



# **Predictors of Caregiver- Reported Improvement in Child Behavior and Functioning**

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# BACKGROUND

- ◆ Providers challenged to show quality & effectiveness of services with limited resources
- ◆ Consumer surveys may offer least burdensome & costly means of assessing quality/outcomes
- ◆ Demographic, service-related, and clinical/ functional determinants of caregiver-reported improvement still not well understood
- ◆ This study uses linked survey and clinical data to examine predictors of perceived improvement



# **Child Performance & Outcomes Measurement System (POMS)**

- ◆ Broad-scale initiative to monitor outcomes of representative sample of children receiving state-funded mental health services
- ◆ Information collected on demographics, legal status, clinical diagnosis, service-related variables
- ◆ Clinical assessments (CAFAS) conducted at intake & every 6 months until discharge
- ◆ Annual survey of caregiver perceptions of services and outcomes (YSSF)



# Youth Services Survey for Families

- ◆ Developed and piloted by the State Indicator Project Children's Indicator Work Group  
YSSF website: [www.mhsip.org/surveylink.htm](http://www.mhsip.org/surveylink.htm)
- ◆ Used in 20+ states to monitor child MH services
- ◆ 22 items reliably assess 5 domains of caregiver perceptions (Access, Family Involvement, Cultural Sensitivity, Satisfaction, Outcome)
- ◆ Additional questions re:
  - Recent school absence, contact with juvenile justice system
  - Demographics, residential status, placement history, medications, LOS and other service-related factors

# *YSSF: Outcome Domain*

- ◆ *6 items* (Cronbach's  $\alpha=0.94$ )

As a result of the services my child and/or family received:

- My child is better at handling daily life
- My child gets along better with family members
- My child gets along better with friends and other people
- My child is doing better in school and/or work
- My child is better able to cope when things go wrong
- I am satisfied with our family life right now

# YSSF Survey Method

- ◆ YSSF administered in mail survey to random sample of 3,054 primary caregivers of SED youth who had received 1+ state-funded mental health service, 7/01/01-12/31/01
- ◆ Surveys identified by code that kept consumer identifying information confidential
- ◆ 526 surveys returned (17.2%)
- ◆ 514 surveys linked to child POMS files
- ◆ 199 youth had YSSF and POMS data including at least one CAFAS assessment

# ANALYSIS

- ◆ Assess relation of caregiver-rated improvement (outcome domain) to:
  - Child demographic, service-related, and clinical factors
  - Other outcome indicators
- ◆ **Outcome domain assessed as continuous variable**
  - Average score on constituent items
- ◆ Statistical analysis conducted to
  - ◆ Assess representativeness of sample
  - ◆ Evaluate the relationship of perceived outcome to potential predictors

# RESULTS

- 66% non-Hisp. white, 30% black, 3% Hispanic
- Average age: 11.9 yrs
- 63% male
- 86% currently living with caregiver
- 54% on Medicaid
- 60% still receiving services from provider
- 74% received services for at least 6 mos
- 64% on meds for emotional/behavioral problems
- 79% moderate to severe impairment at intake
- 48% missed 2+ school days in last mo.
- 10% contact with juvenile justice in last mo.
- 19% received out of home placement in last 6 mos

# Comparison to Other Samples

- ◆ YSSF participants vs all youth in POMS
  - 39 vs. 34% in special education ( $p=0.05$ )
  - 13 vs. 2% had deferred diagnosis at intake ( $p < 0.01$ )
  
- ◆ YSSF-CAFAS vs. all youth in POMS
  - 47 vs. 34% in special education ( $p < 0.01$ )
  - 46% vs. 56% on Medicaid ( $p < 0.01$ )
  - 22 vs. 31% referred through educational/legal system ( $p < 0.01$ )
  
