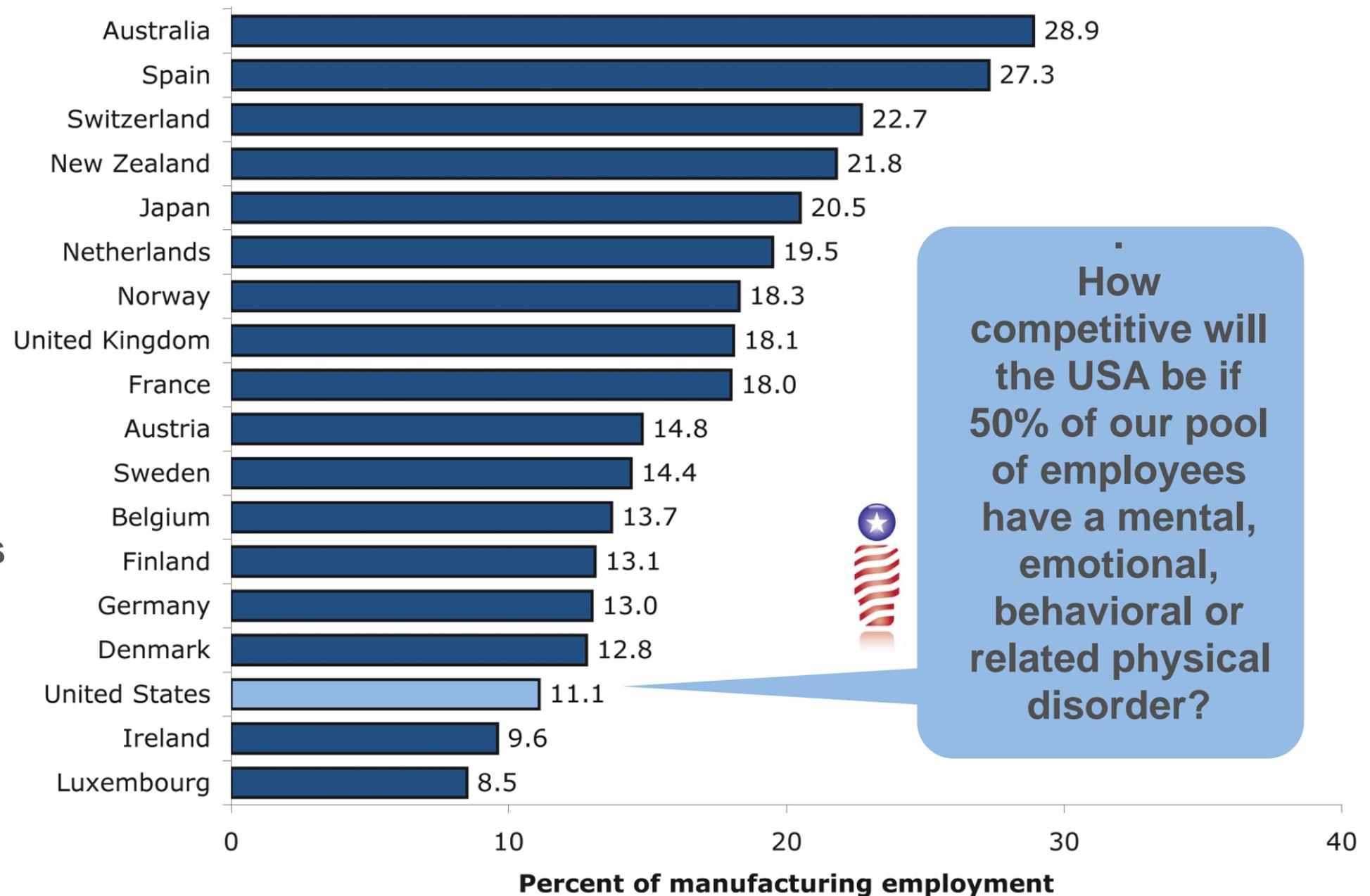
Many of these other rich democracies have nearly **universal access** to prevention of and protection from mental, emotional, behavioral and related physical disorders.

The USA **rations** prevention of and protection all these disorders.



**The USA has 4.6 million small businesses under 25 employees.**

**Manufacturing, Employment in Enterprises with <= 20 Employees, 2006 Among Rich Democracies Using OECD Data**

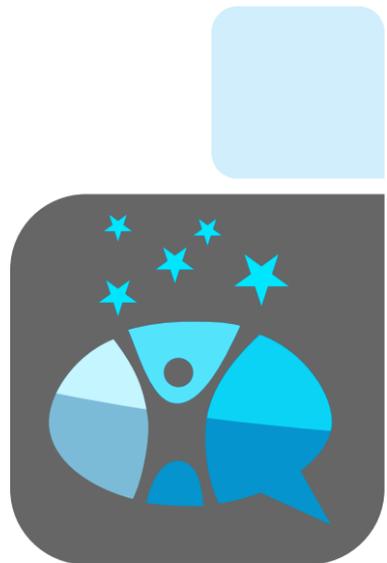


**How competitive will the USA be if 50% of our pool of employees have a mental, emotional, behavioral or related physical disorder?**

# Practical recipe for *rapid results* to better our futures



- Pick 4-5 practical, proven *Behavioral Vaccines* that protect against many problem outcomes
- Make these Universally Accessible for **All Families**
- Adopt facilitative *polices* ACROSS gov't money silos
- Form public-private partnerships to facilitate rapid action, mixed funds and sponsorships
- Have public scoreboard for rapid results
- Promote success & use of these tools in mass media

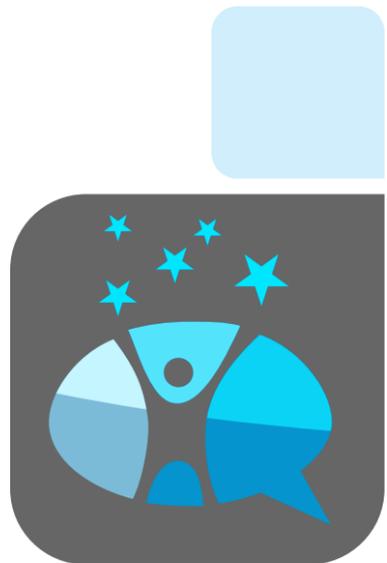


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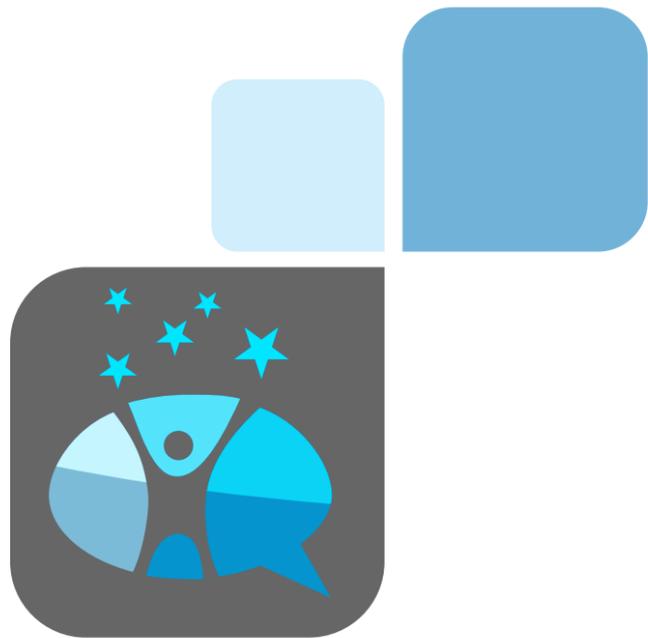
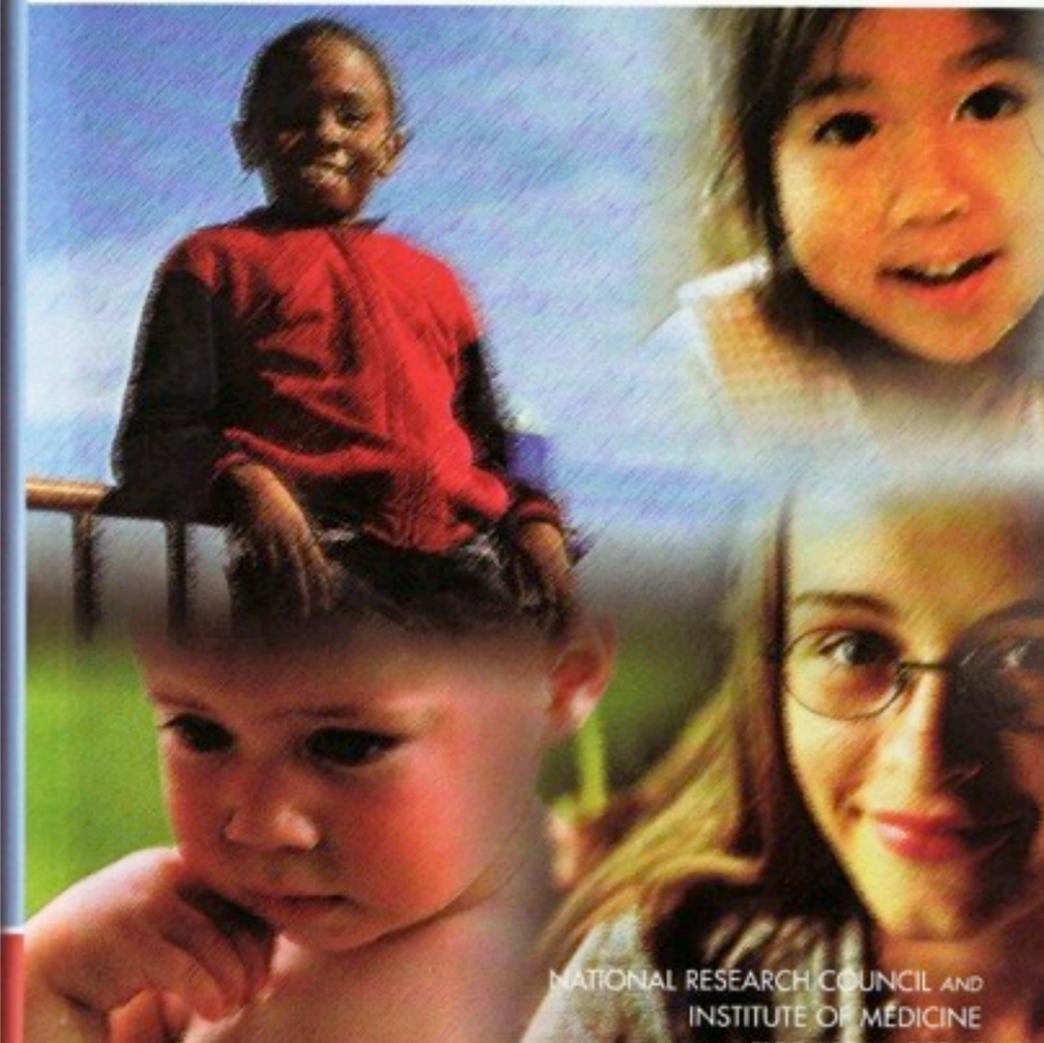
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*PS: The current government "logic models" for prevention ARE the problem.*



