

Understanding Early
Conduct Problems and
Their Persistence: *A Prequel* to
the Early Childhood Version of
the Family Check-Up

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Special
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- Staff and Participants of the Pitt Mother & Child Project
- Women, Infants, and Children Nutritional Supplement Program (WIC)
- National Institute of Mental Health
- National Institute on Drug Abuse

Aims



Describe developmental model of early conduct problems

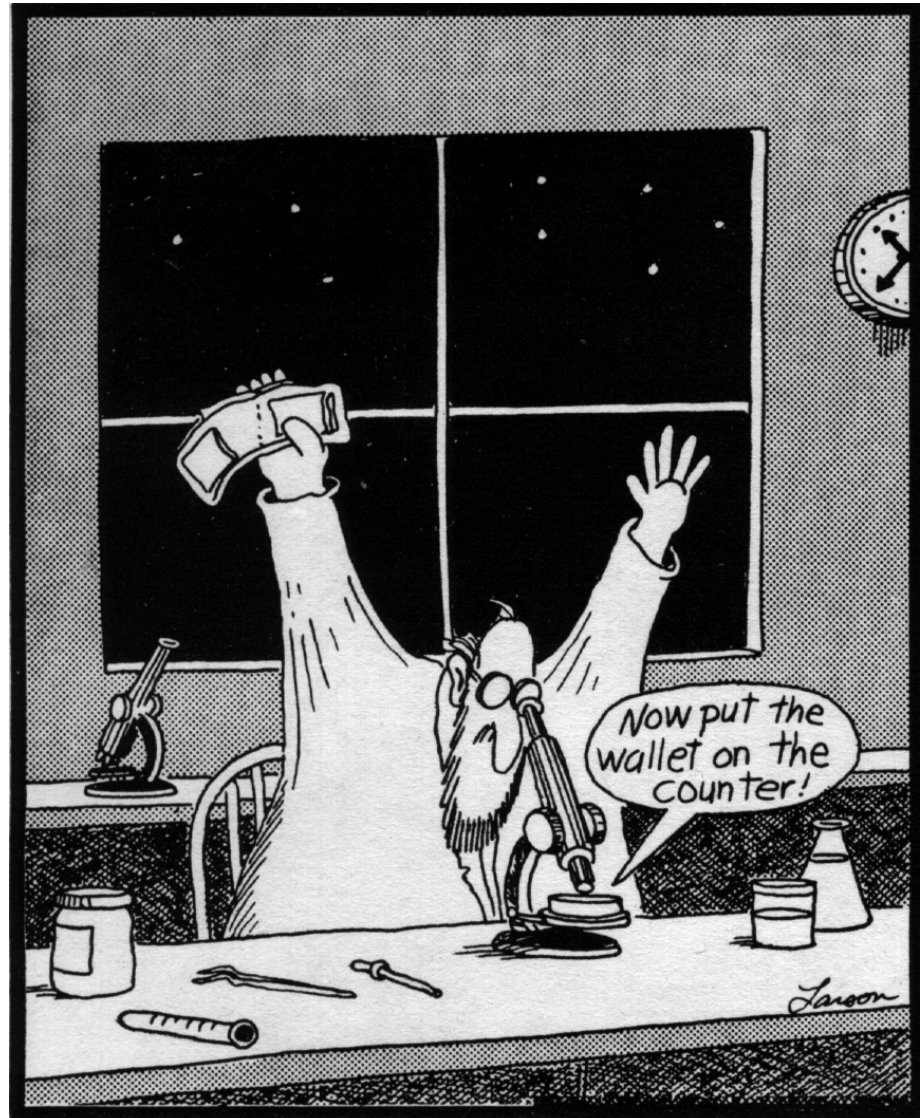


Review support for components of model



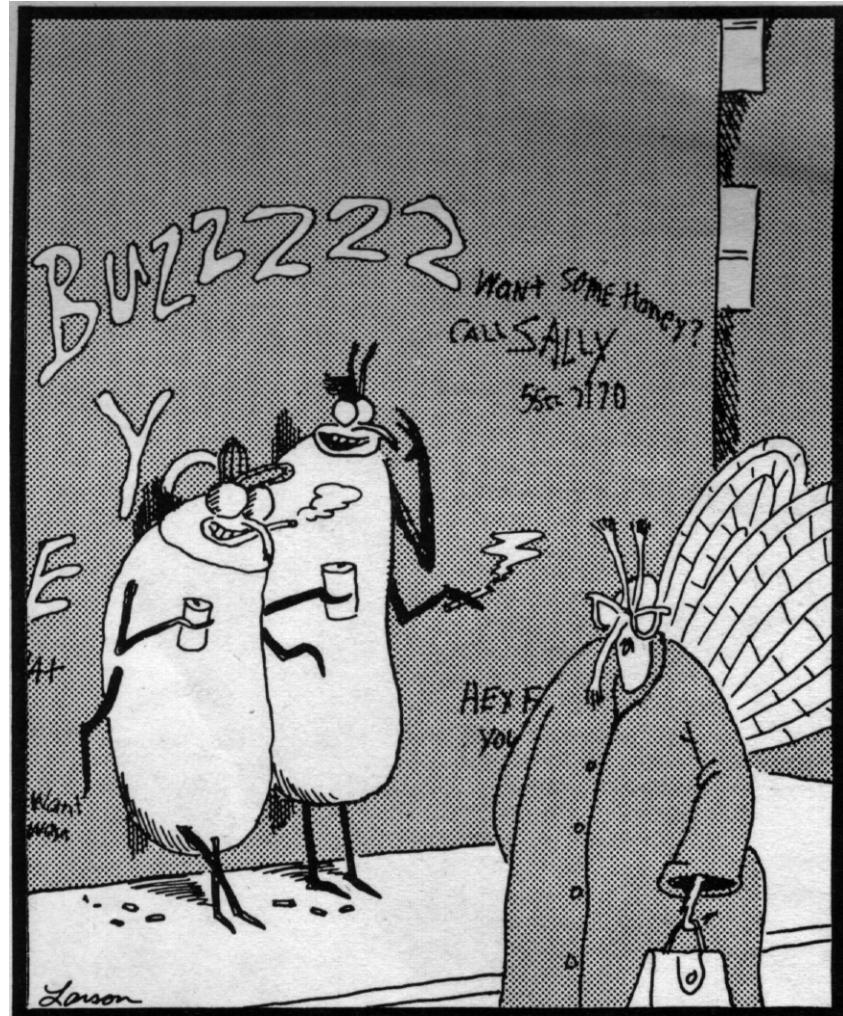
Briefly discuss implications for further basic and applied work