- ◆ *No other differences in demographic, service, or clinical factors*

# *Demographic and Service Predictors of Caregiver-reported Improvement*

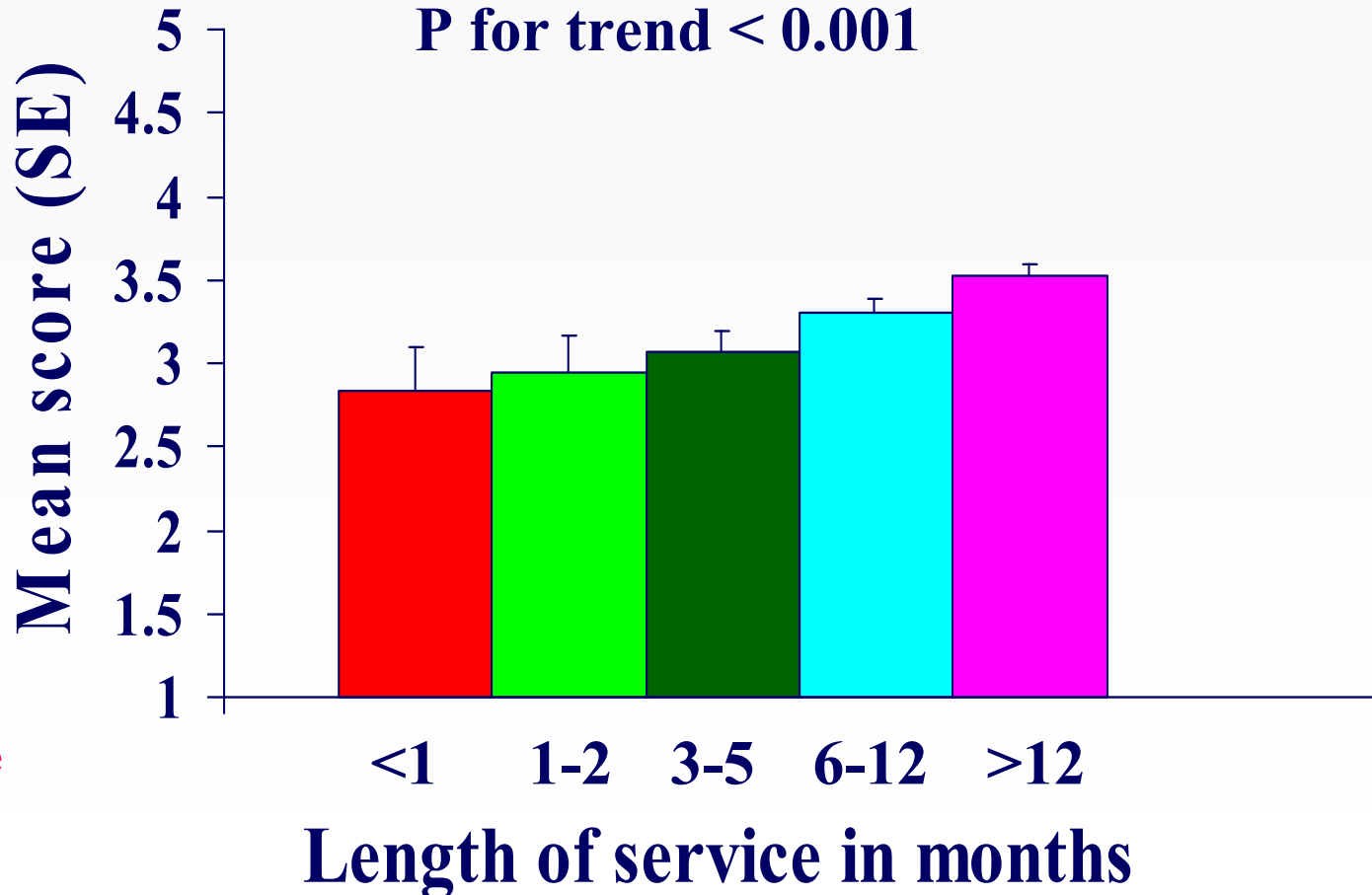
- ◆ Caregivers report greater improvement for youth
  - On Medicaid ( $p < .003$ )
  - Still receiving services ( $p < .001$ )
  - In services longer ( $p < .001$ ); see Fig 1
- ◆ Caregivers indicate less positive outcomes for youth
  - Referred through the schools or legal system ( $p < .01$ )
  - With most severe impairment at admission ( $p < .05$ )
- ◆ Adjustment for other factors did not alter these associations