# Preventing Mental, Emotional, and Behavioral Disorders Among Young People

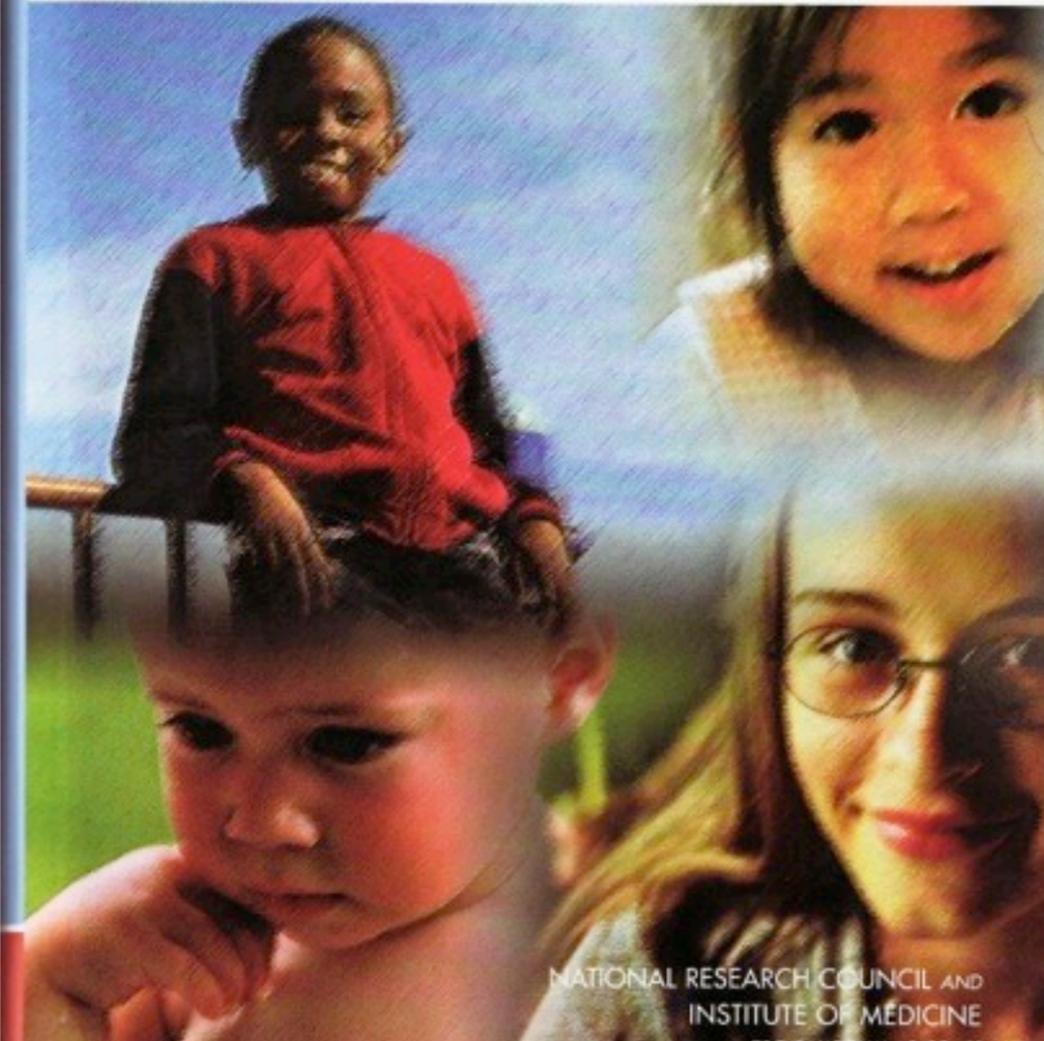
Progress and Possibilities



The IOM Report contains most of the behavioral vaccines that can be scaled up for *universal access* quickly for rapid results to protect all America's children & families.

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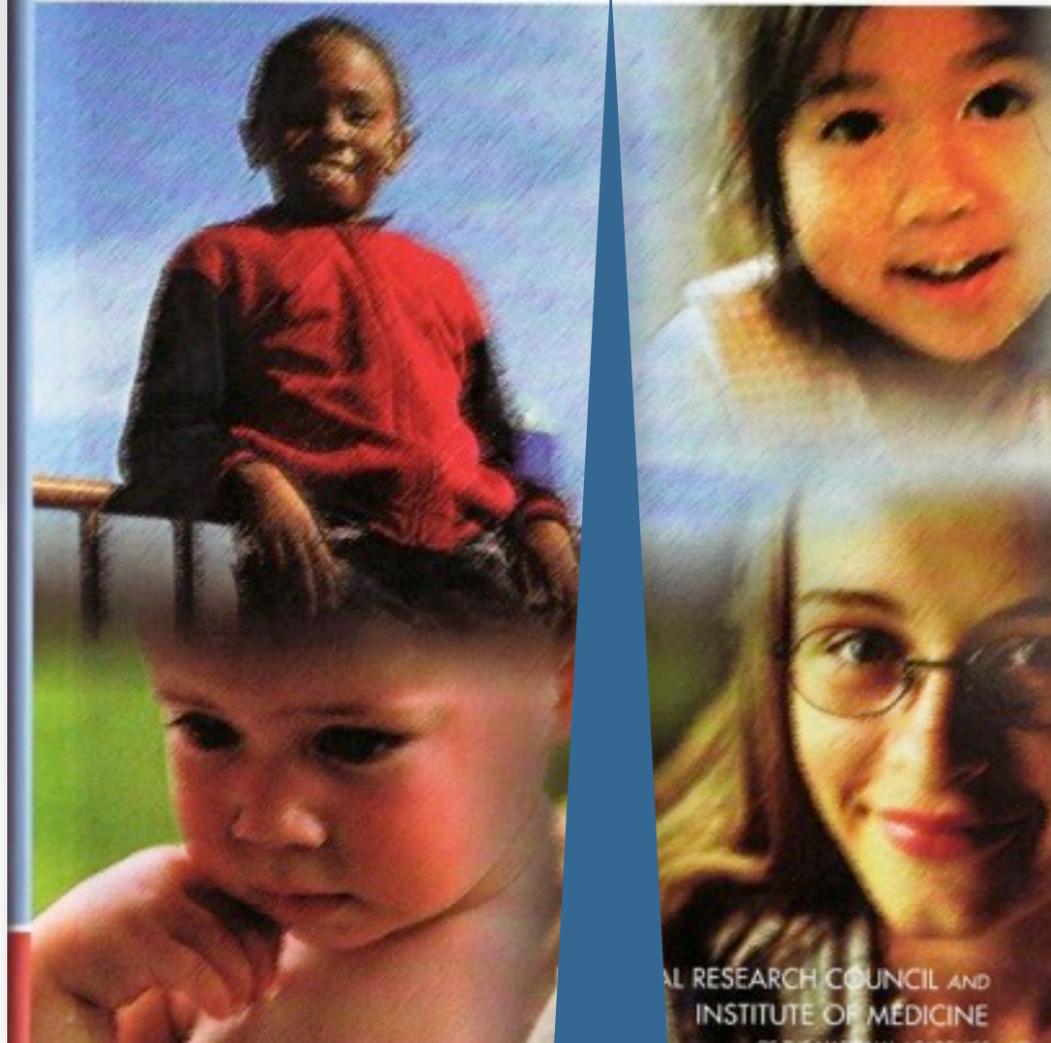
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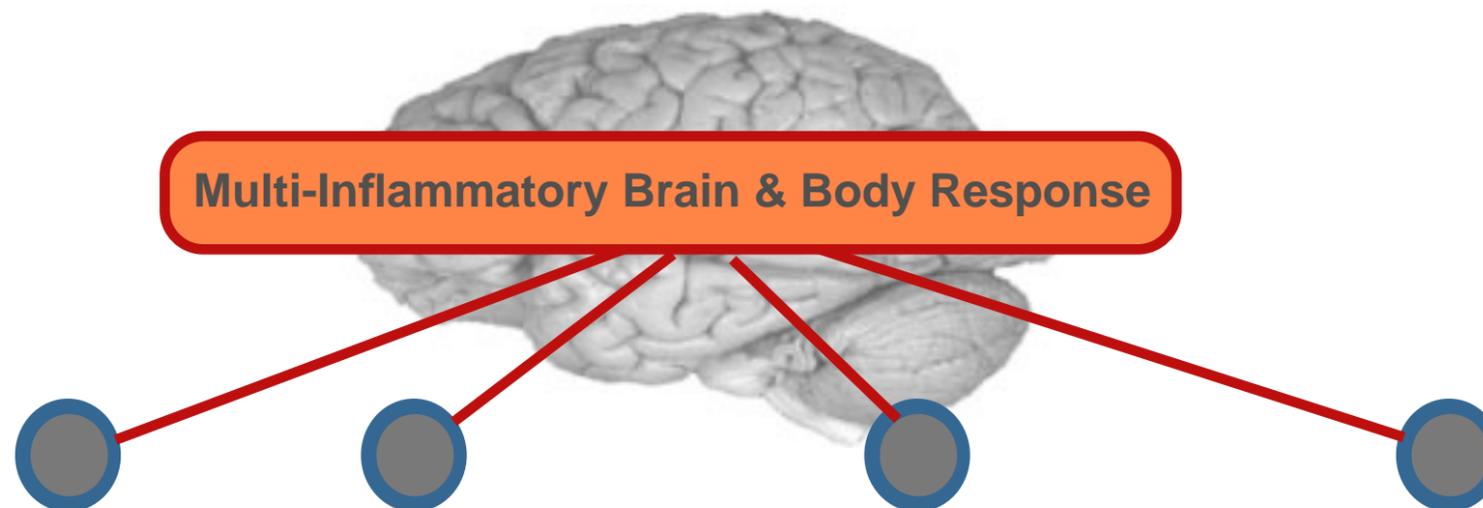
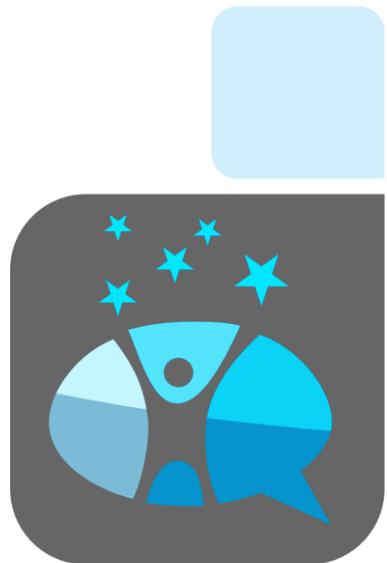
## Preventing Mental, Emotional, and Behavioral Disorders Among Young People

