

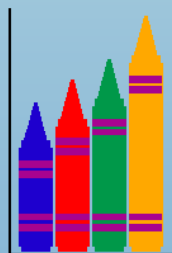


## OSEP Center on Evidence-based Practice: Young Children with Challenging Behavior

([www.challengingbehavior.org](http://www.challengingbehavior.org))

Multi-site, Longitudinal Study:

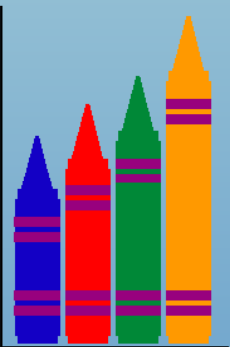
The KIDS Study



Center for Evidence-Based Practice:  
Young Children  
with Challenging Behavior

# KIDS Study - Lead Investigators

- University of South Florida – Dunlap, Fox
- University of Colorado at Denver - Strain
- University of Florida - Conroy
- University of Kansas - Juniper Gardens - Carta
- Lehigh University – Kern
- Tennessee Voices for Children – Timm
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- USF - Data Base & Infrastructure – Lardieri, Sowell
- USF – Statistician - Banks

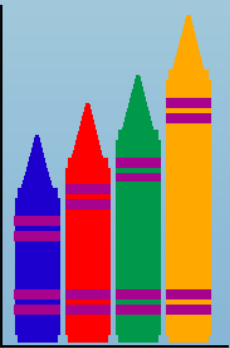


# Purpose



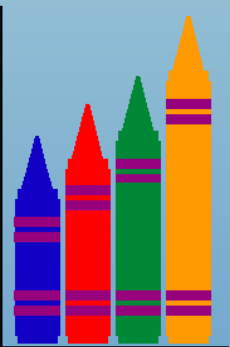
The principal goals of the KIDS Study are to:

- (1) describe in detail the developmental trajectories of a diverse population of young children who exhibit serious challenging behaviors, or who are at high risk for developing challenging behaviors, and
- (2) identify variables that may predict different trajectories as well as different outcomes, such as readiness for kindergarten.



# Some Anticipated Contributions

- Describe natural history of challenging behaviors in important populations of young children
- Provide first empirical evidence of preventive factors regarding challenging behaviors from a multi-variate perspective
- Provide necessary first-generation data for second-generation empirical tests of interventions



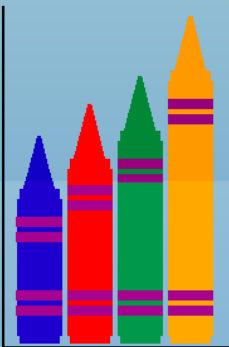
# Eligibility & Recruitment

## Eligibility:

- (1) child is between 18 and 48 months;
- (2) parent/legal guardian provides informed consent and expresses willingness to participate for at least 3 years;
- (3) (a) child exhibits challenging behavior that is being formally addressed by an early intervention or early childhood special education provider *or* (b) child displays challenging behavior according to Center definition (impediment to development & social participation; chronicity) *or* (c) child meets criteria for being at high risk of challenging behaviors due to presence of 4 of 10 risk factors.

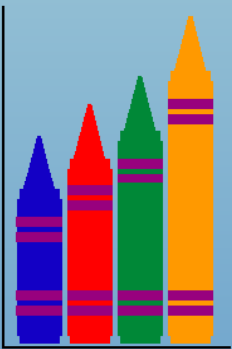
## Recruitment - from 6 sites/programs targeting these high risk populations

- Lehigh Valley, PA; Nashville, TN (RIP), Gainesville, FL; Tampa Bay area , FL; Denver, CO; Kansas City and Lawrence, KS.



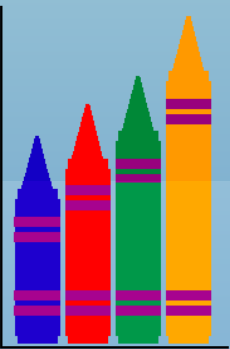
# Design and Measurement

- Accelerated (longitudinal) growth curve design, with two cohorts...
  - 18-30 months
  - 36-48 months
- Data collection – every 6 months
- Measurement Categories
  - Child Measures ; Family Measures; Ecological/Contextual Measures; Intervention Measures (but very limited); Growth Outcomes; Kindergarten Outcomes



