Imagine Arizona, When Student Violence and Mental Illnesses Are Rare *Again*

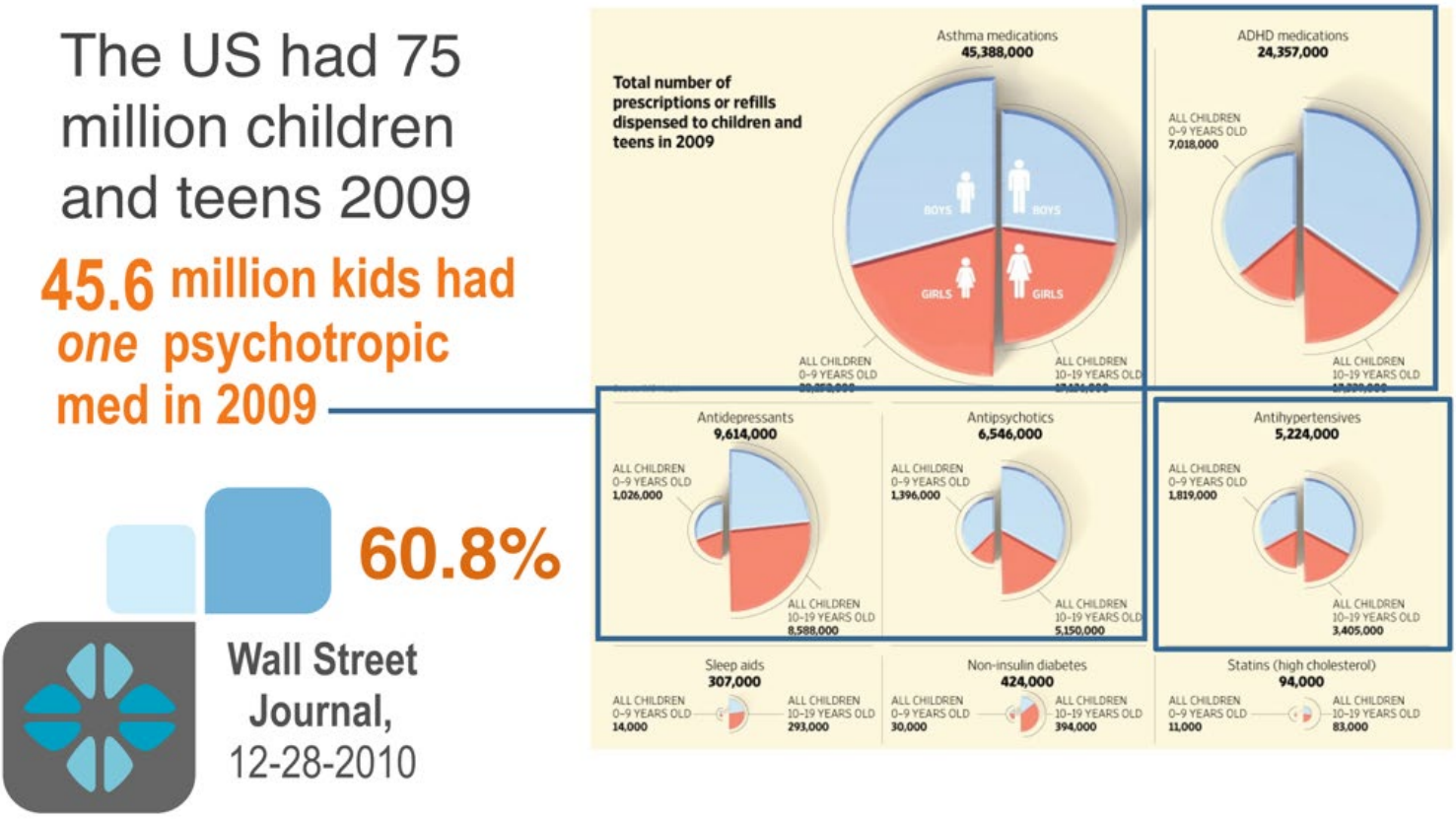
By Dennis D. Embry, Ph.D.[1]

Twice in my lifetime, children have been haunted by serious illnesses. The first was polio, and children like me raised dimes and more to prevent the dreadful disease. A break-thru happened in 1955 showing the vaccine stopped polio [1]. Soon everyone got the polio vaccine, and now polio is basically vanished except in some war-torn areas in the world.

What health threat haunts children in Arizona and America today?

That is an epidemic, and this is why virtually every other ad on TV is about some medication for a psychiatric disorder. And, the *Wall Street Journal* documented that more than half of America's children have had a psychotropic medication [2]. Just as we could not treat our way out of polio iron lungs, wheelchairs, and braces, we cannot treat our way out of childhood behavioral and psychiatric disorders.