Progress and Possibilities



Several behavioral vaccines protect against multiple disorders

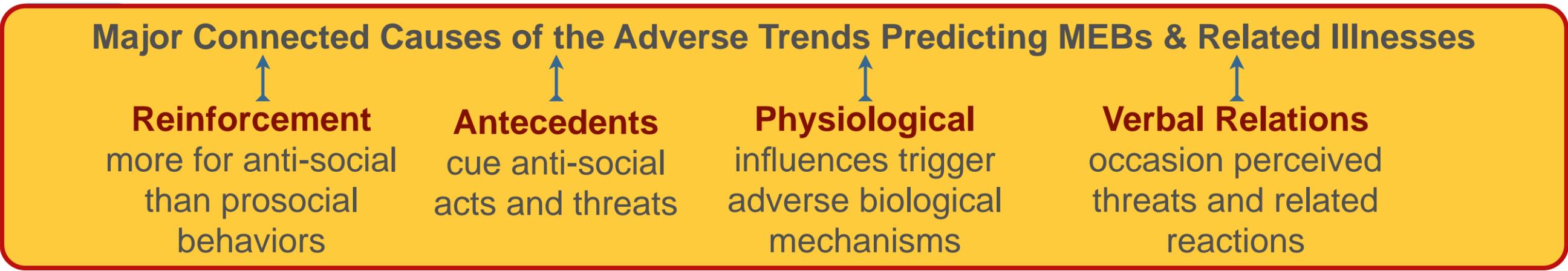
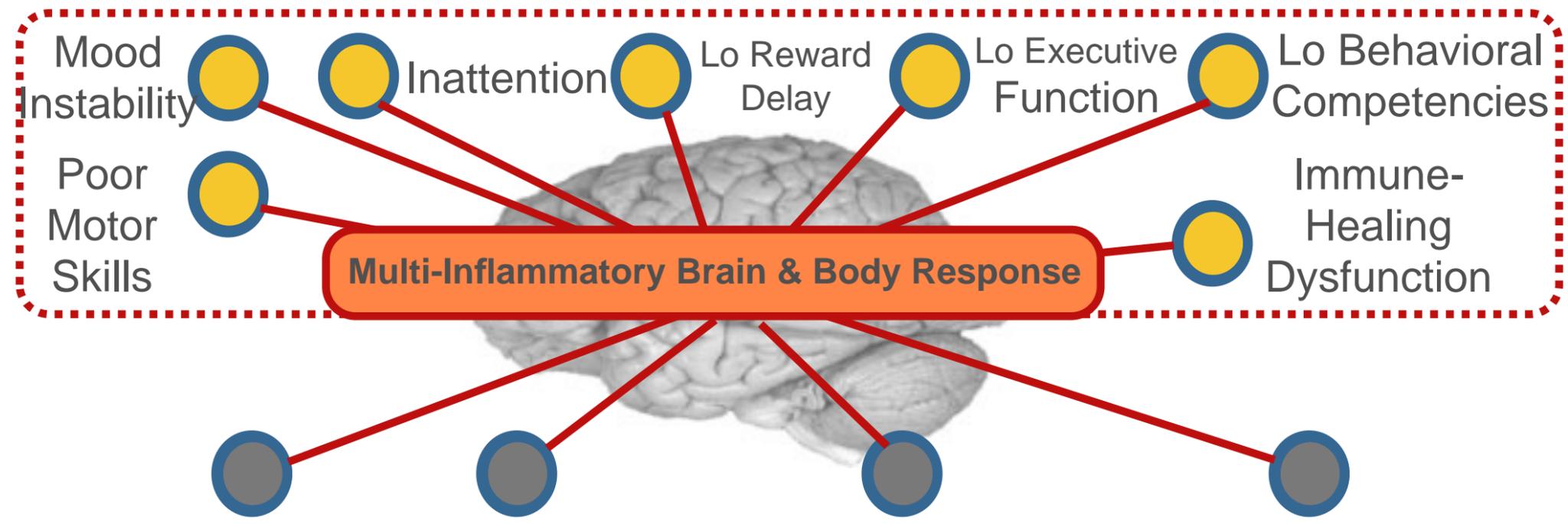




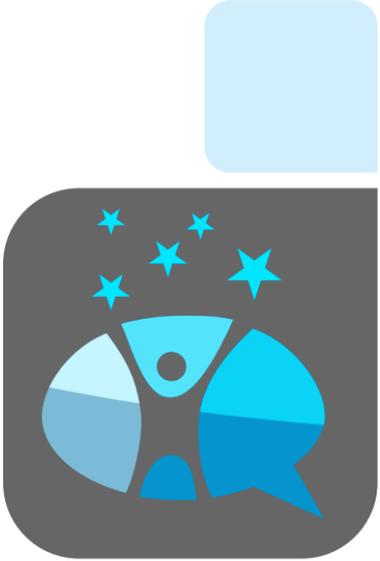
**Major Connected Causes of the Adverse Trends Predicting MEBs & Related Illnesses**

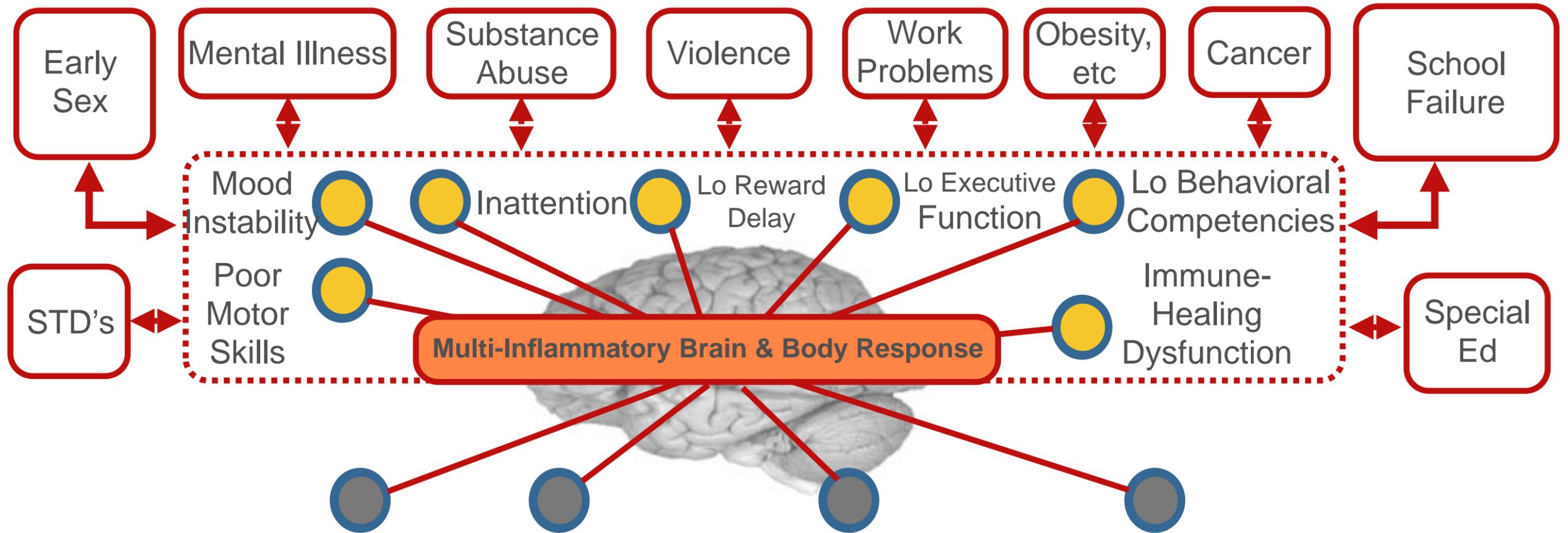
<b>Reinforcement</b> more for anti-social than prosocial behaviors	<b>Antecedents</b> cue anti-social acts and threats	<b>Physiological</b> influences trigger adverse biological mechanisms	<b>Verbal Relations</b> occasion perceived threats and related reactions
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The Same Conditions Predict Multiple Disorders



