



WASHINGTON STATE
UNIVERSITY
EXTENSION

Community Poverty and Adverse Childhood Experience as School Readiness Predictors

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CHILD & FAMILY RESEARCH UNIT
CAFRU

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 Summary of key WaKIDS findings

- The organizing power of poverty and ACEs when describing risk.
- Poverty is a principal tool for explaining individual and school differences in academic success. Community ACEs offers meaningful added explanatory power.
- Hispanic and ELL status for both individuals and schools are primary mediating factors when examining school readiness, academic progress, and social risk.
- The type of community influences social risk and academic outcomes.


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Magic Wand: Three Research Based Strands: Key Factors Common To All Competent Children

- 1. Relationship:** A strong parent-child relationship, or, when such a relationship is not available, a surrogate care-giving figure who serves a mentoring role.
 - The power of caring people to help children heal
- 2. Regulation:** The ability to self-regulate attention, emotions, and behaviors.
 - The ability of natural systems to teach and support
- 3. Competency:** Good cognitive skills, which predict academic success and lead to rule-abiding behavior
 - The role that education systems can have to help with healing

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Place matters


Neighborhoods and 'area deprivation'

- Deprivation- a lack of critical assets needed to support health and wellbeing.
- Poverty and segregation as the two principal area characteristics studied
- Early use of adversity measures as a neighborhood characteristic

Out-of-school influences on school success

- Non-genetic issues such as access to care in pregnancy that create prenatal challenges to development
- Inadequate access to health care
- Food insecurity
- Family stress and disruption
- Environmental pollutants that compromise health and
- Neighborhood factors such as access to social support and safety.
- Berliner 2009

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Some framing information

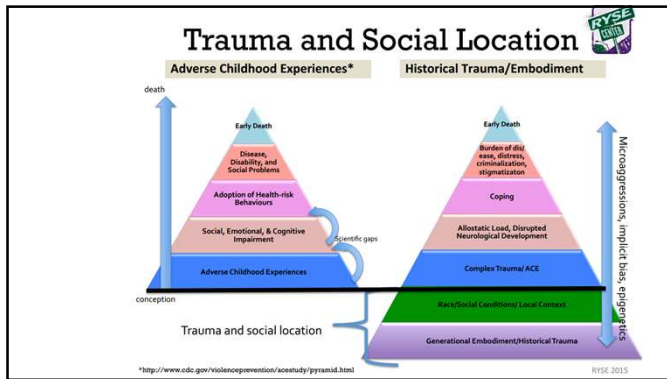
Poverty and children

- Nationally, 40% of children will live in poverty at some time in their childhoods
 - Among Black and Hispanic students, 75% v. 30% White students
- 43% of Washington students are Free and Reduced Meal (FRM) enrolled
 - Family of three- \$37,296 annual gross income
- 64% of WaKIDS children FRM enrolled

Our increasing diversity

- Washington students:
 - 23% Hispanic, 11% English Language Learner (ELL)
- WaKIDS sample
 - 32% Hispanic, 26% ELL
- Special education enrollment
 - 14% K-12
 - 11% WaKIDS sample

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We know ACEs are established early in life with resulting risk

- In more than 1,600 Spokane families
 - 50% of parents and 25% of these 2-4 year old children already experienced four or more ACEs
- As children's ACEs increase, teachers' assessments of school readiness and social emotional development demonstrate the 'ACE dose' effect.