The Spread of Antisocial Behavior

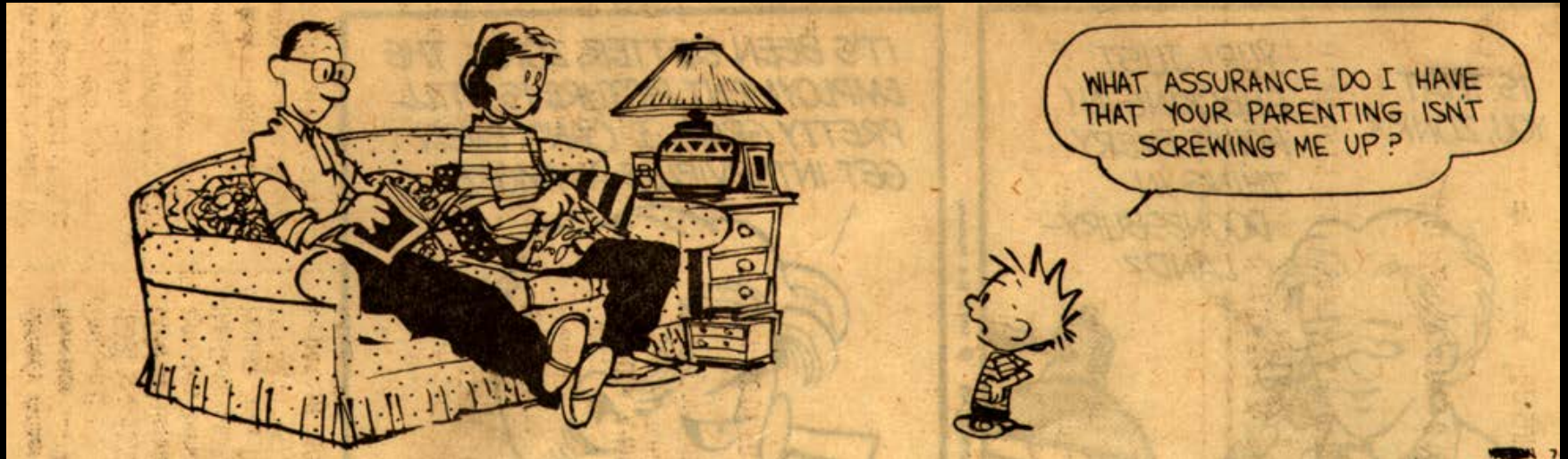


**Working alone, Professor Dawson stumbles
into a bad section of the petri dish.**

Child Effects Model

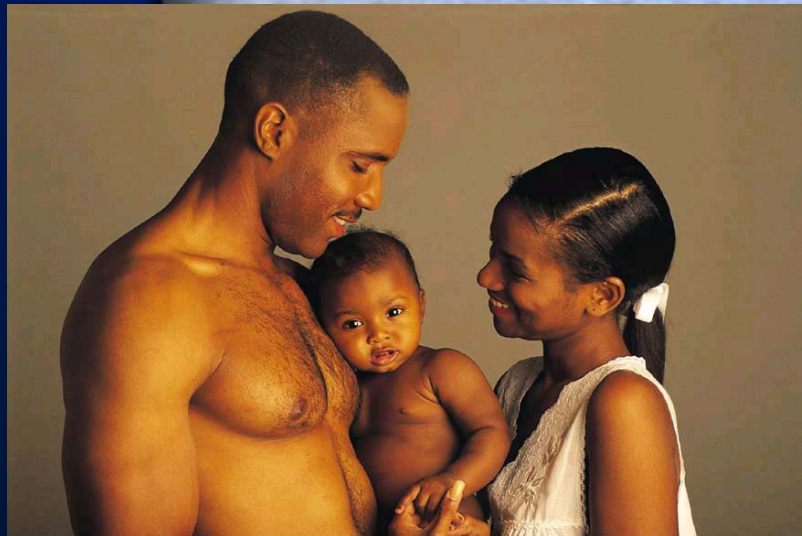


Killer bees are generally described as starting out as larvae delinquents.



Parent Effects Model

Parent, Family, and Neighborhood



Developmental Transformations: 12 to 24 Months

- ❑ Increase in undirected anger
- ❑ Walking to toddling



12-24
Months:
Transition
to Physical
Mobility



**Attachment
Theory:
Early
Starting
Conduct
Problems
(Ainsworth,
Sroufe,
Greenberg)**

- Sensitivity in 1st two years promotes child compliance
- By preschool age, parental requests should be honored differentially based on the quality of the parent-child relationship and the stakes for displeasing parents
- Supports parents making investment in child early on

Patterson's Early Starter Model

PARENTS:

Deficits in Family
Management skills

CHILD

Irritability,
Hyperactivity

Coercive
Cycles of
Interaction

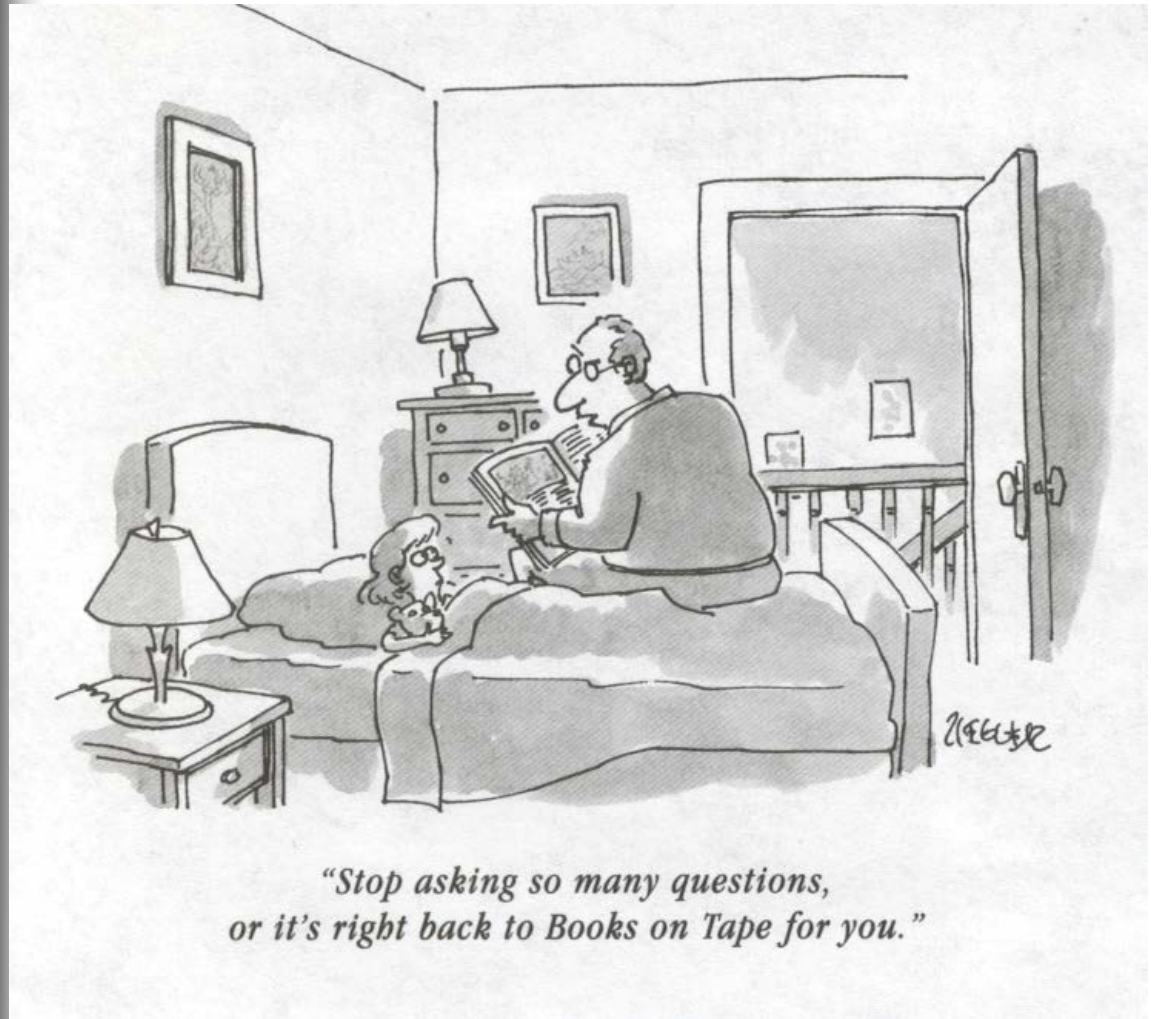
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graph LR; A[PARENTS:  
Deficits in Family  
Management skills] --> D[Coercive  
Cycles of  
Interaction]; B[CHILD  
Irritability,  
Hyperactivity] --> D;
```

Monitoring



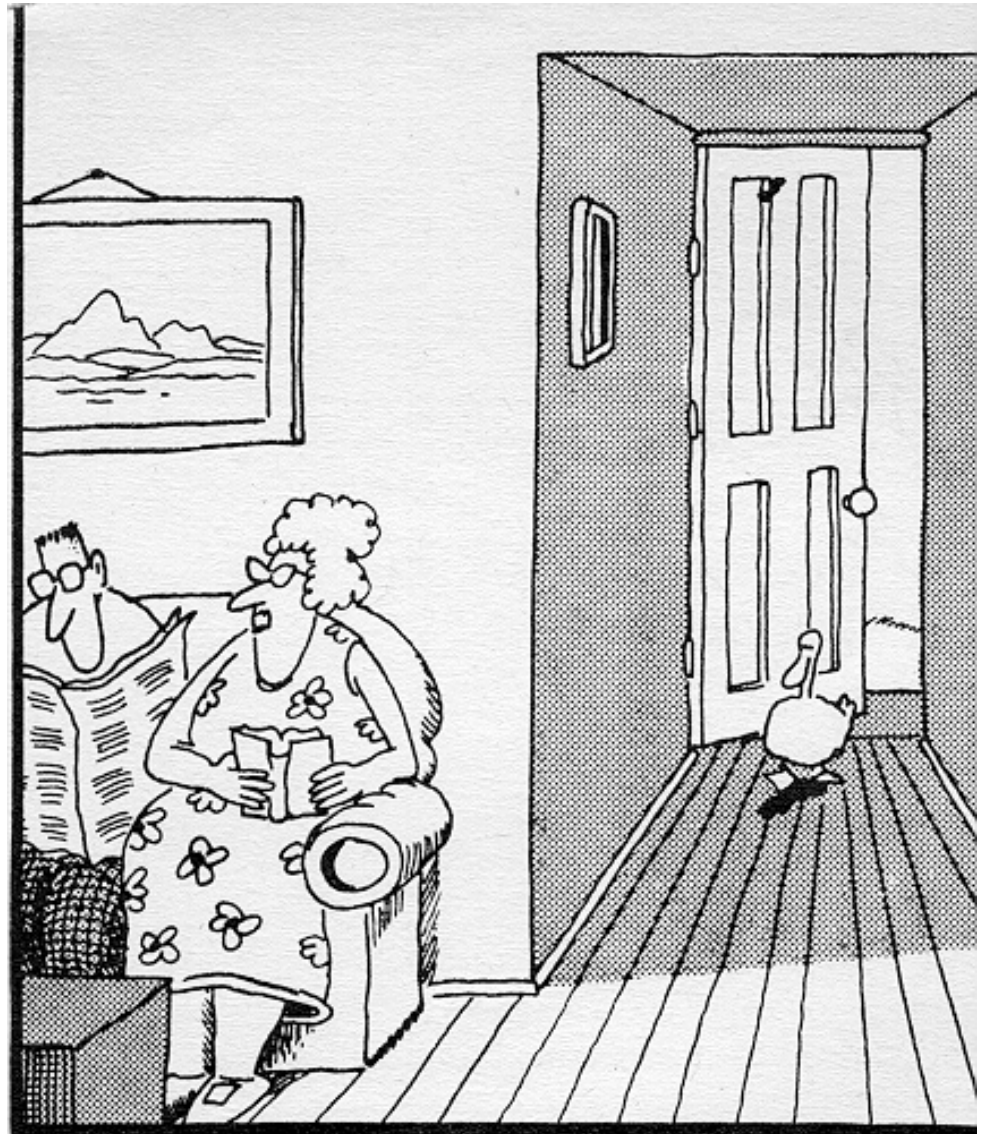
"All right, Billy, you just go right ahead! ...
I've warned you enough times about
playing under the anvil tree!"

“Reactive” Parenting



*“Stop asking so many questions,
or it’s right back to Books on Tape for you.”*

“Proper” Parenting



“Here he comes, Earl ... Remember, be gentle but firm ... we are absolutely, positively, not driving him south this winter.”

Siblings Matter



Lawrence Finn
Brother to Huckleberry.
Got straight A's in school.
guidance counselor.



Doug Greystoke
Brother to Tarzan.
Lumberjack. Died
from infected badger bite.



"Aunt" Debbie