The Same Conditions Predict Multiple Disorders

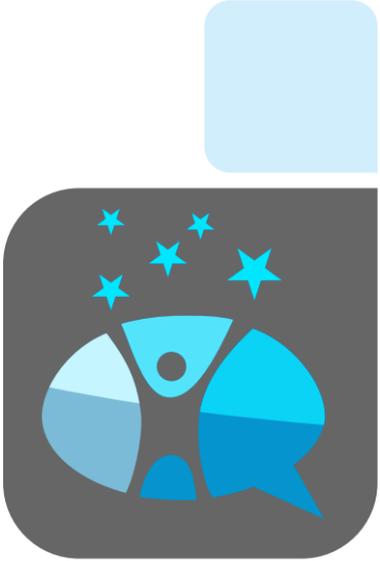


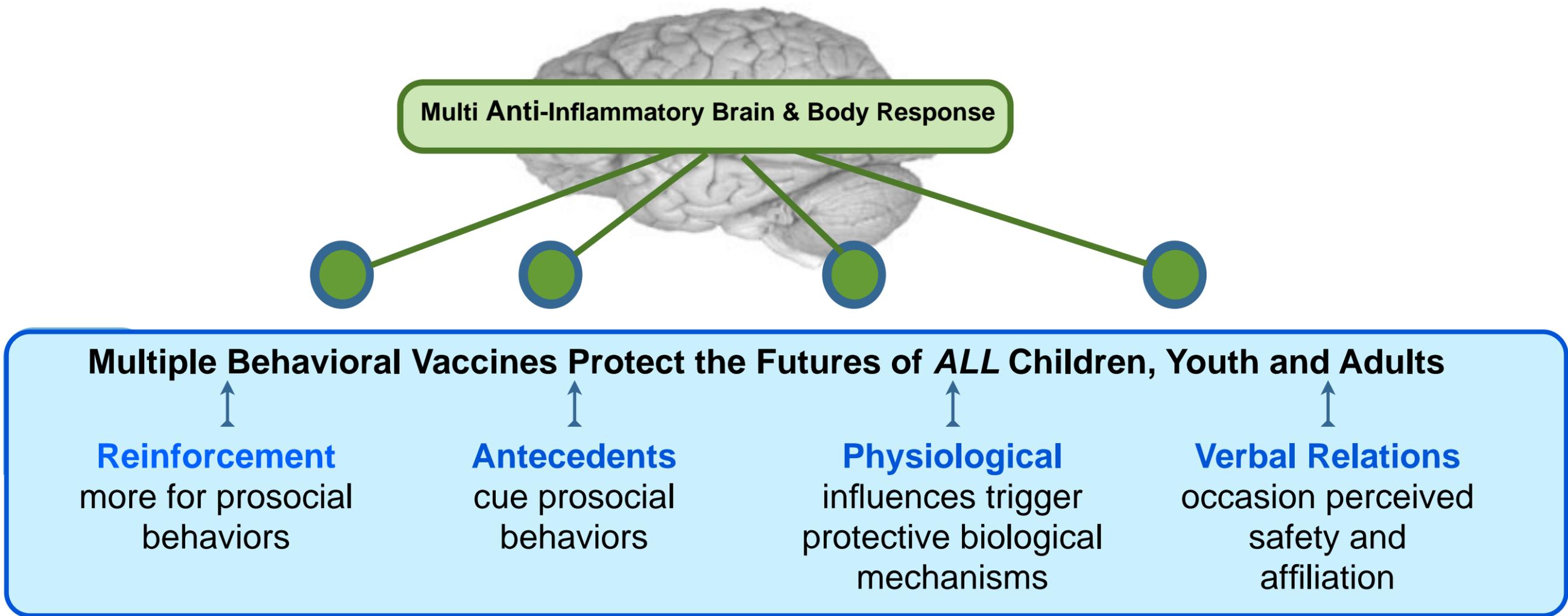


**Major Connected Causes of the Adverse Trends Predicting MEBs & Related Illnesses**

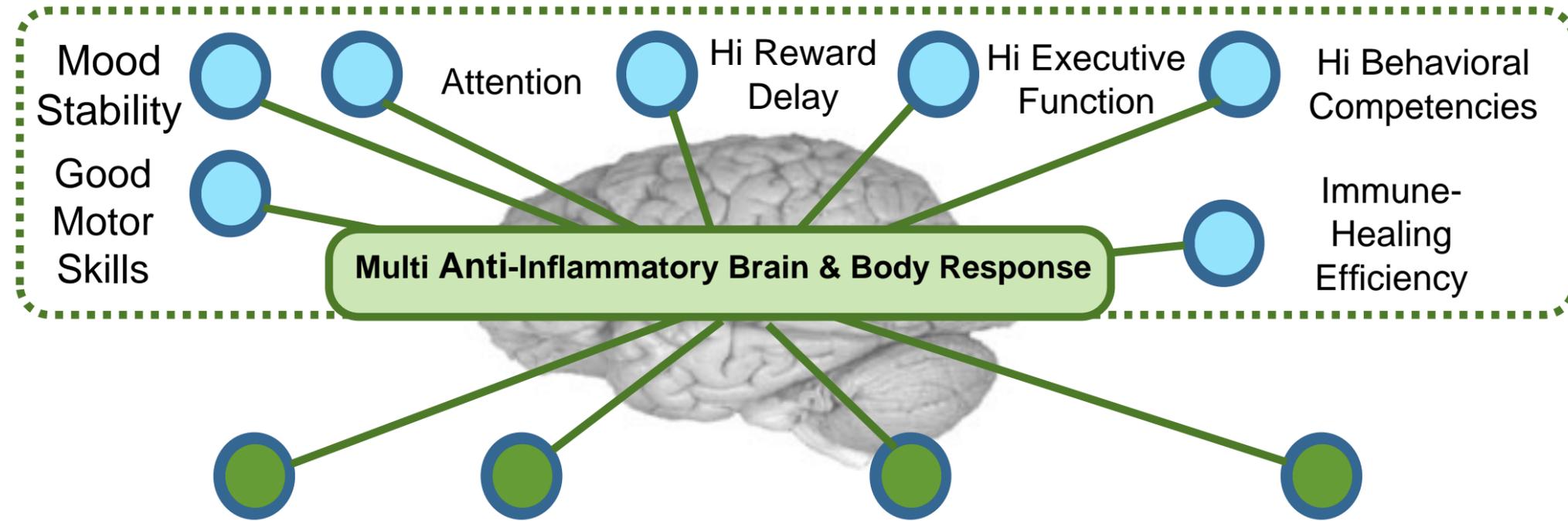
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The Same Conditions Predict Multiple Disorders





The Same Conditions Protect and Prevent



**Multiple Behavioral Vaccines Protect the Futures of ALL Children, Youth and Adults**

**Reinforcement**  
more for prosocial behaviors

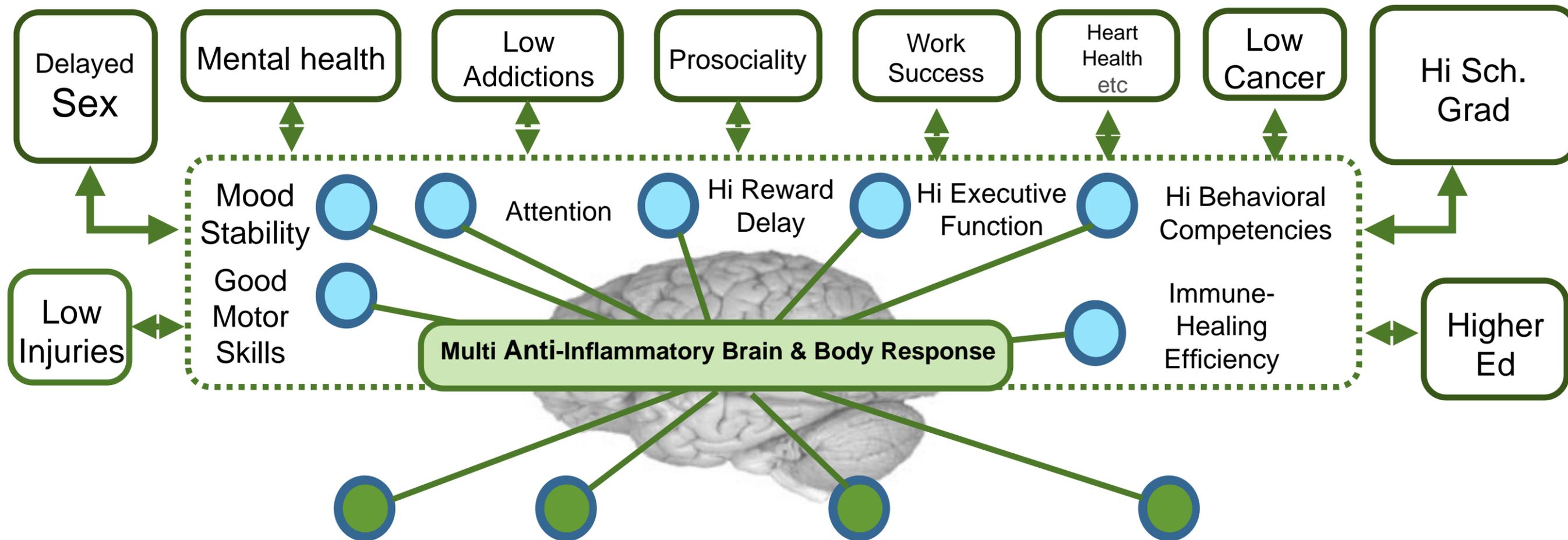
**Antecedents**  
cue prosocial behaviors

**Physiological**  
influences trigger protective biological mechanisms

**Verbal Relations**  
occasion perceived safety and affiliation

The Same Conditions Protect and Prevent





**Multiple Behavioral Vaccines Protect the Futures of ALL Children, Youth and Adults**

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**Antecedents**  
 cue prosocial behaviors

**Physiological**  
 influences trigger protective biological mechanisms

**Verbal Relations**  
 occasion perceived safety and affiliation

The Same Conditions Protect and Prevent



## Behavioral Vaccine Example:

### PAX Good Behavior Game in just FIRST Grade



- Rapidly decreases disturbing, disruptive behavior
- Increases reading test scores, high school graduation & college entry
- Prevents every form of addiction (tobacco, alcohol, drugs)
- Prevents violent crime and prison use
- Prevents multiple major mental illnesses (ADHD, conduct disorders, anti-social personality disorder, depression)
- Prevents suicide



**Costs less to deliver universally than mosts childhood medical vaccine, but...**

## Cost Savings



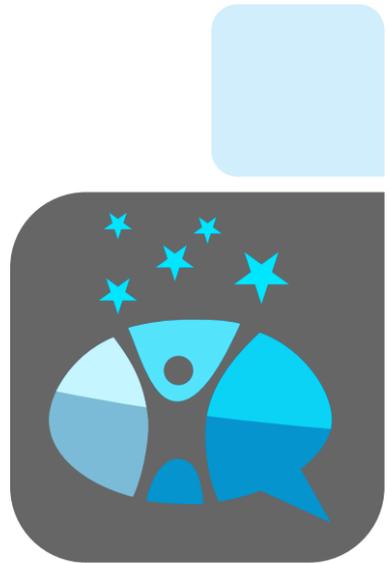
# How much might this behavioral vaccine save for America's future?

PAX GBG pays back \$4,637 to individuals, taxpayers, and others per student exposed in First Grade over 15 years.

Assuming 4,000,000 First Graders each year in the US, that saves **\$18 billion** every First Grade cohort by age 21.

Source: Aos, S., Lee, S., Drake, E., Pennucci, A., Klima, T., Miller, M., et al. (2011). Return on Investment: Evidence-Based Options to Improve Statewide Outcomes. (July), 8. Retrieved from <http://www.wsipp.wa.gov/rptfiles/11-07-1201.pdf>





What if we provided parenting supports for every family?