# Current Status

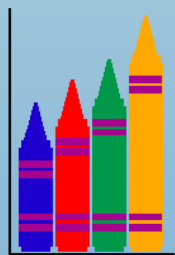
- Recruitment/Data collection initiated in late 2003
- Recruitment completed in August, 2005
- Wave 1 enrollment = 244 participants
- All Wave 1-3 data in data base; Clean up of data nearing completion
- Available data from Waves 4-6 being entered
- Data analyses under way



## Some Descriptive Statistics --- at Entry (Wave 1)



From Dunlap et al.  
Conference on Research  
Innovation in Early Intervention  
February, 2006

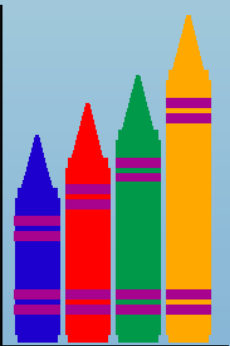


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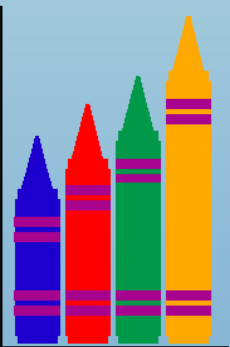
# Population Description (n=244)

Male	62.6%
Female	37.4%
Enrolment age > 36 mos.	47.2%
Enrolment age < 36 mos.	52.8%
African-American	34.1%
Caucasian	37.1%
Hispanic	20.5%
Other	8.3%




# Population Description (n=244)

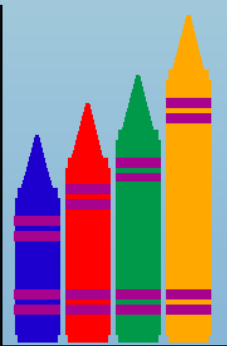
Known Dev. Delay	11.2%
Known Autism	5.1%
Known Language Problems	29.7%
CBCL Total > Clinical	34.9%
CBCL Internal > Clinical	23.3%
CBCL External > Clinical	40.6%



# Some Risk Factors

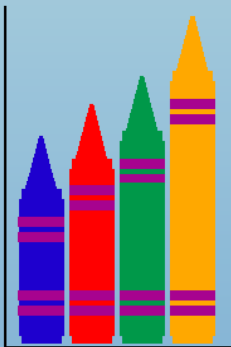


Hx of Mental Illness (birth family)	39.5%
Hx of Substance Abuse (birth family)	32.3%
Hx of Criminal Conviction (birth family)	28.2%
Hx of Domestic Violence (birth family)	17.9%
Hx of Child Protection	13.5%
Hx of Sleeping Problems (Child)	39.5%

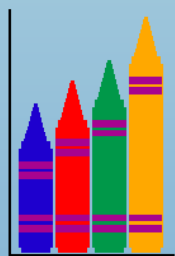


# Population by Site

	UC-D	KU	Lehigh	TVC	UF	USF
% of Total N	12.3	16.9	18.8	15.7	12.3	24.1
% Male	46.9	68.2	73.5	65.9	56.3	58.7
% > 36 mos	25	50	55.1	58.5	43.8	42.9



# Data Analyses

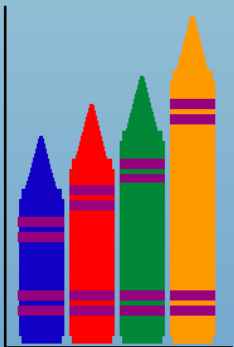


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# Examples of Analyses in Progress

- Relationships between language and behavior
- Relationships between key predictor variables (e.g., quality of child care; family functioning) and behavior problems at Wave 1
- Relationships between predictor variables at entry and behavior problems over time (Waves 2-5)
- Cumulative risk factors and relationships to behavior and language development

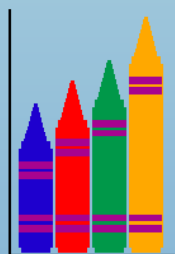
- 
- Kindergarten readiness and kindergarten functioning\*\*\*






## Some Data on Cumulative Risk Factors: Preliminary Findings from KIDS Study

Carta, Lardieri, & Timm  
Conference on Research  
Innovation in Early Intervention  
February, 2006

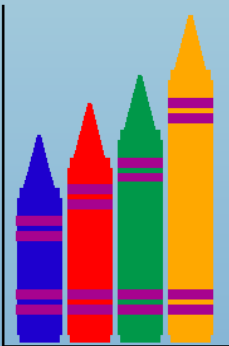


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# Risk Factors and Their Criteria