**Fig. 1. Association of perceived improvement in child outcome to length of service**

**Improved?**

**Strongly Agree**

**Strongly Disagree**



# *Relation of Outcome Domain to Other Indicators of Functioning*

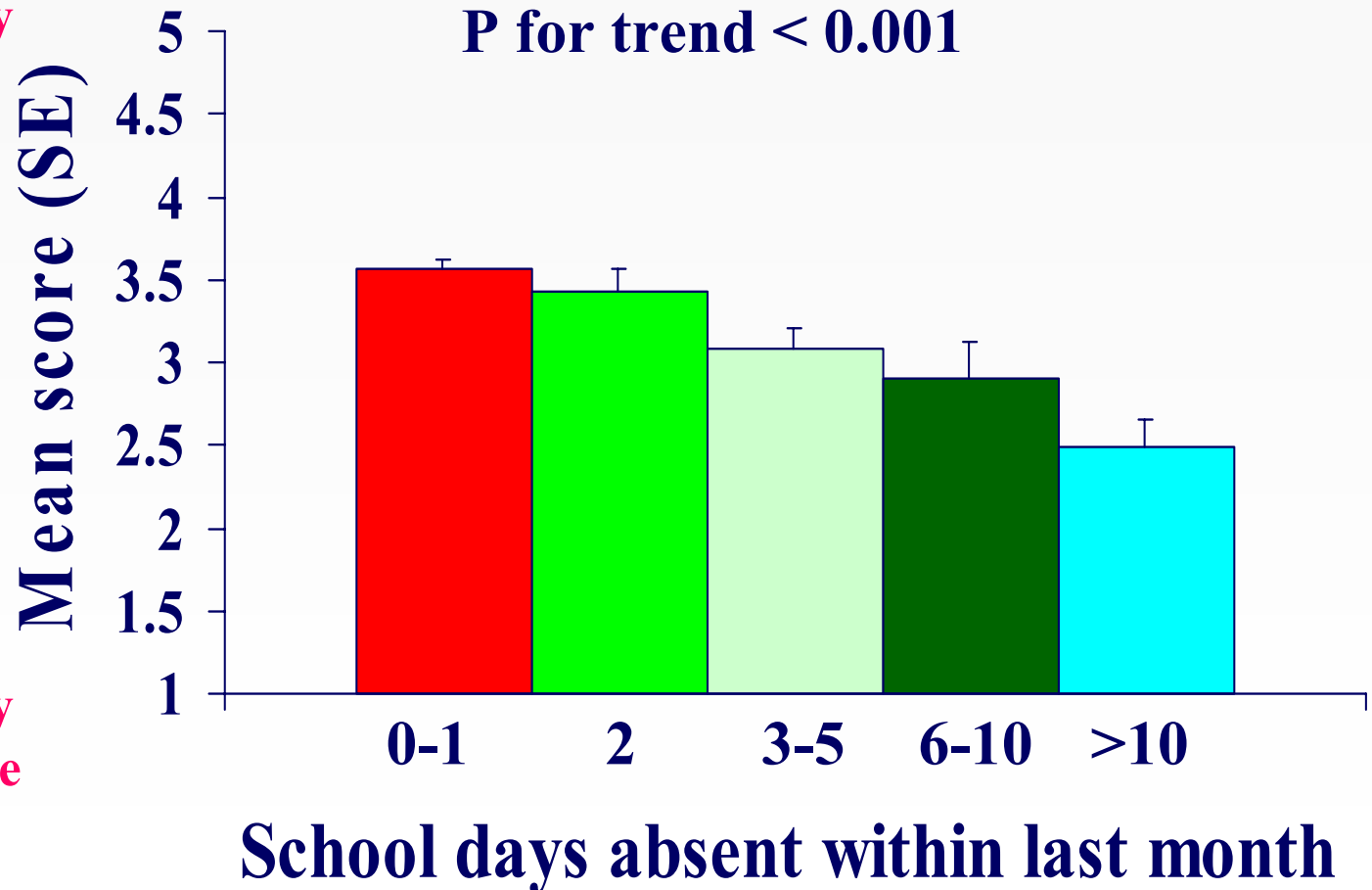
- Caregiver ratings of child improved outcome negatively associated with caregiver reports of:
  - ◆ school absence in last month ( $p < .000$ ); see Fig 3
  - ◆ youth arrested in last month ( $p < .000$ ); see Fig 4
  - ◆ youth in court in last month ( $p < .000$ ); see Fig 4
  - ◆ Youth in out of home placement in last six months ( $p < .001$ )
- Caregiver ratings of child improved outcome positively related to improvement in two CAFAS subscales: emotions & thinking
- Associations remain after adjustment for other demographic and service factors

# Fig. 2. Association of Recent School Absence to YSSF Outcome Domain

Improved?