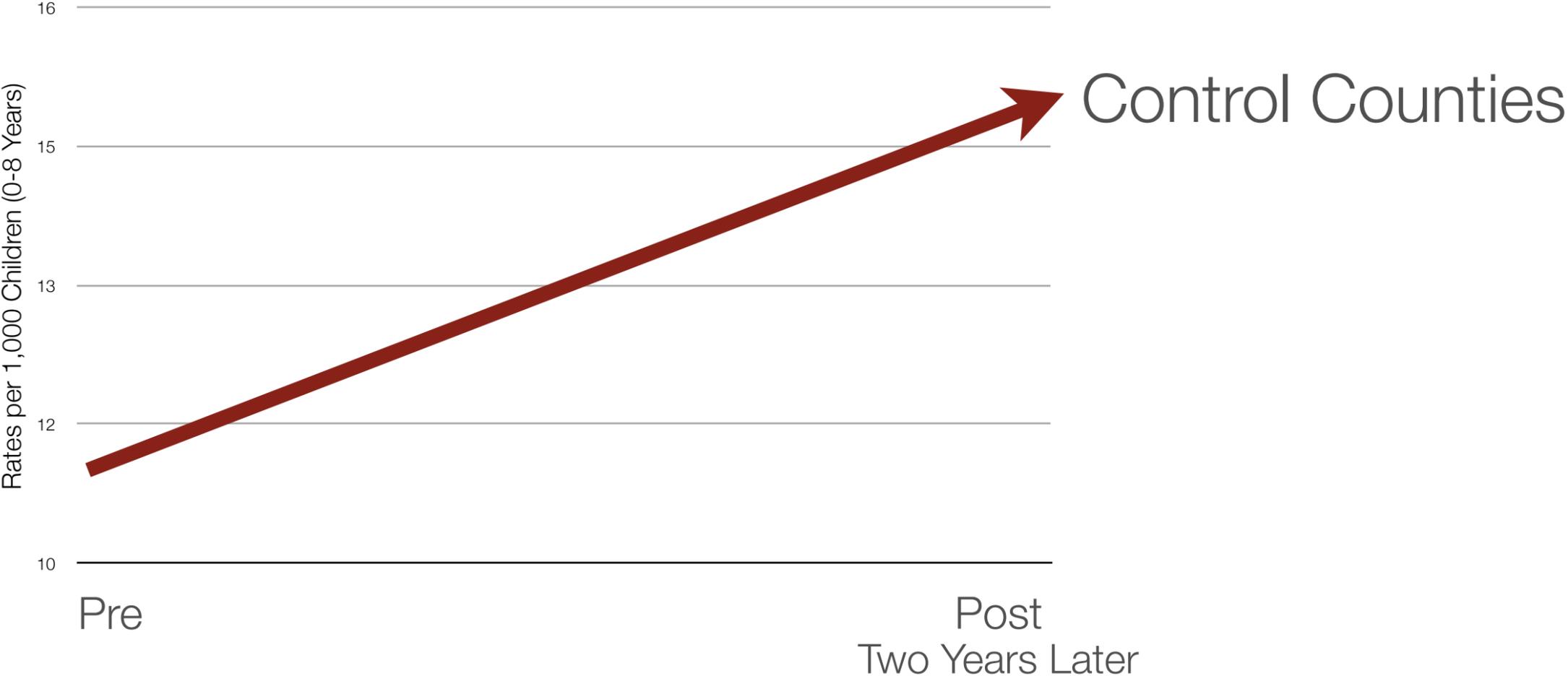
# Substantiated Child Maltreatment



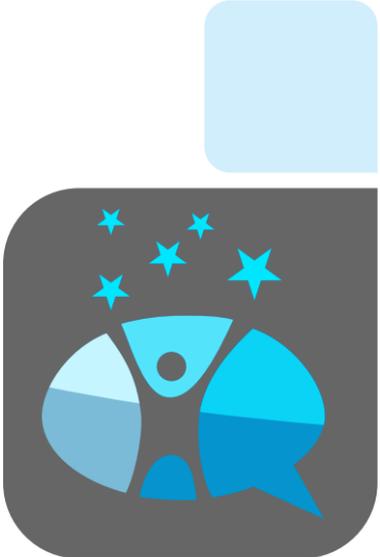
Prinz et al., 2009, *Prevention Science*



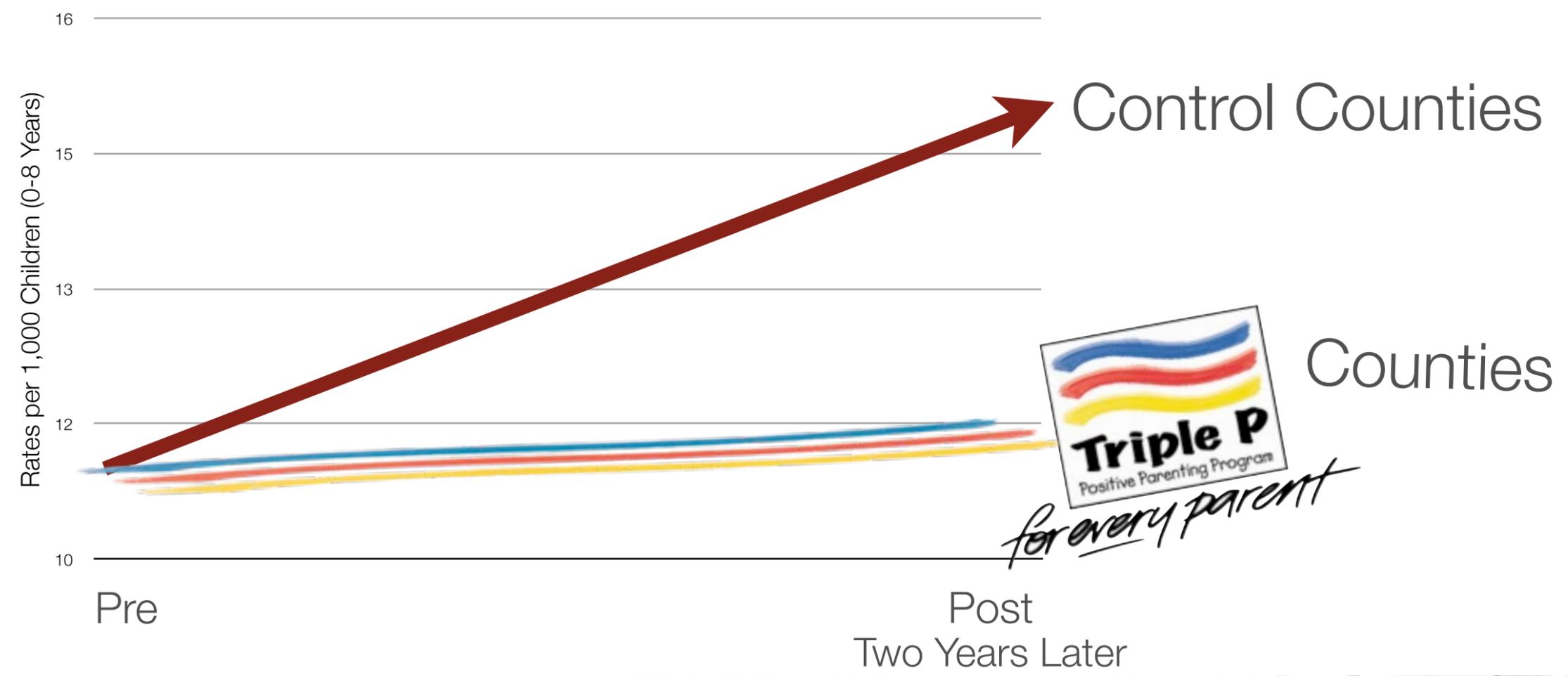
# Substantiated Child Maltreatment



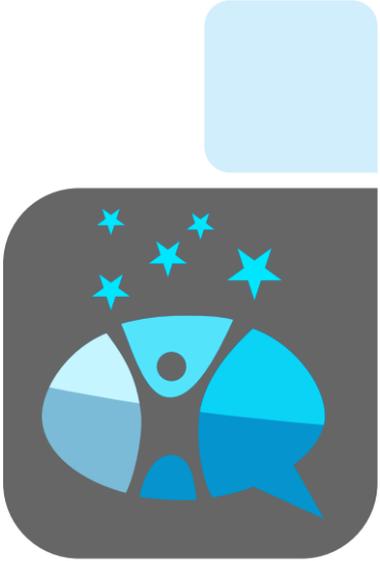
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# Substantiated Child Maltreatment