Risk	Measure	Criteria
Mental Illness	History of mental illness in family?	Yes
Criminality	Birth parents convicted of crime?	Yes
Marital discord	History of domestic violence	Yes
Child maltreatment	Child Protection concerns about safety of child	Yes
Teen mom	Birth mom's age	<18 yrs at child's birth
English not primary language	Language child hears most at home?	Not English
Parental distress	Parenting Stress Inventory-Distress Subscale	In clinical range

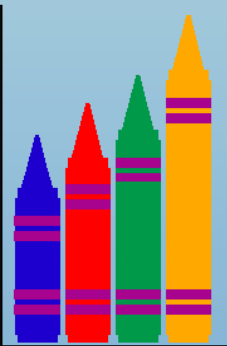




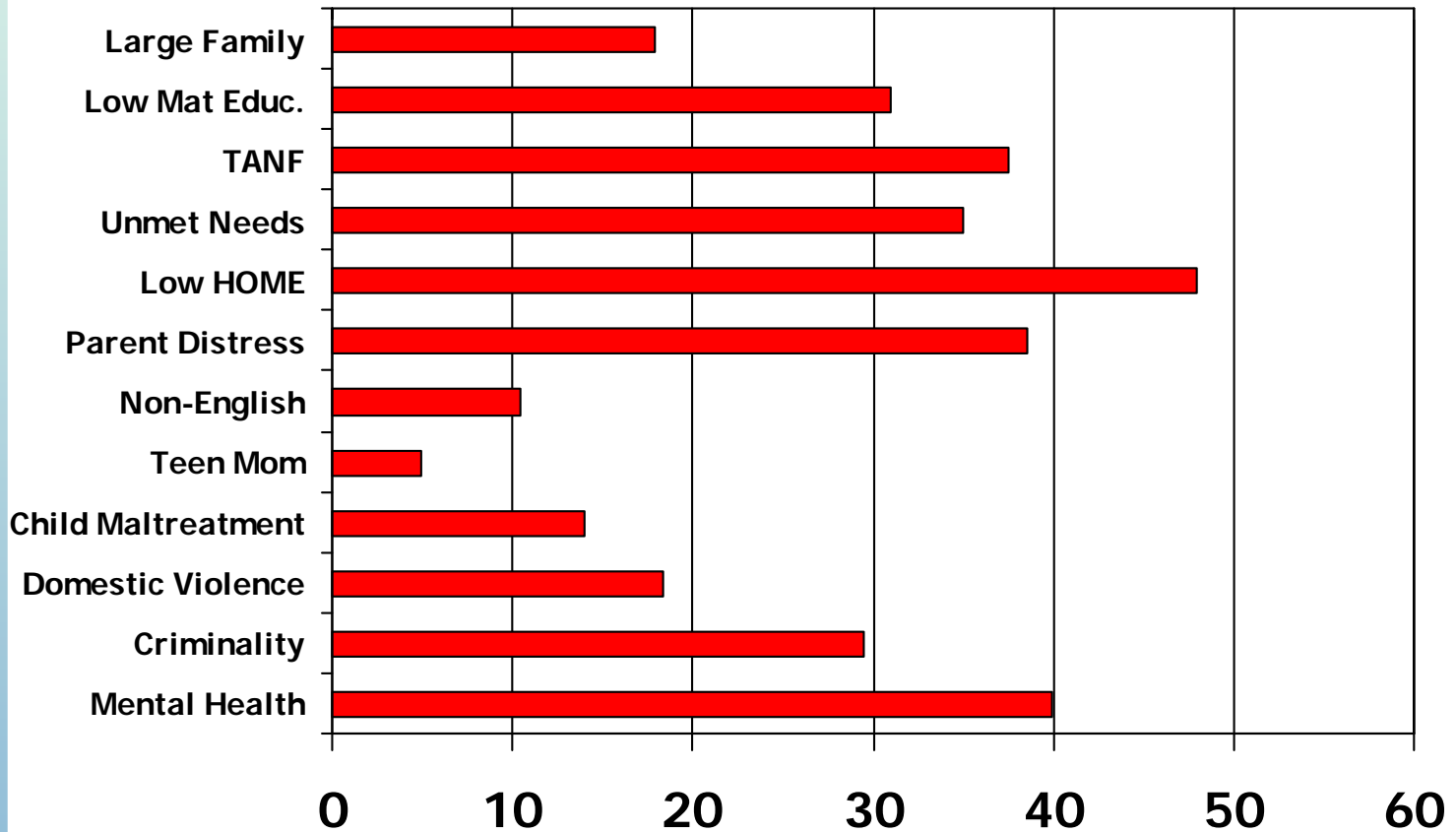
# Risk Factors and Their Criteria (cont.)