Strongly Agree

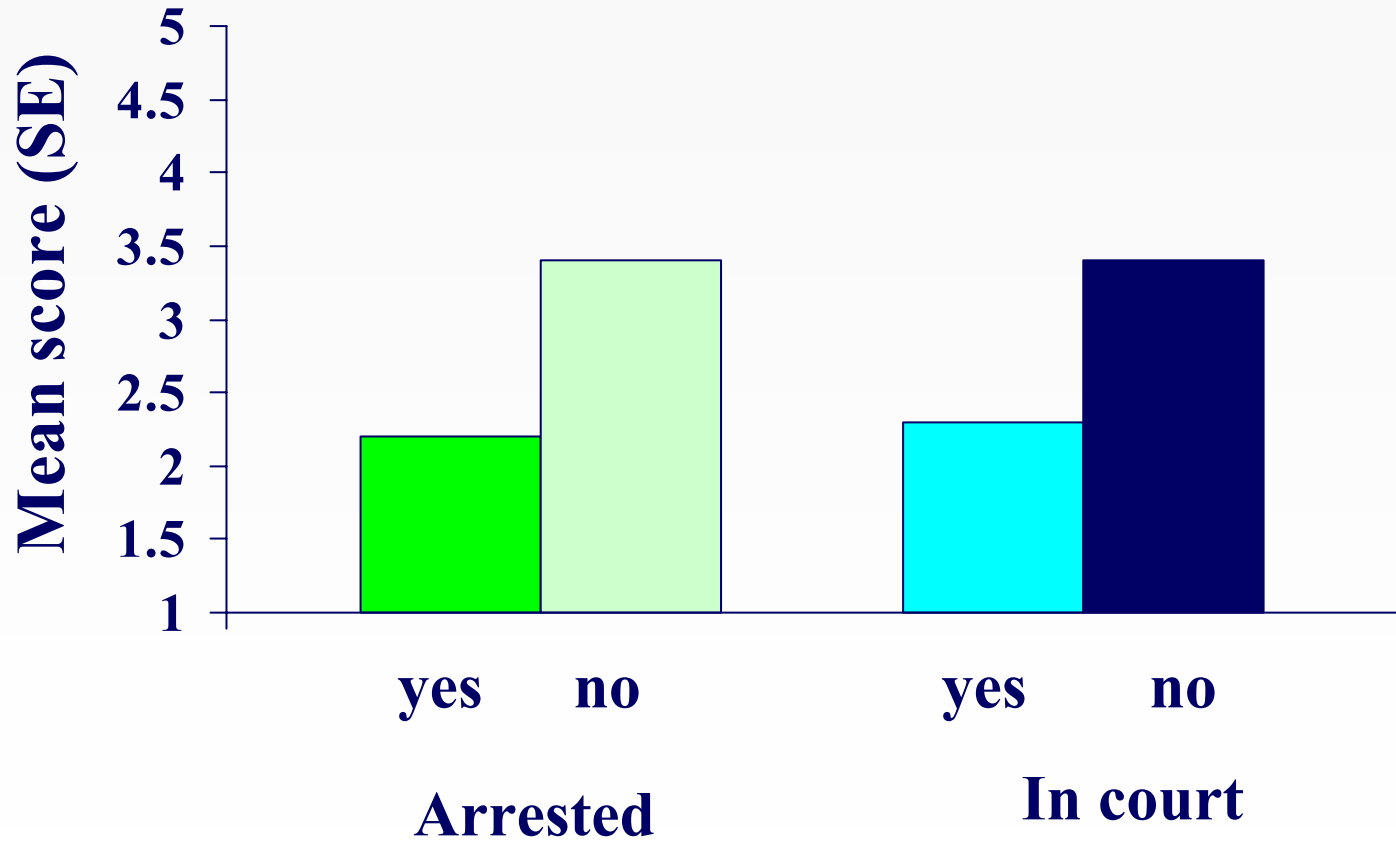
Strongly Disagree



# Fig. 3. Association of Juvenile Justice Involvement to YSSF Outcome Domain

Improved?

Strongly Agree



Strongly Disagree

# CONCLUSIONS

## *Caregiver perceptions of child treatment outcomes*

- ◆ May be influenced by several factors, including insurance, child residential setting and placement history, service-related characteristics, and baseline clinical status.
- ◆ Were negatively associated with recent child legal involvement and school absence, and positively associated with specific clinician-rated changes in child mental health status.
- ◆ May thus reflect both recent functional impairment and clinical/therapeutic change