	Time 1	Time 2	Time 3
0-1 ACEs	28	34	40
2-3 ACEs	28	34	40
4 or more ACEs	24	30	36

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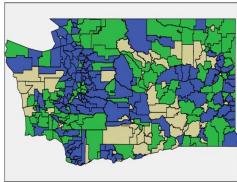
Spokane Elementary ACEs Study: Odds for academic and health problems with increasing ACEs

Spokane Elementary School Students	Academic Failure	Severe Attendance Problems	Severe School Behavior Concerns	Frequent Reported Poor Health
Three or More ACEs N=248	3	5	6	4
Two ACEs N=213	2.5	2.5	4	2.5
One ACE N=476	1.5	2	2.5	2
No Known ACEs N=1,164	1.0	1.0	1.0	1.0

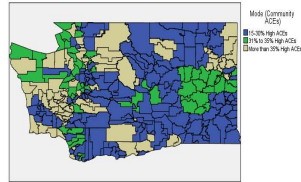
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Poverty and ACEs in communities are not correlated

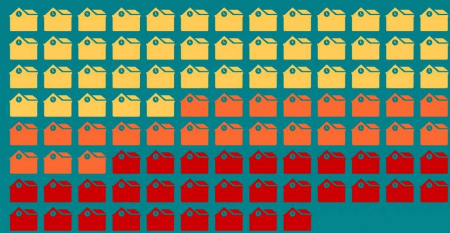
Poverty in School Districts (Locales)



Adult ACEs in School Districts (Locales)



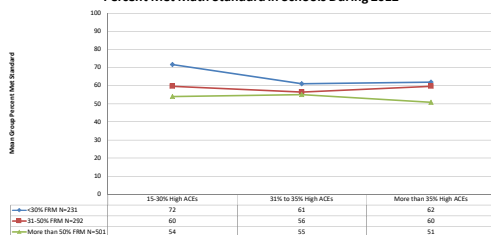
Nearly 1/3 of Washington Students live in communities where 35% of the adults have 3 or more ACEs



44% of Washington schools are in low Adult ACEs communities, 24% are in moderate adult ACEs communities and 32% are in high adult ACEs communities

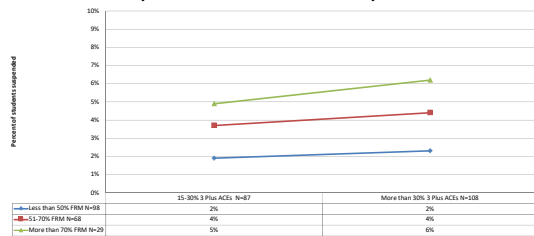
The impact of community ACEs and poverty on academic success

The Interaction of FRM Enrollment and Community ACEs on Grade 4 Percent Met Math Standard in Schools During 2012

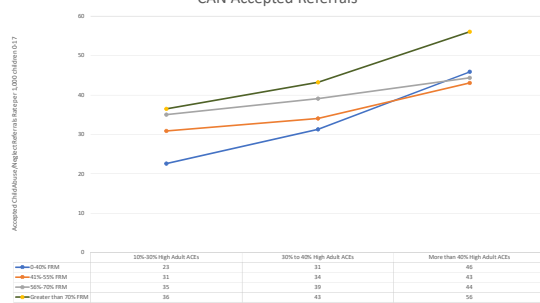


Adult ACE risk in communities accelerates the impact of poverty on discipline actions

**Percent of Student Suspended in 2013
by FRM Enrollment and Community ACEs**




**Poverty and Community ACEs Relationship to
CAN Accepted Referrals**



WaKIDS kindergarten readiness questions

1. What are the principal community risk and protective characteristics that predict initial differences in school?
2. Is students' initial school readiness predictive of school adjustment and academic success?
3. Do community ACEs and poverty serve as principal factors through which to characterize community risk?
4. What are the individual differences that influence community risk and protective factors as predictors of school readiness and progressive academic success?




WaKIDS Overview

- Statewide initiative, progressively implemented
- WaKIDS system supports greater identification and early supports
- Higher need schools prioritized for early adoption in the rollout
- WaKIDS Assessment (TSG Gold)
- Main analyses: 137,234 students

Year	Districts N=295	Schools N>2,300	Students	Teachers
2016-17	266	1,097	77,314	4,372
2015-16	257	887	58,656	2,974
2014-15	193	623	43,298	2,110
2013-14	187	550	38,443	1,800
2012-13	102	308	21,811	981
2011-12	68	165	6,661	392
2010-11	51	63	1,760	116