Youngest sister of
Mother Teresa. Rockette.



Ted Wright
Older brother of Orville
and Wilbur. Miner.



Sidney Letterman
Assistant gag writer
for the Benny Hill show.



Eddie Moto
Hunchback of Midvale
Community College. In
charge of dismissal bell.

In their sibling's shadow

Why should sibling relations be important?

- **First long-term peer relationship**
- **Sample of behavioral style with peer**
- **Does it represent a marker of behavior problems?**
- **If so, is it more than a marker?**



Demographic Characteristics of Sample

Totals

Sex of child	310 boys
Yearly Income	\$12,708
Mother's age	28, range 17-43
Maternal education	12.6 years
% Married/ Living Together	62
% White/Afr. Amer.	53/36
Criminality	36%

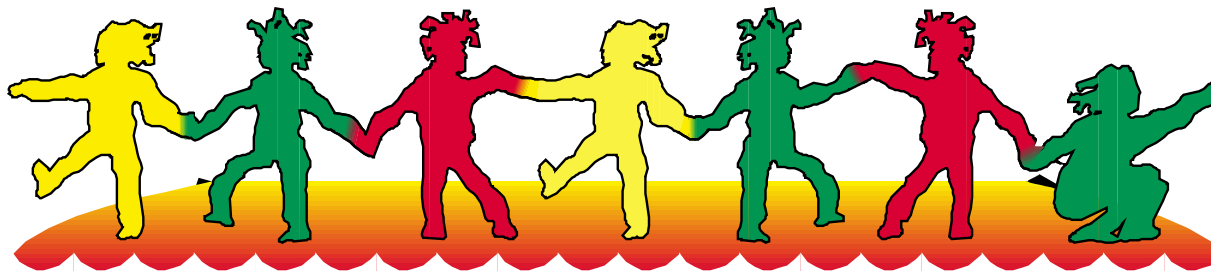
Pitt Mother & Child Project: Follow-Up Schedule

1 yr. 1.5 yr. 2 yr. 3.5 yr. 5 yr. 5.5 yr. 6 yr. 8 yr. 10 yr. 11 yr. 12 yr. 15 yr. 17 yr. 20 yr. 21 yr. 22 yr. 23 yr.
 Lab Lab Lab/ Home Home Lab Home Home Lab Home Home Home Home/ Intern. Home/ Internet