Prinz et al., 2009, *Prevention Science*



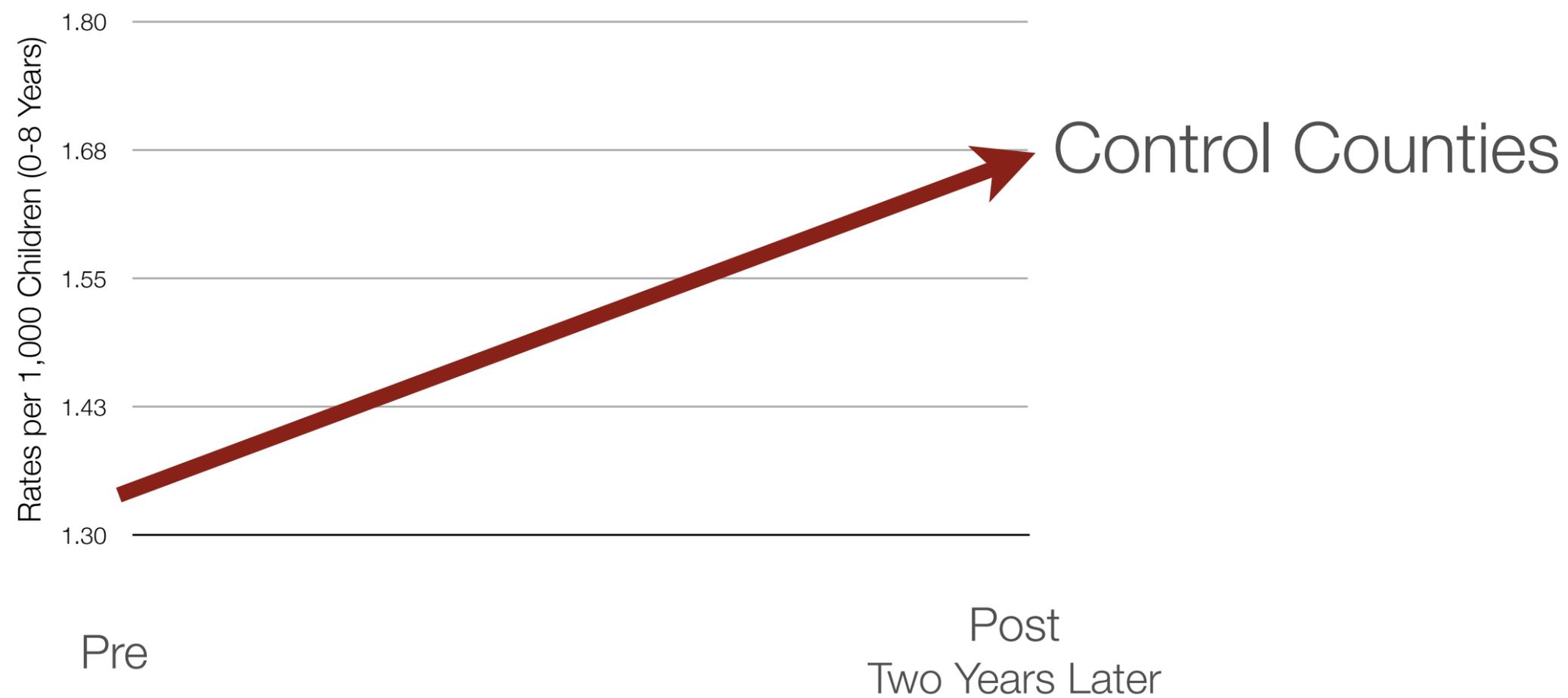
# Child Abuse Hospital Injuries



Prinz et al., 2009, *Prevention Science*



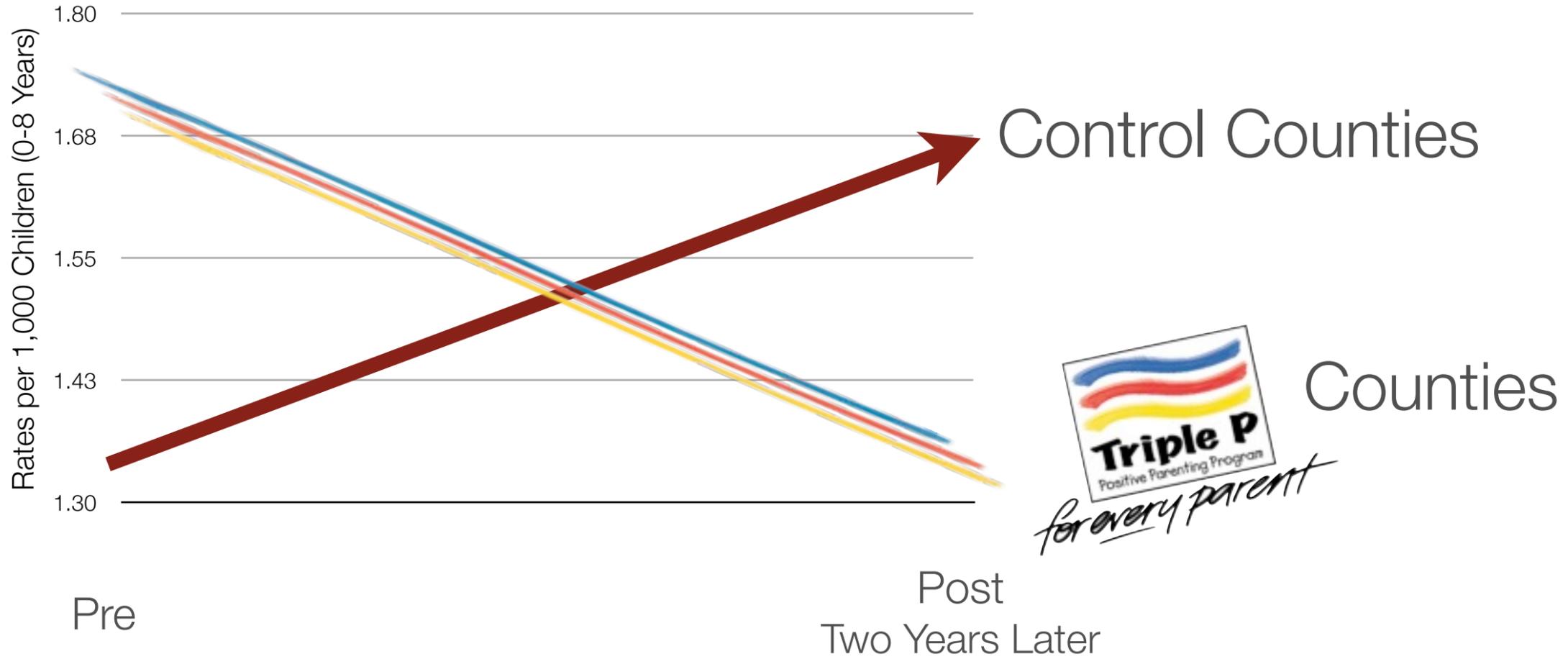
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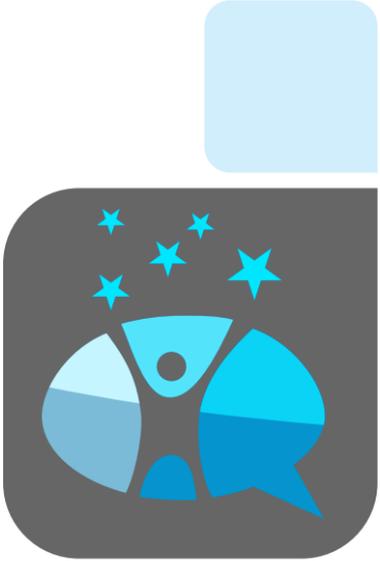
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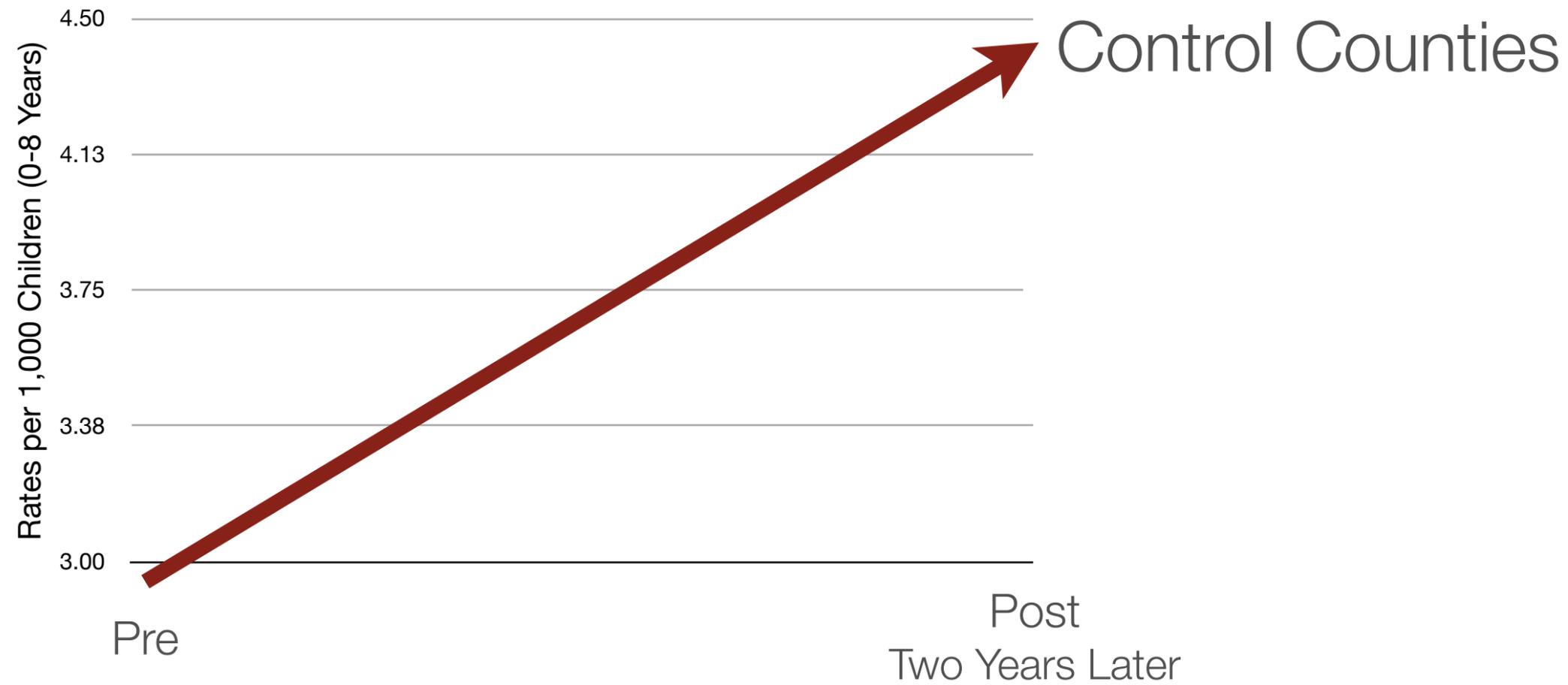
# Child Out-of-Home Placements



Prinz et al., 2009, *Prevention Science*



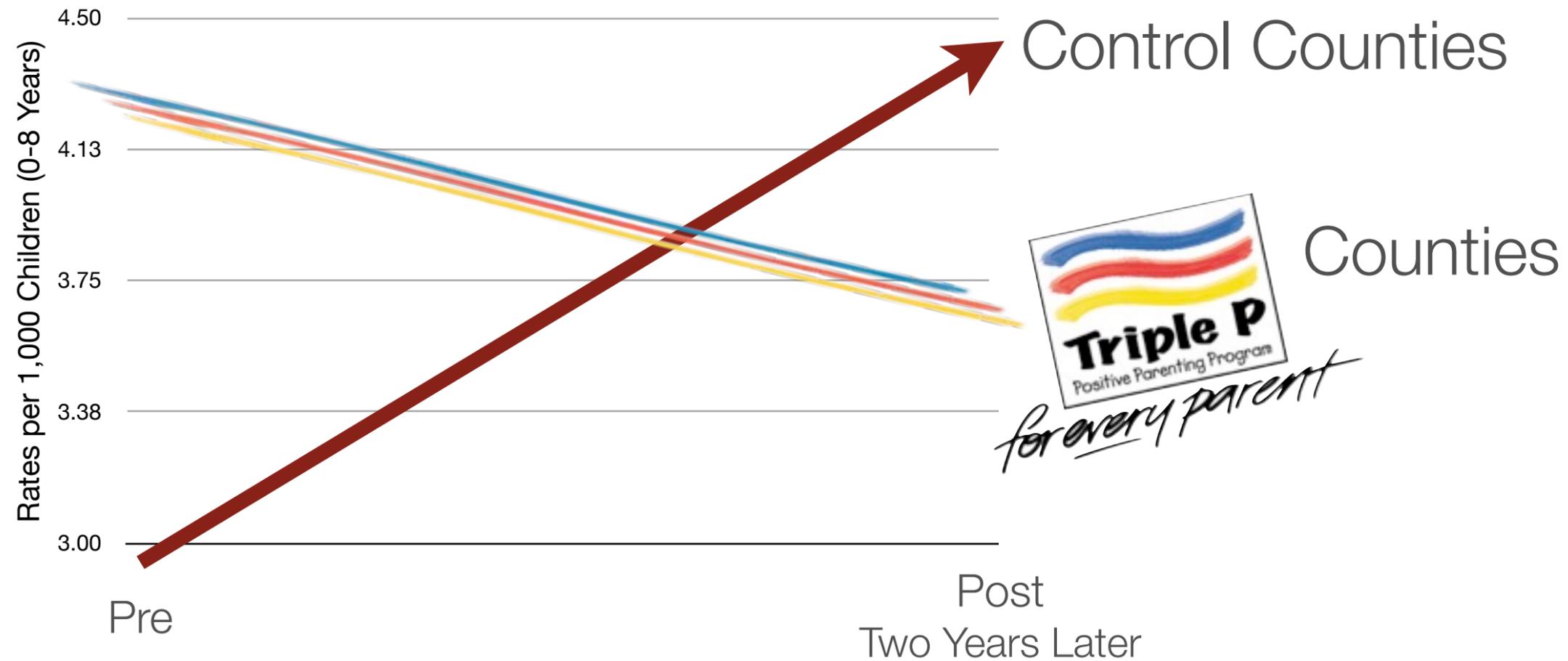
# Child Out-of-Home Placements



Prinz et al., 2009, *Prevention Science*



# Child Out-of-Home Placements



Prinz et al., 2009, *Prevention Science*





What do these results mean fiscally?