In 2009, the Institute of Medicine announced that it was scientifically possible and proven to prevent mental, emotional, and behavior disorders [3], naming two



Presently, more than half of America's children will have a real, honest-to-god, mental illness by age 18, and the percentage has been increasing every two years.

strategies specifically: the Good Behavior Game® and Population Level Triple P®. Because school-based strategies are easier to scale, the Substance Abuse and

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Mental Health Services Administration decided to fund and test the scalability of the Good Behavior Game®. Just 10 years later, new science shows that the possibility is now proven beyond any doubt, and Arizona is about to launch population-level efforts to prevent and reduce children's mental, emotional, and behavioral disorders [4]—based on replicated longitudinal science better than any psychotropic medication for children's disorders [5-10]. And yes, the platinum standard science shows permanent brain gene change [8]. NIH has just funded a study to examine the effects of this prevention strategy of children (about 1,500 students) at age 35 that was implemented in primary grades.

The simple strategy works in an individual classroom and has proven impacts children over 20 years later [8, 10-16]. The strategy impacts both teacher and family wellbeing, including reductions in Adverse Childhood Experiences from direct trauma and secondary trauma.

The strategy is Multi-Tiered Systems of Support (MTSS) friendly, with easy to implement at a Tier 1 level and supported by simple Tier 2 and 3 additions. The strategies easily generalize to home, afterschool, and clinical settings from the classroom.

The strategy is not just about mental health; it is the only strategy proven at population level to improve standardized reading and math scores—regardless of curriculum [17], while also improving family life [18]. And, PAX GBG reduces teachers' burnout and stress IF teachers implement [19], though teacher burnout tends to reduce implementation of any evidence-based practice that reduces students' mental, emotional or behavioral problems [20-24]. New studies are underway to help teachers help themselves better with their stressors and burnout. All total, there are more than 50 peer reviewed publications on PAX Good Behavior Game or its precursors, which may be found at pubmed.gov or psycnet.apa.org.

pax Good Behavior Game

NREPP National Registry of Evidence-based Programs and Practices

Predicted Benefits of PAX GBG in Your School, District, Tribe or Community When First Grade Students Reach Adulthood After 1-2 Years of PAX GBG Exposure*

Site Estimate for:	***All First Graders in Arizona***	
Enter number of First Graders at school, district, Tribe or community>>>>>>	**71,051**	**<<< Enter number of First Graders**
6,112	Fewer young people will need any form of special education services	
3,955	More boys will likely graduate from high school.	
4,746	More boys will likely enter university	
6,306	More girls will likely graduate from high school	
4,928	More girls will likely enter university	
690	Fewer young people will commit and be convicted of serious violent crimes	
6,831	Fewer young people will likely develop serious drug addictions	
4,674	Fewer young people will likely become regular smokers	
2,517	Fewer young people will likely develop serious alcohol addictions	
3,446	Fewer young women will likely contemplate suicide	
4,674	Fewer young men will likely attempt suicide	
$925,084,020	**Predicted financial net savings to students, families, schools, communities, state/federal governments**	
$23.67	**Estimated Cost of PAX GBG Materials Per Child for Lifetime Protection**	
$22.00	**Estimated Cost of External Training & Technical Supports Per Teacher Prorated per Child's Lifetime**	
$26.80	**Estimated Cost of Internal Supports for Implementation and Maintence by Teachers Prorated per Child's Lifetime**	

All this seems *"too good to be true",* just like it seemed too good to be true to stop polio before the Salk Vaccine worked [1]. The Salk Vaccine results were true, and so are the results on prevention outcomes for the Good Behavior Game® other compatible strategies in 2009 IOM Report—for changing behavior, changing biological and brain measures and even gene expression for the better. The strategy was first tested and published 50 years ago [25] and now multiple randomized, longitudinal trials in the U.S. Canada and Europe. My talk outlines how multiple strategies reported in the 2009 IOM Report—embedded in PAX Good Behavior Game—can and will be implemented in Arizona—transforming the mental, behavioral, and physical health of the states' future: All *Our* Children. Arizona is a big place, with a big population, and with an equally big vision for the future. The Good Behavior Game is a "game changer" for Arizona (see estimate from the scientific studies for likely impact below)—proven to prevent virtually every addiction including opiate addictions, prevent suicide, violent crime, multiple mental illnesses, and increased education & economic success.

What Arizonans may not know is that this work and results have emerged as a result of 30-years in research and develop in Tucson by PAXIS Institute and Johns Hopkins University in Baltimore. The very first population-level, randomized control study to prevent carrying of guns and knives as well as reduce violent injuries at schools was conducted in Tucson [26-30]. Dr Embry was the creator and prevention scientist behind that study, and he lives in Tucson and grew up in Phoenix as a young child.

What attendees may not know is that the Arizona Health Care Cost Containment System (AHCCCS), the Governor's Office, and the Arizona Department of Education is providing substantial funding to implement the single most scientifically proven classroom strategy to prevent violent behavior, mental and emotional disorders, and improve standardized math and reading scores at a population level. That strategy is, the PAX Good Behavior Game. All that is needed is that educators learn to use these daily practices (not lessons), which also improves the well-being of educators, administrators, and families.

The talk will highlight both the science, outcomes, and next steps to make it happen in your classrooms, schools, and communities.

Research Citions Related to PAX Good Behavior Game

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