 Home Home Twice MRI MRI

---- Camp ----

--- Court Data ---

-----Teacher and School Data -----



83% retention at age 22

Measurement Strategies

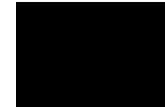
- Focus on observation of developmentally salient issues (e.g., maternal responsiveness & infant persistence at age 1, discipline practices at age 2)
- Assess in multiple contexts (e.g., home, lab, summer camp, school) with observations of target child interacting with parents, sibs, peers, best friends, and romantic partners
- Supplement observations with reports of family, child, and community risk factors using multiple family members, peers, best friends, romantic partners, teachers, school and official records

Measures

High Chair Task at 1 yr: Maternal Responsiveness and Infant Persistence



Child Noncompliance at 2 yrs: observed during clean-up task

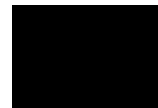


Behaviorial Inhibition at 2 yrs: In response to distressing gorilla sounds



Parenting Practices at 1.5 & 2 yrs: Hostile/Rejecting based on molecular and global ratings during clean-up task

Sibling Conflict at 5 yrs: Verbal and physical conflict between target child and closest-age sib during 1 hour directed play session

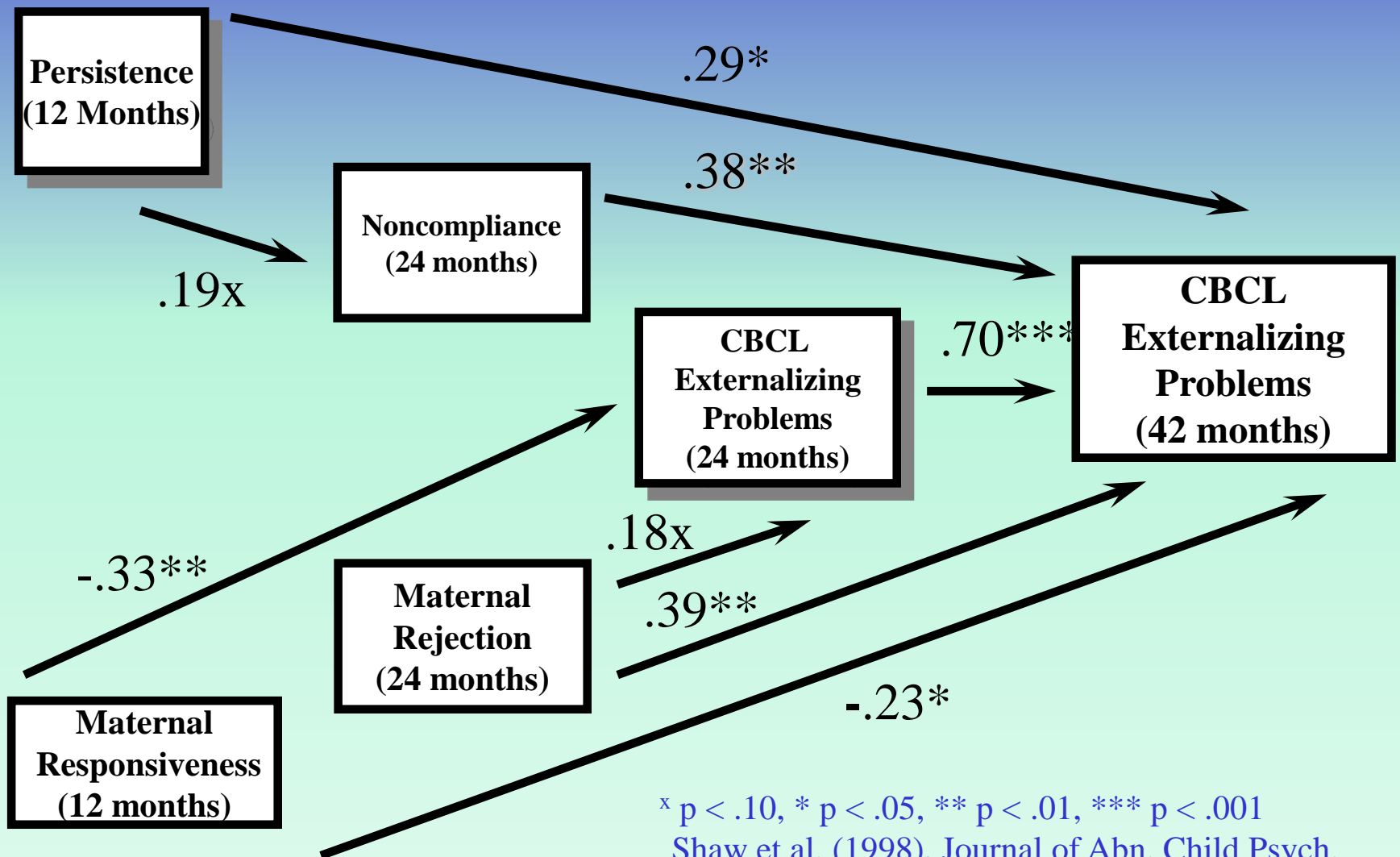


Maternal Resources: HOME Acceptance (2 yrs.), Beck Depression Inventory (1.5 to 5 years), General Life Satisfaction (1.5 yrs.), and Parenting Daily Hassles (1, 5, 2, & 3.5 yrs.)

Child IQ at 5.5 yrs: 4 subscales of the WPPSI-R

Achenbach CBCL/TRF at 2, 3.5, 5, 6, & 8 yrs: Externalizing, Aggression, and other DSM-based factors

Child and Parenting Predictors: Boys



Study of Sibling Effects

JULY 10, 2006

www.time.com AOL Keyword: TIME

WARTIME LEAKS ■ GITMO NO MORE? ■ MIDDLE EAST MELTDOWN

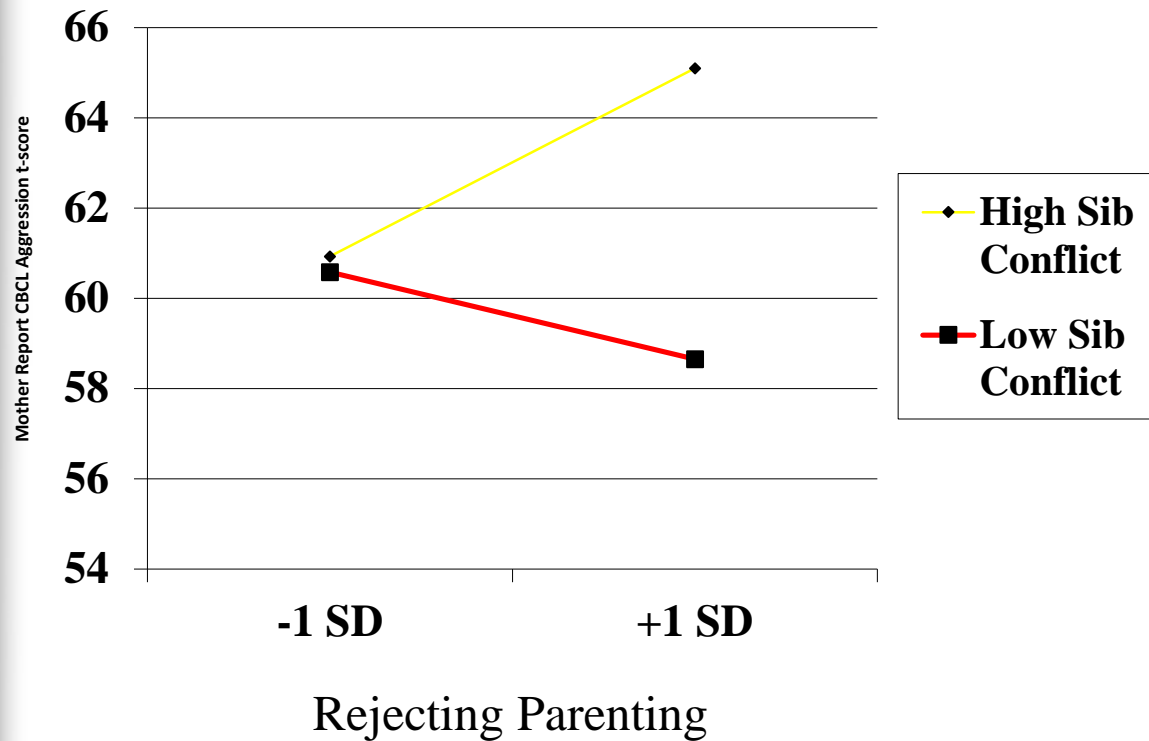
TIME

How your **siblings** make you who you are

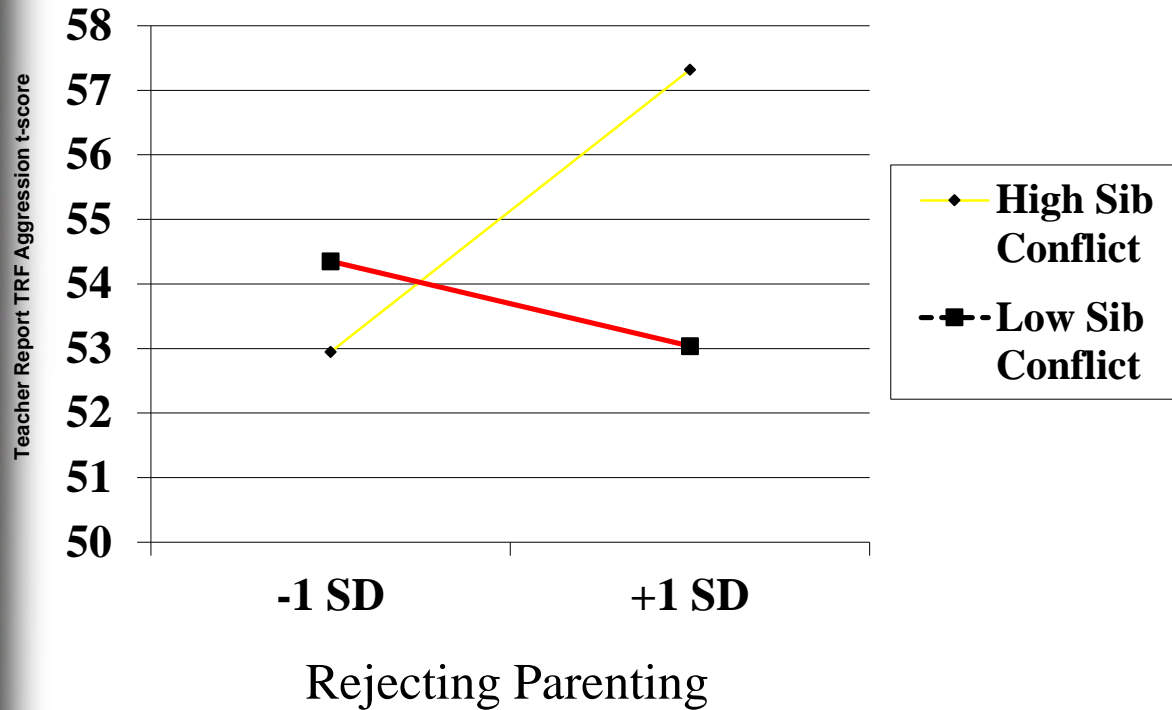
By Jeffrey Kluger



Two-way