# Building models policy change

**Triple P® Prevention Estimator**

**BEGIN HERE**

**SELECT A STATE:**

**2006 Child Census and Federally Reported Maltreatment Data**

Total Population 0-9	Cases of Maltreatment	Out of Home Placement
5,212,861	59,194	25,098

 **CHILDREN** 6,400  
Saved Annually

 **DOLLARS** \$140,230,181  
Saved Annually

*Adjust the value to display the estimated savings.*

**Annual Placement Cost Per Child**

**\$21,911**

**Expert Adjustor**

\$11,000 \$66,000

Prinz, Sanders, Shapiro, Lutzker & Whitaker (2009). Population-based prevention of child maltreatment: The U.S. Triple P System Population Trial. Volume 10, March Issue. <http://www.springerlink.com/content/104965/>

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# Building models policy change

Use personalized business models to communicate to cost-efficiency and benefits.

### Triple P® Prevention Estimator

#### BEGIN HERE

**SELECT A STATE:**

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# Building models policy change

Use personalized business models to communicate to cost-efficiency and benefits.

Show short-term benefits

### Triple P® Prevention Estimator

**BEGIN HERE**  
**SELECT A STATE:** California  
Save Scenario Print Reset

**2006 Child Census and Federally Reported Maltreatment Data**

Total Population 0-9	Cases of Maltreatment	Out of Home Placement
5,212,861	59,194	25,098

**Substantiated Cases of Maltreatment** | **Out of Home Placements** | **Cases of Lifetime Conduct Disorder**

 **CHILDREN 6,400**  
Saved Annually

 **DOLLARS \$140,230,181**  
Saved Annually

*Adjust the value to display the estimated savings.*  
**Annual Placement Cost Per Child**  
\$21,911   
\$11,000  \$66,000  
**Expert Adjustor**

Prinz, Sanders, Shapiro, Lutzker & Whitaker (2009). Population-based prevention of child maltreatment: The U.S. Triple P System Population Trial. Volume 10, March Issue. <http://www.springerlink.com/content/104965/>

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# Building models policy change

Use personalized business models to communicate to cost-efficiency and benefits.

Show short-term benefits

Allow decision makers and advocates to adjust cost savings to their location.

### Triple P® Prevention Estimator

**BEGIN HERE**

**SELECT A STATE:** California

Save Scenario    Print    Reset

2006 Child Census and Federally Reported Maltreatment Data		
Total Population 0-9	Cases of Maltreatment	Out of Home Placement
5,212,861	59,194	25,098

Substantiated Cases of Maltreatment    **Out of Home Placements**    Cases of Lifetime Conduct Disorder

 **CHILDREN** 6,400  
Saved Annually

 **DOLLARS** \$140,230,181  
Saved Annually

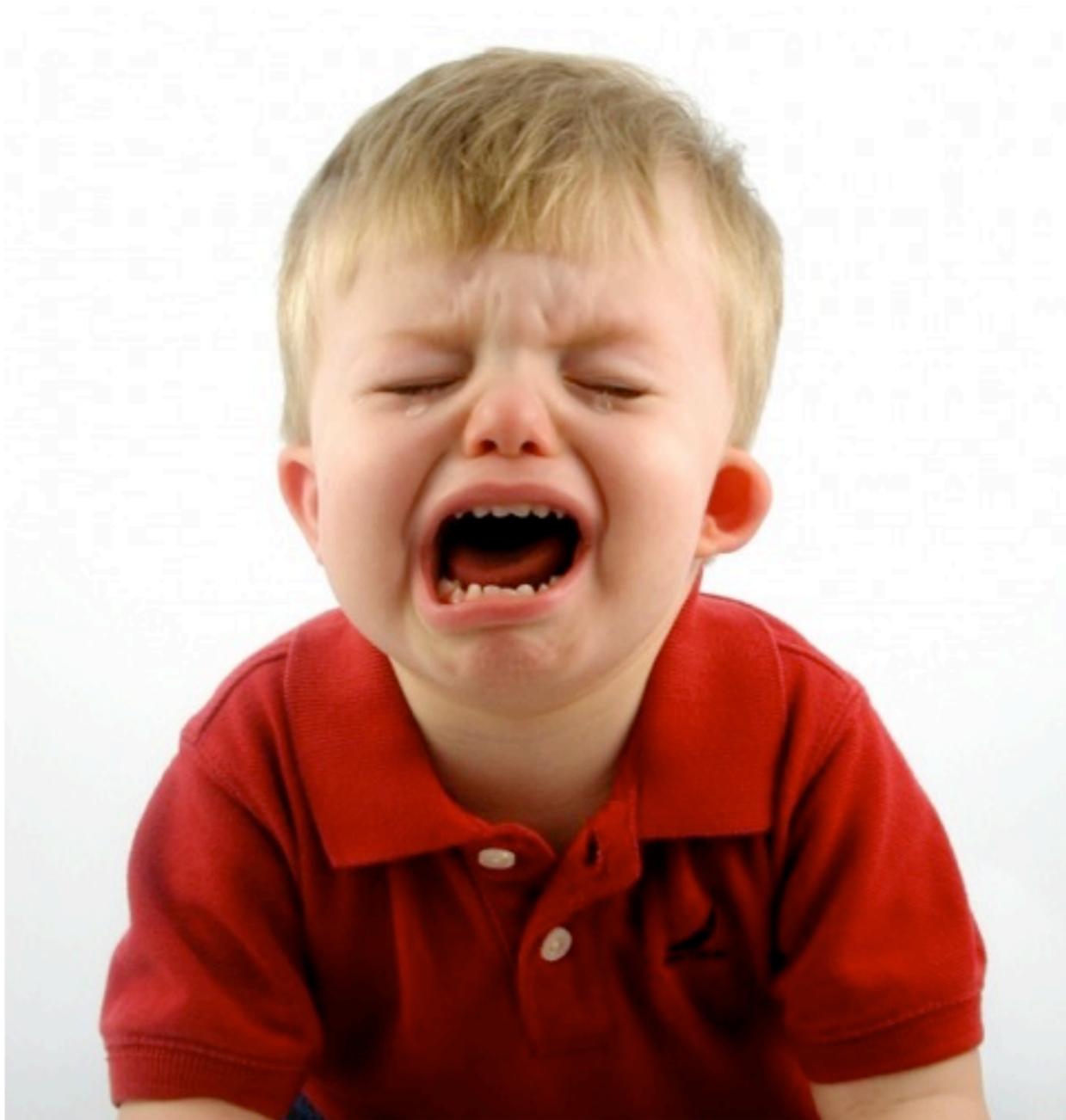
*Adjust the value to display the estimated savings.*

**Annual Placement Cost Per Child**  
\$21,911    21911

\$11,000    \$66,000  
**Expert Adjustor**

Prinz, Sanders, Shapiro, Lutzker & Whitaker (2009). Population-based prevention of child maltreatment: The U.S. Triple P System Population Trial. Volume 10, March Issue. <http://www.springerlink.com/content/104965/>

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## What parent doesn't need know how to solve meltdowns?

PS. Children who don't learn to self-regulate well tend to have many problems as teens and adults.



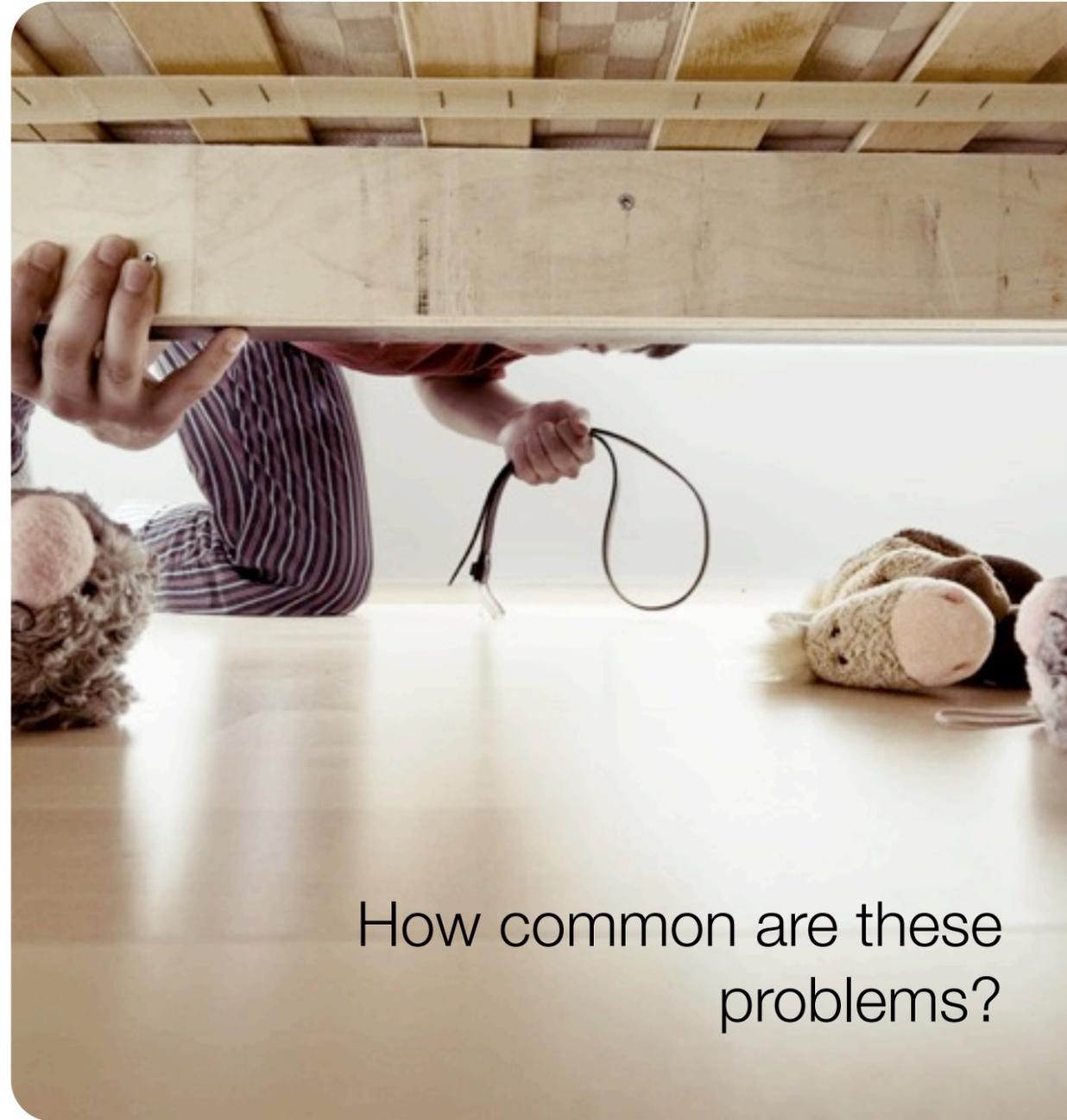
# How many parents have to deal with a very aggressive child?