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Data sources

- The WaKIDS assessment includes six domain scales measuring:
 - Cognitive development
 - Language development
 - Literacy development
 - Math development
 - Physical development
 - Social emotional development.
- In addition, WaKIDS results are summarized as the number of domains (0-6) on which the student is considered to have met or exceeded developmental expectations.
- OSPI student data for 1-4 years
- BRFSS
- Census
- DSHS Community Risk Indicators
- Healthy Youth Survey (youth voice describing school/family/community climate and levels of risk)

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Data analysis

- Consolidating risk and protective factors, Confirming the role of poverty and community ACEs as the summative explanatory tools
- Generalized Estimating Equations as the analytic approach
 - Controlling for DSHS locale, type of community, and school
 - Hispanic ethnicity and ELL status as covariates

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Key factors influencing the analysis

- Controlling for locality (DSHS locale, community type, and schools)
- The profound effects of Washington's increasing diversity
 - Hispanic ethnicity
 - ELL student status
- Constraints of administrative data sets to address research questions
- Nature of the WAKids assessment tool
- Cumulative three year Kindergarten data and the look at the 2013-14 Kindergarten cohort over three years

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Individual and school differences impacting school readiness

■ Individual

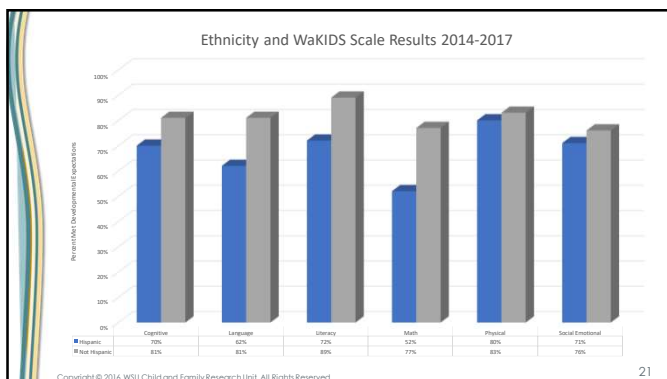
- Gender
- Hispanic ethnicity
- Poverty
- ELL status


■ School Characteristics

- Poverty
- Percent Hispanic enrollment
- Percent ELL students
- Type of community

■ 72% of ELL students are Hispanic

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School Poverty and Community ACEs as Mediators of School Readiness

School FRM Enrollment


- Significant linear impact on school readiness for all seven WAKids dimensions
 - App. 10% mean pass differences lowest to highest poverty groups
- Hispanic and ELL student enrollment related to lower academic performance AND lower reported social risks-possible evidence for the Hispanic Paradox.

Community ACEs

- Significant predictor of WAKids results on four of seven dimensions
 - Total domains school ready
 - Cognitive
 - Language
 - Literacy
 - Math
- Main effect is after controlling for poverty, locality, ethnicity, and ELL status
- 2-4% mean pass percent differences between lowest and highest ACEs communities

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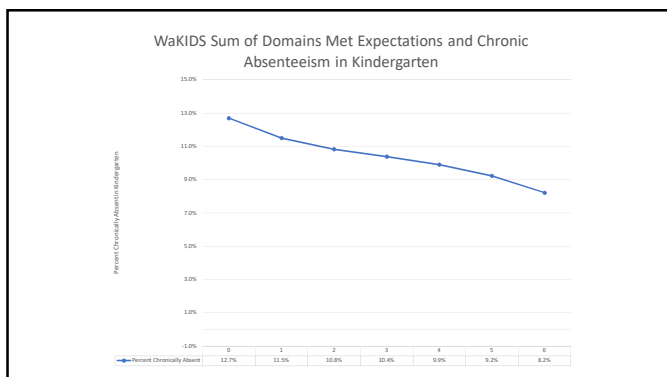