interaction between
rejecting parenting
and sibling conflict
in predicting CBCL
Aggression at age
5/6

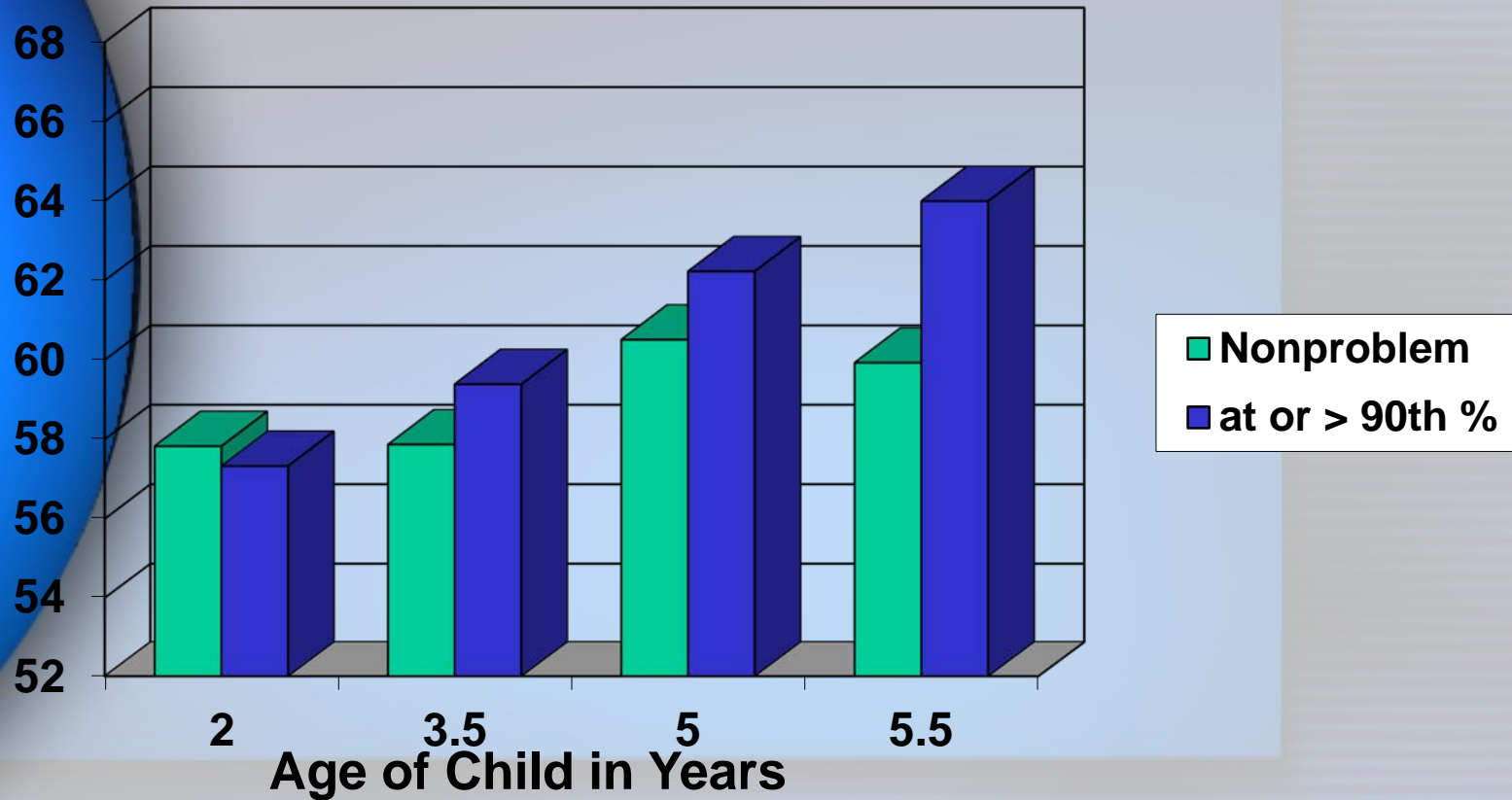


Two-way
interaction between
rejecting parenting
and
sibling conflict in
relation to TRF
Aggression at age 6



Trajectories Leading to Clinically-Elevated Scores on TRF Aggression at age 8: CBCL Aggression at Ages 2, 3.5, 5, & 5.5

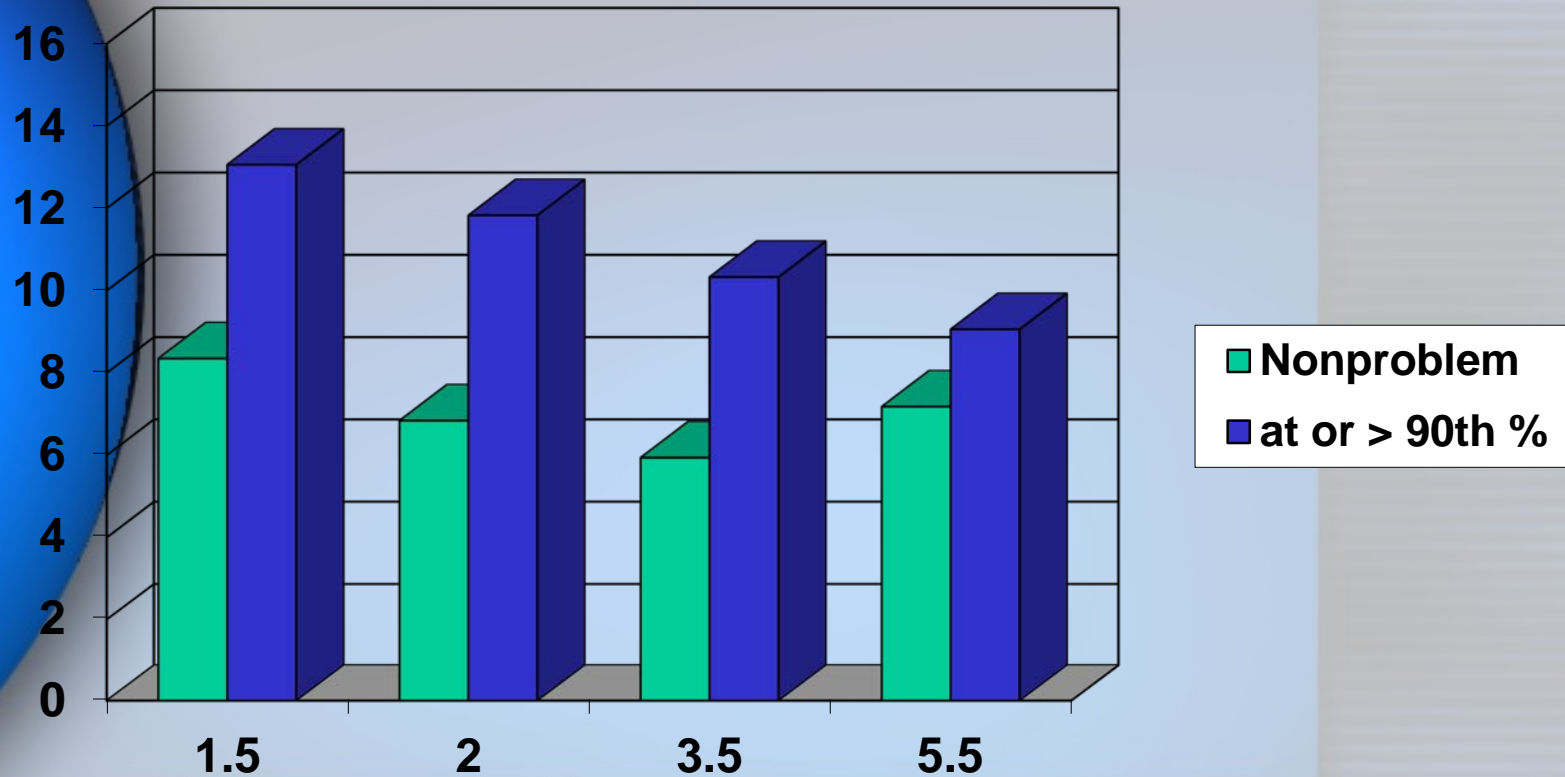
CBCL
Aggression



Effect size = -.1 - .48 sd
Shaw, Bell, & Gilliom, Clinical Child
and Family Psychology Review (2000)

Trajectories Leading to Clinically-Elevated Scores on TRF Aggression at age 8: Maternal Depressive Symptoms At Ages 1.5, 2, 3.5, and 5.5

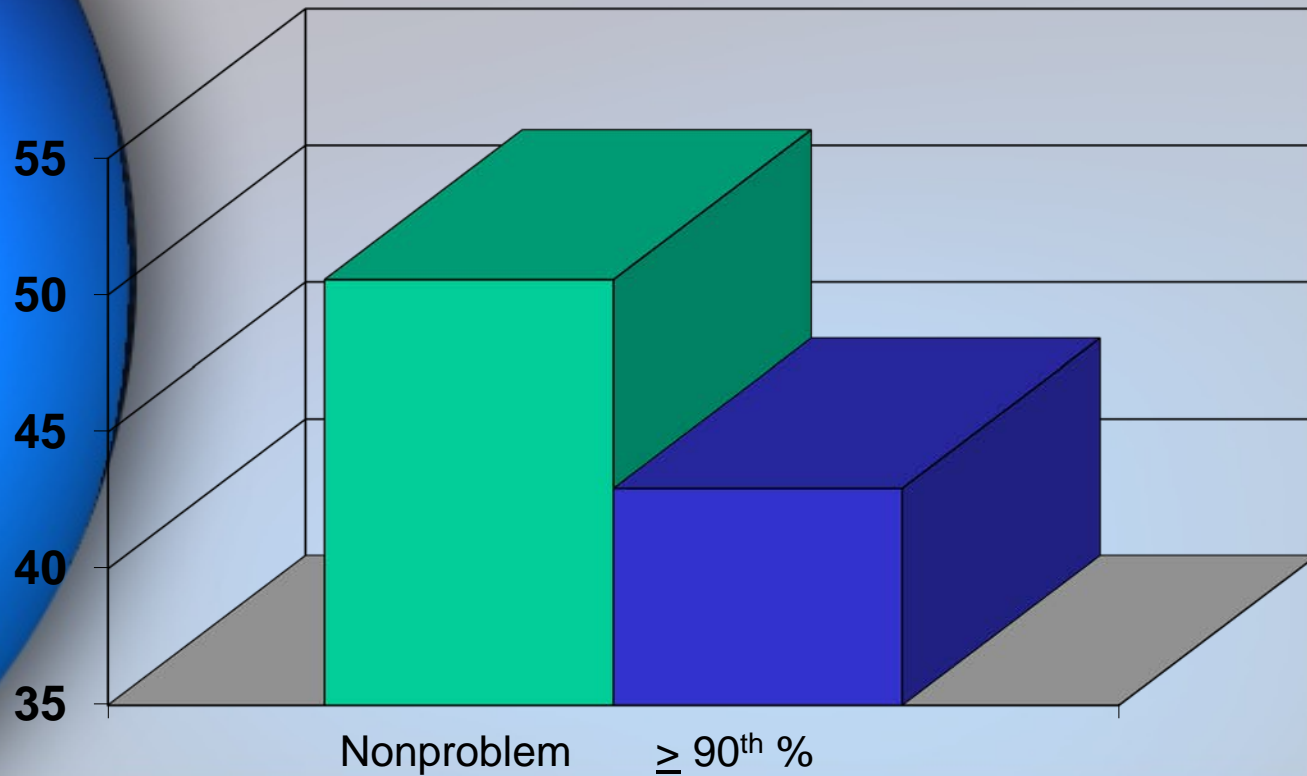
Maternal Depressive Symptoms



Effect size = .27 - .73 sd

Trajectories Leading to Clinically-Elevated TRF Aggression Scores at Age 8: Maternal Social Support at Age 1.5

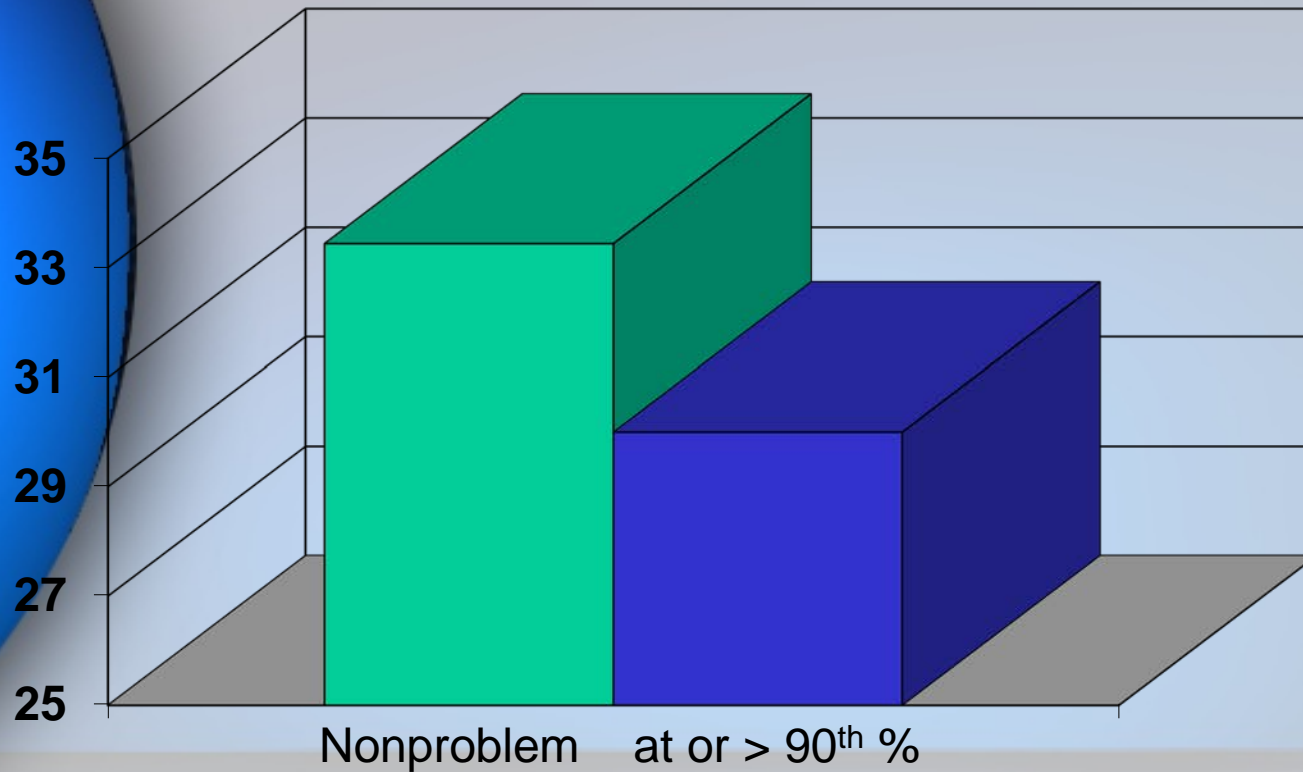
Maternal Social Support



Effect size = .80 sd