PS. Children who have such aggress problems when young tend to develop more serious problems as adolescents.

# Consider these common problems experience by families everywhere...

- Children who won't go to bed and stay in bed.
- Children who won't get ready for school.
- Children who deliberately engage in dangerous behavior.
- Children who refuse to do their school work or homework.
- Children who are chronically afraid to try anything new.
- Children who throw screaming fits while shopping.
- And what else?





How common are these problems?

Let's estimate...

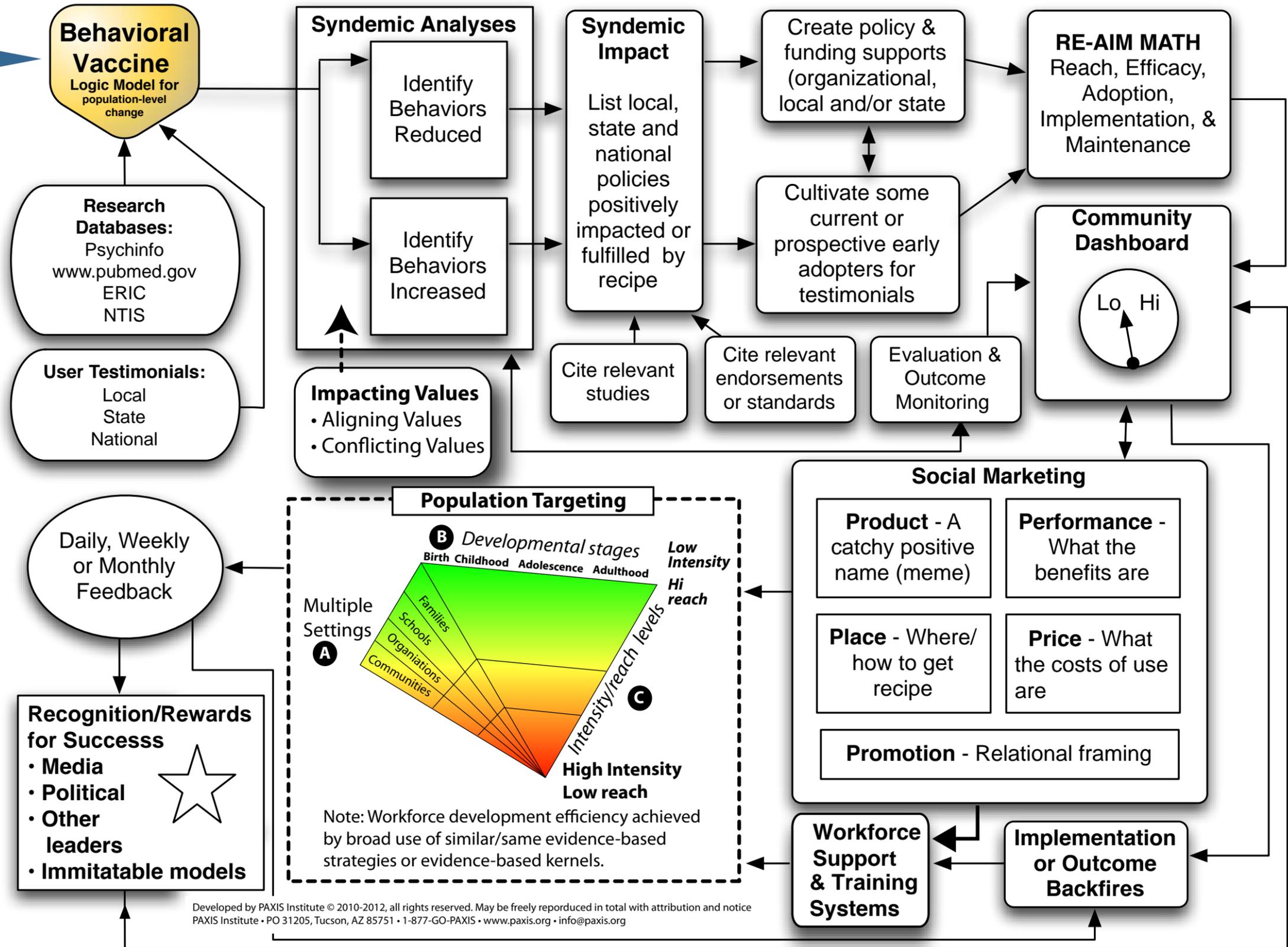




Moving everyone in the community...

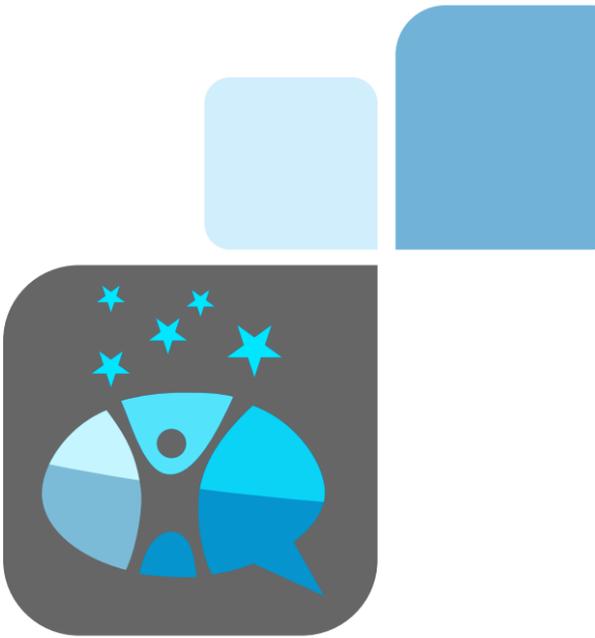
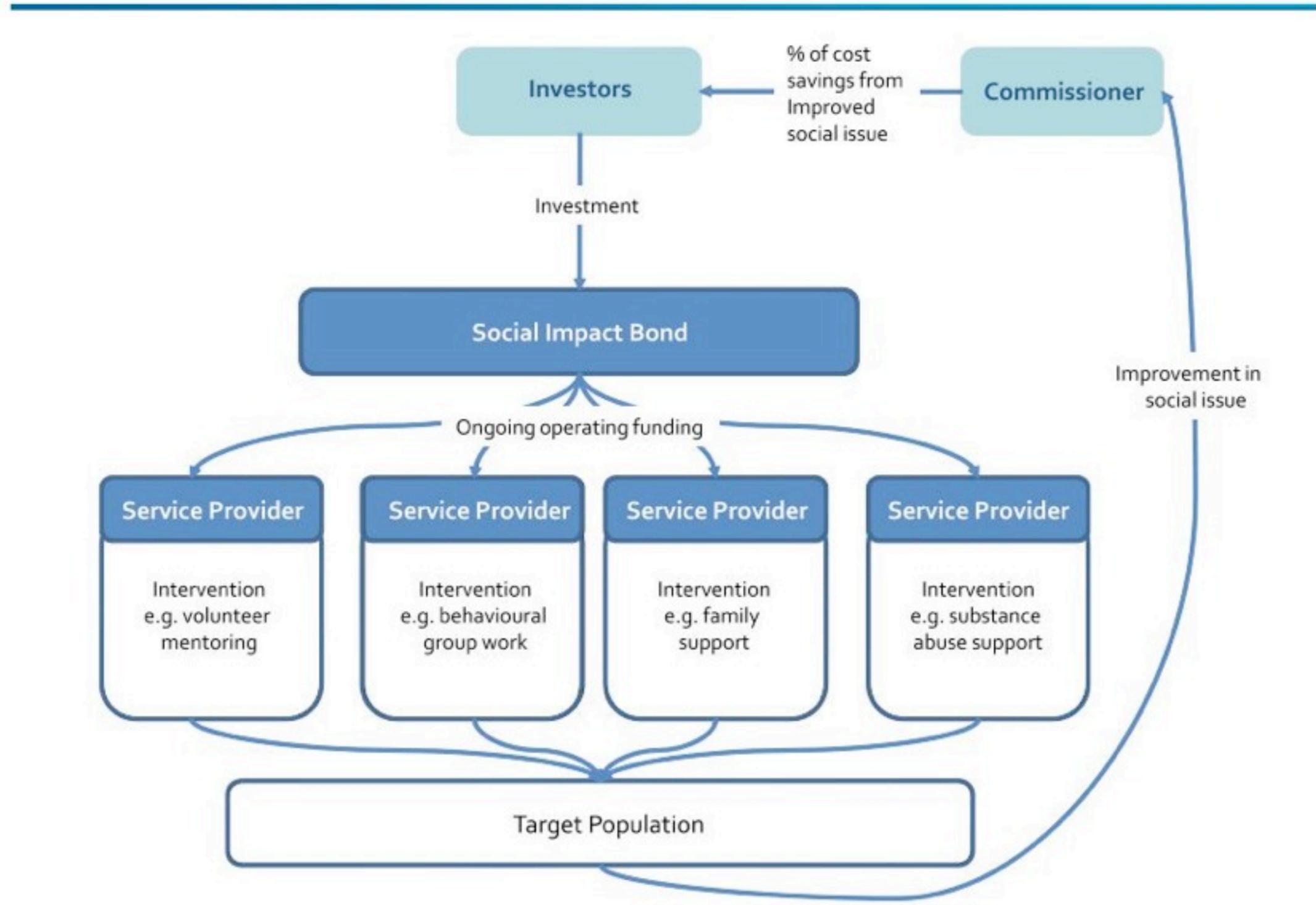
Note: Behavioral Vaccines are repeated evidence-based kernels or recipes of kernels that reduce mobility, mortality, and/or increase well-being (See Embry 2002; 2004; 2011)

Yes, there is a logic model for guiding local, state and federal policy makers to achieve population-level prevention.



# Social Impact Bond Structure

Yes, there are even innovative funding models to achieve population-level prevention.



# Our Futures