Risk	Measure	Criteria
Low stimulating home environment	HOME Total Score (Infant-Toddler or Early Childhood)	Score in lowest 1/3 of our sample
Lack of family support	Unmet needs on Family Support Scale	Number of unmet needs is in upper 1/3 of our sample
Low income	Family is TANF recipient	Yes
Limited education of primary caregiver	Primary caregiver's education	< High School diploma
Large family size	Number of children	4 or more children

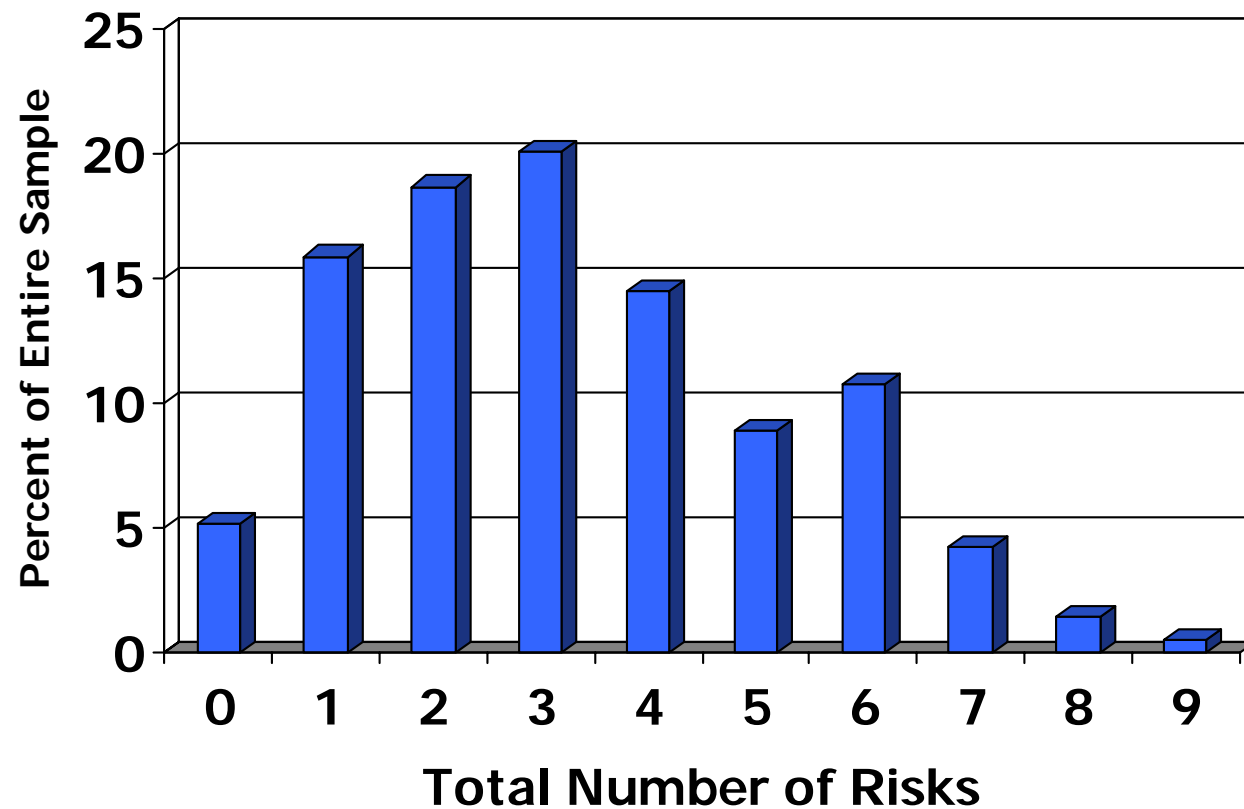


## Percentage of Sample with Risk Factor



N = 244

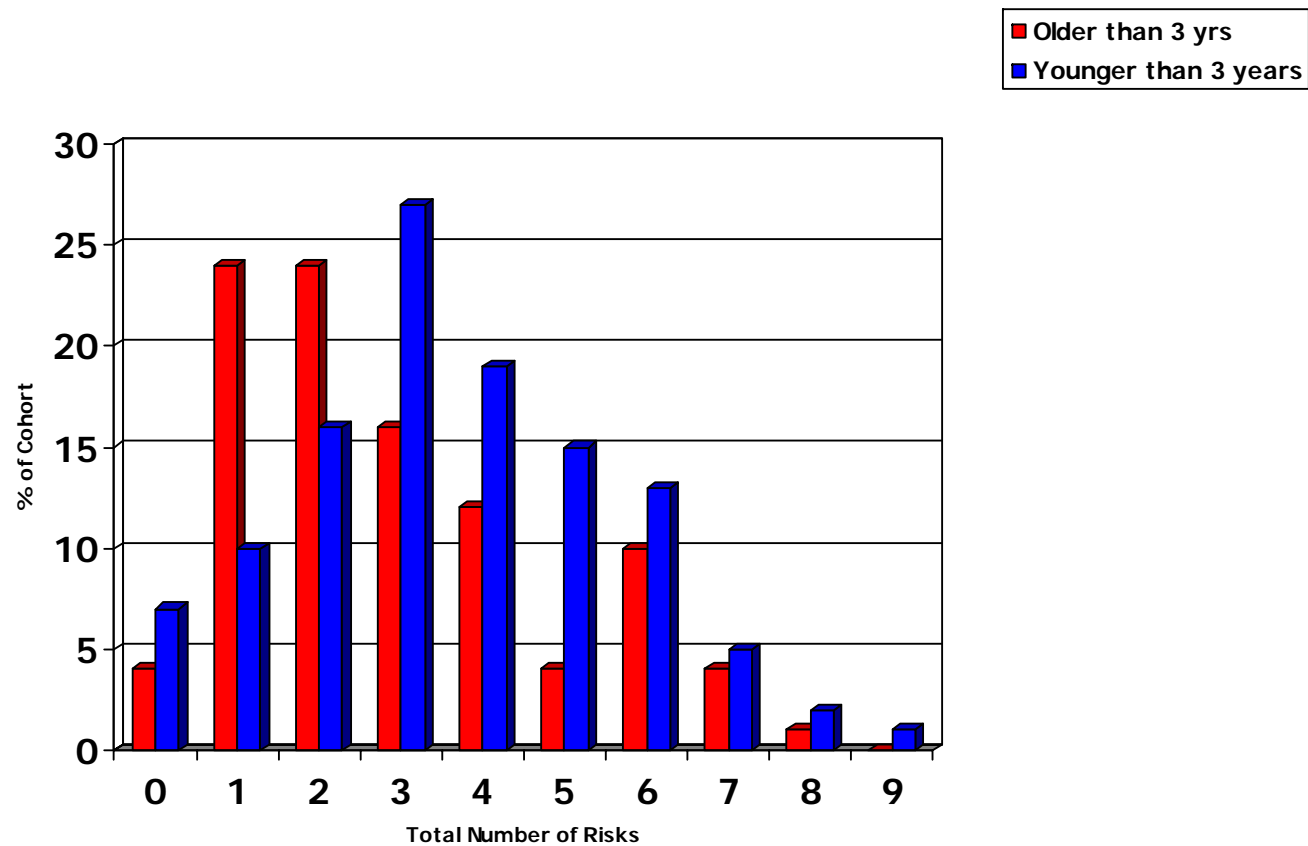
# Distribution of Cumulative Risk Across Entire Sample



N = 244

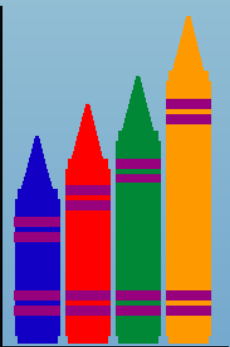
M=3.25; sd = 1.97

# Cumulative risk: younger and older children in KIDS sample



# Correlations between risks and behavioral outcomes

- Risk most highly correlated with CBCL-Externalizing:
  - Parent Distress:  $r = .255; p < .001$
- Risks most highly correlated with CBCL-Internalizing
  - Parent Distress:  $r = .185; p < .004$
- PLS-Expressive
  - Low Home Environment:  $r = .34; p < .001$
  - SES:  $r = -.26; p < .0001$
  - Maternal education:  $r = .25; p < .0001$



# KIDS STUDY - Summary

- Unique data set – first data set focused on understanding the development and nature of challenging behavior
- Knowledge of trajectories may yield important information for
  - Focus of intervention activities (e.g., child-focused vs. family-focused)
  - Approaches needed for intervention (e.g., parenting, parenting stress, language promotion, quality child care)
  - Timing of intervention
  - Ecologies linked to optimal outcomes