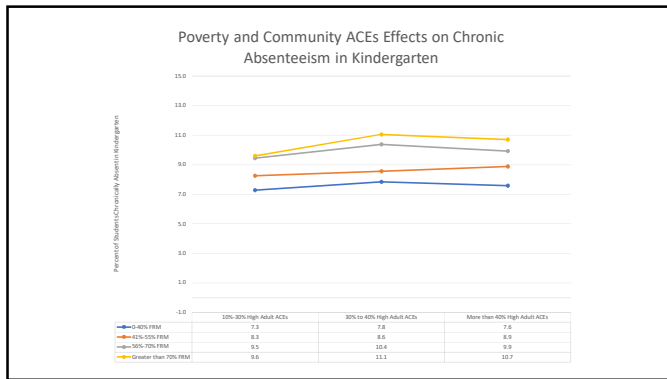
Factors Influencing Early Academic Experiences

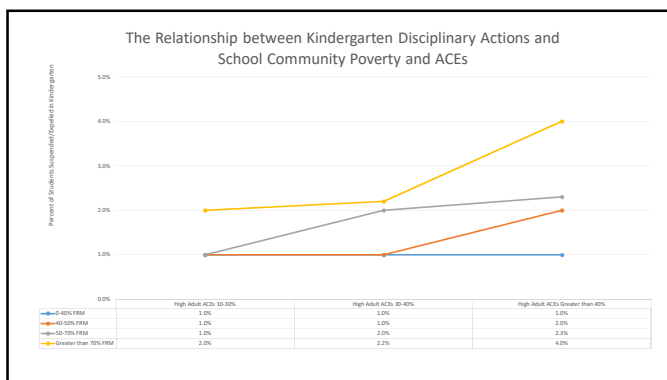
- Validating WAKids results
 - Progression into special education
 - Chronic absenteeism
 - State standardized test results in grade 3
- Individual differences
 - Race, gender with respect to absenteeism and discipline
- An interaction effect of poverty and community ACEs
 - Absences and discipline

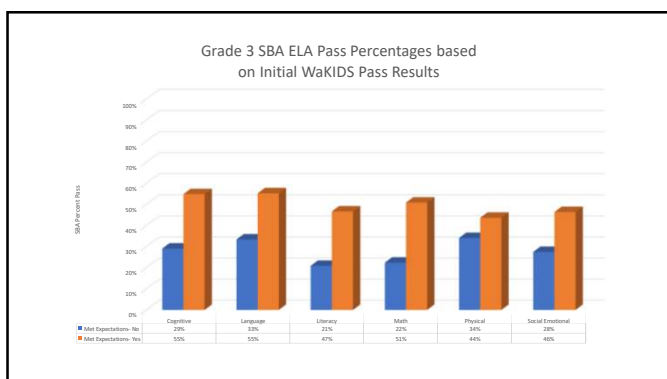
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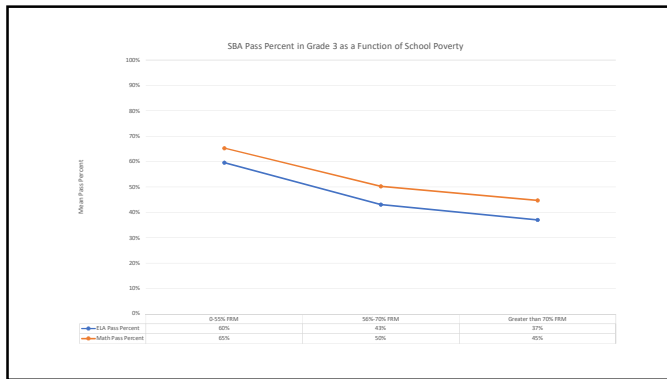
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Addressing community risk factors for academic and youth well-being

- Poverty and ACEs require related but often distinct supports
- Build local capacity for differing local need
- Social resources and social connection as primary protective steps
- Sustain economic opportunity efforts
- Expand public awareness on the scope and consequences of ACEs and trauma
- Integrate social emotional learning
- Use trauma-informed principles in student supports and learning strategies
- Increase access to early intervention and treatment resources for the most vulnerable students and families