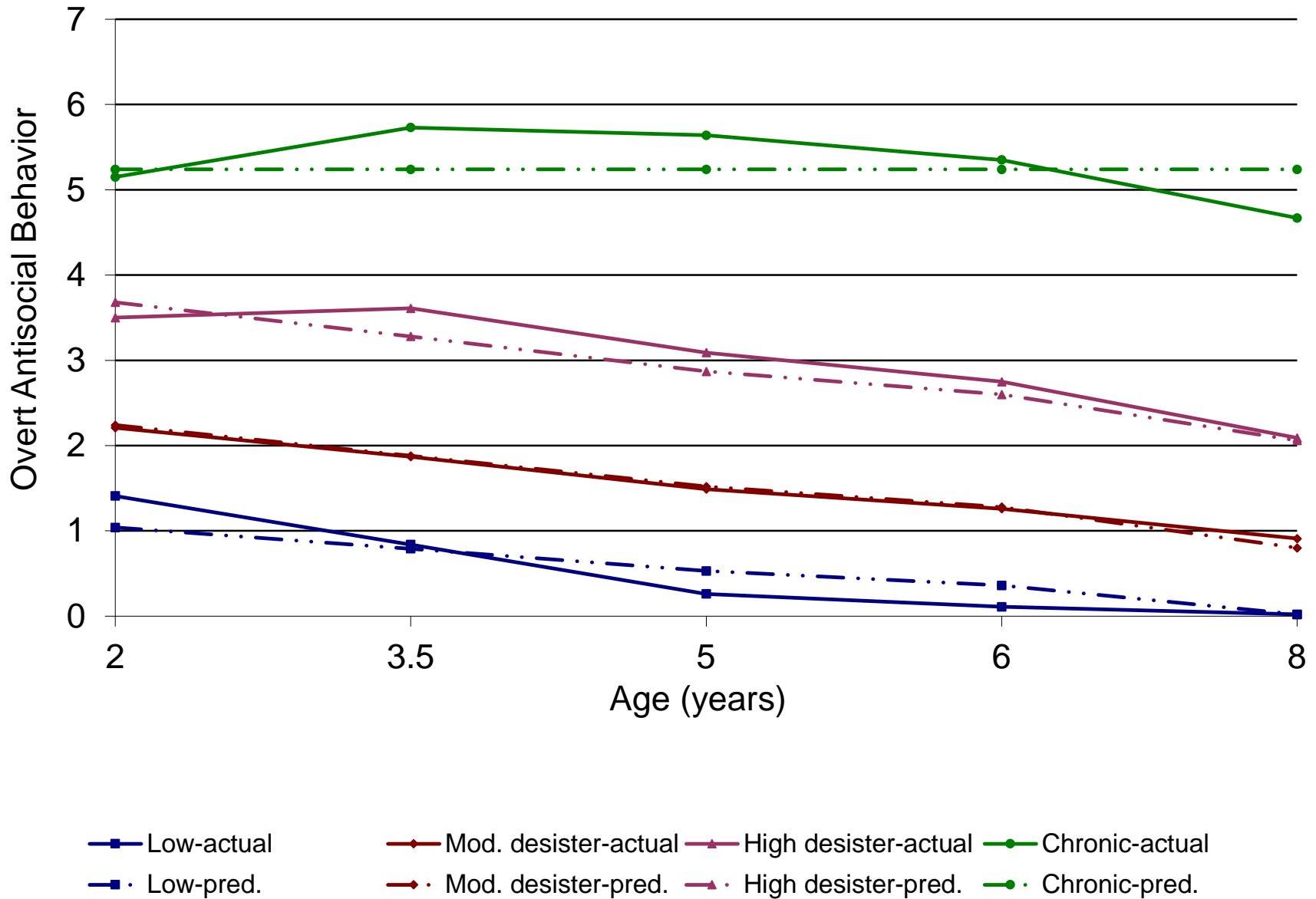
Trajectories Leading to Clinically-Elevated TRF Aggression at age 8: HOME Total at Age 2

HOME
Total



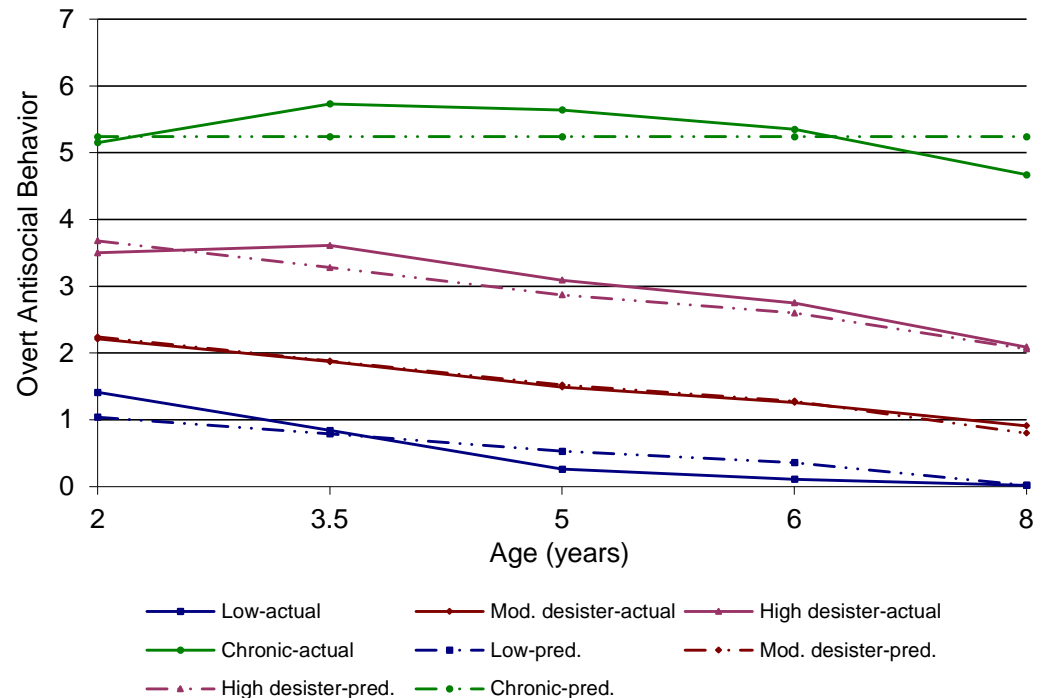
Effect size = .56 sd

Developmental Trajectories of Overt Antisocial Behavior



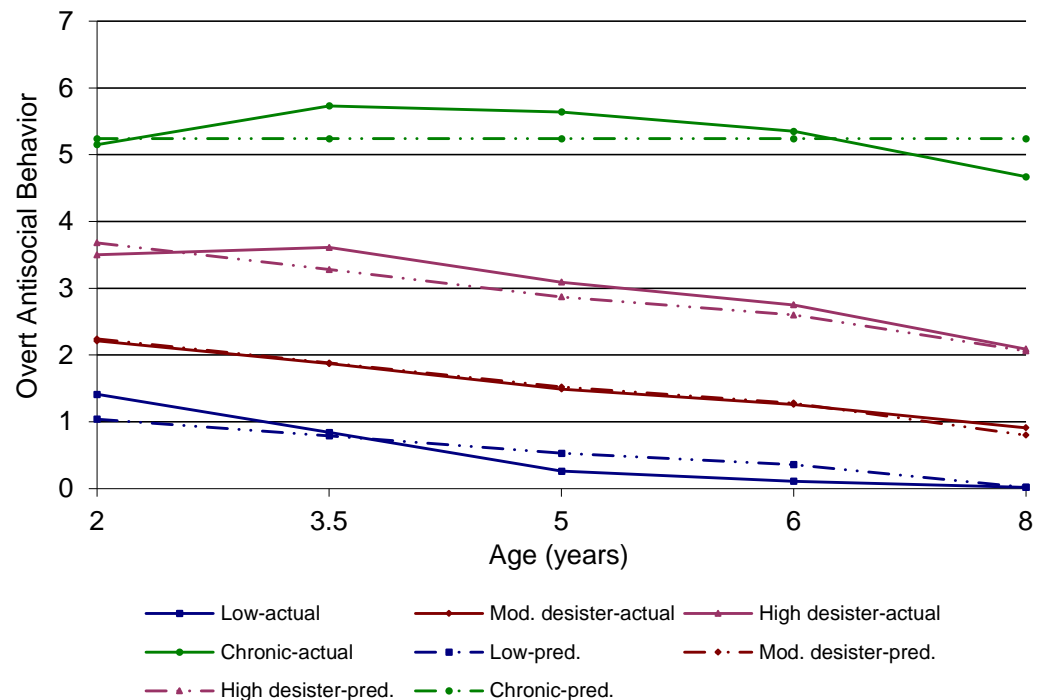
Age 2 Risk Factors that Differentiate Initially High vs. Initially Low Starting Groups

- Including rejecting parenting, child IQ, maternal education, and family income as other predictors:
- Low Behavioral Inhibition
- High Maternal Depressive Symptoms

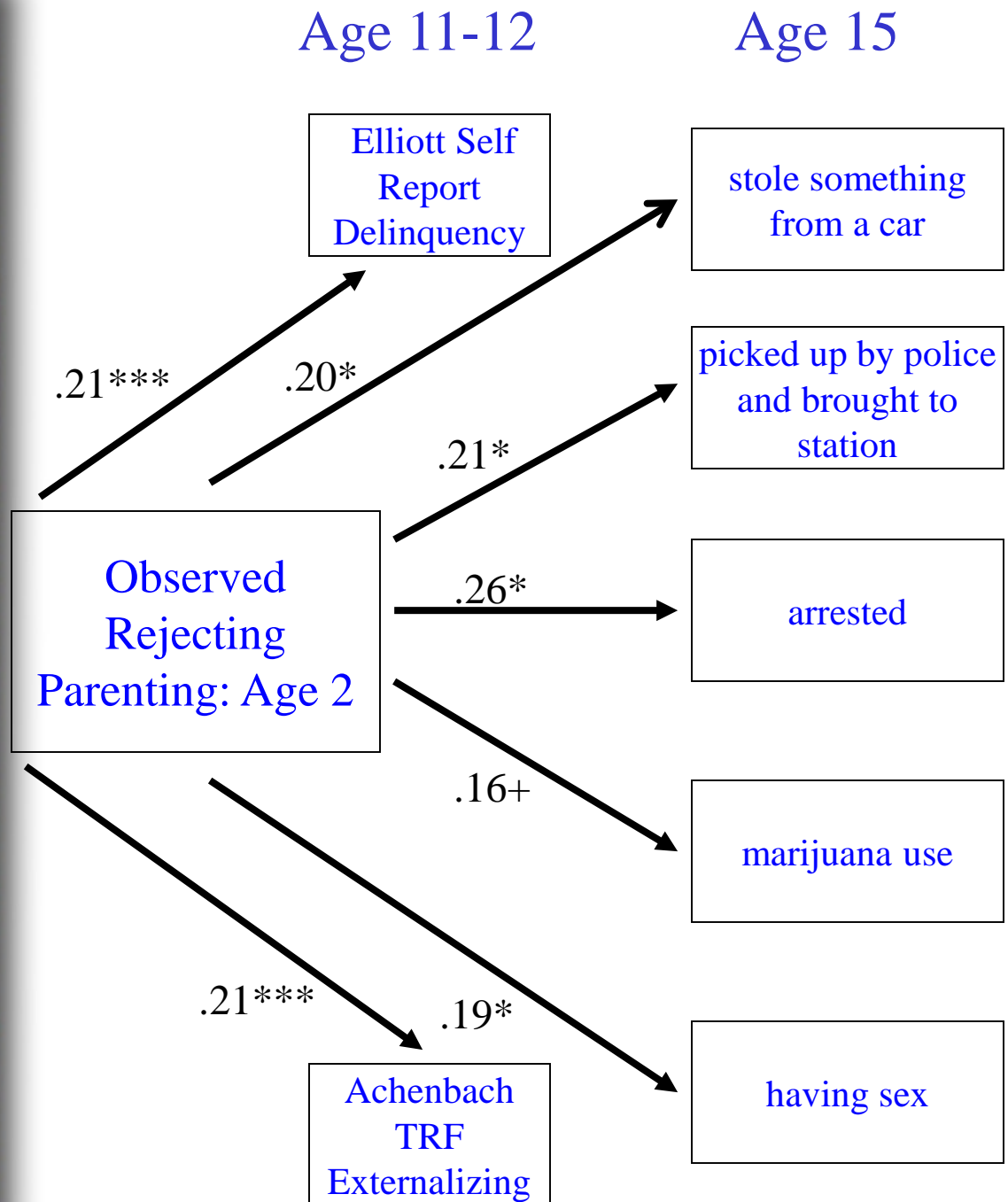


Age 2 Risk Factors that Differentiate Persisters vs. Desisters

- Including child IQ, maternal education, and family income, and maternal depression as other predictors:
- Low Behavioral Inhibition
- High Rejecting Parenting

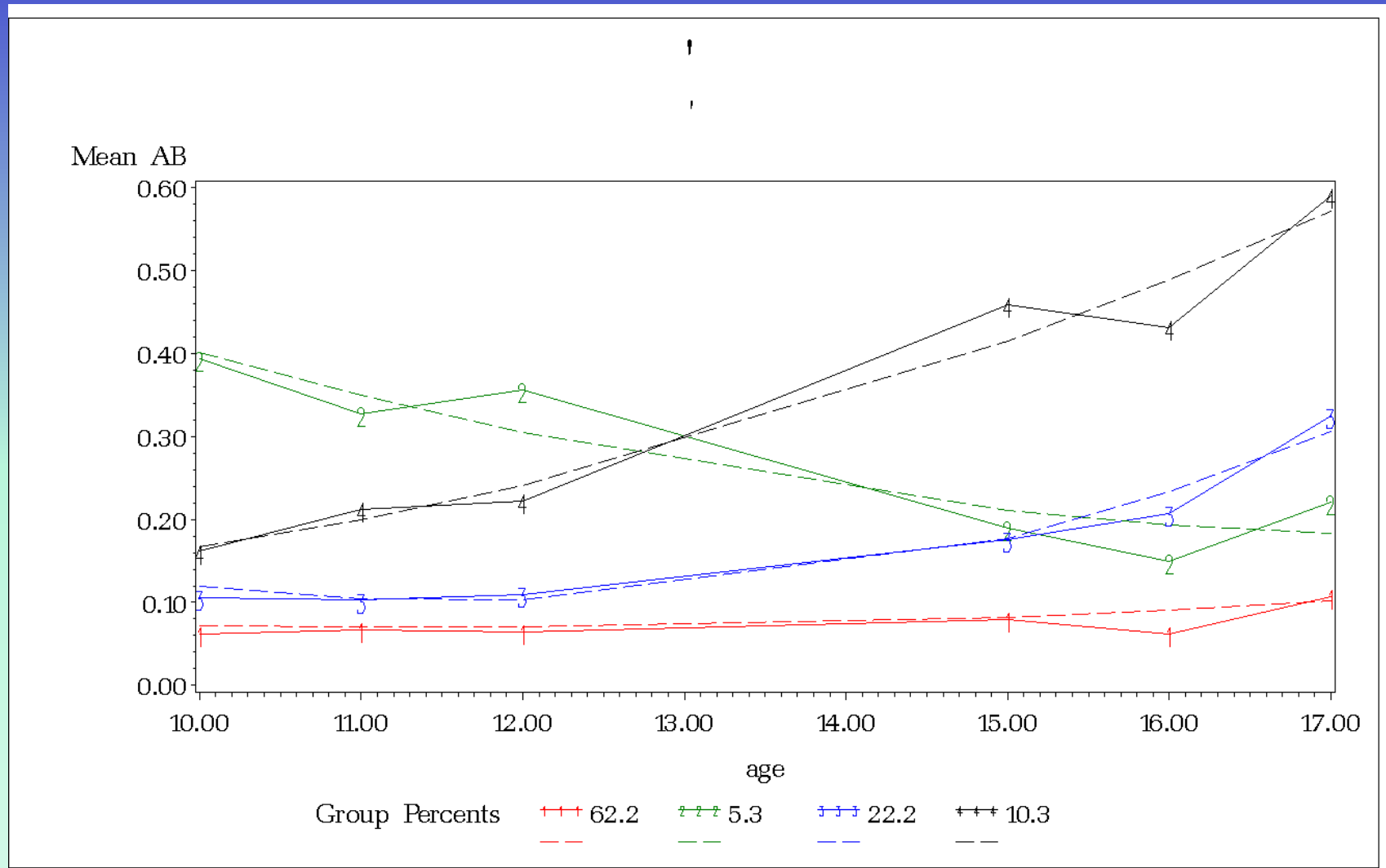


Follow-Up to Youth & Teacher Reports of Adolescent Antisocial Behavior



*** $p < .001$, * $p < .05$, + $p < .10$

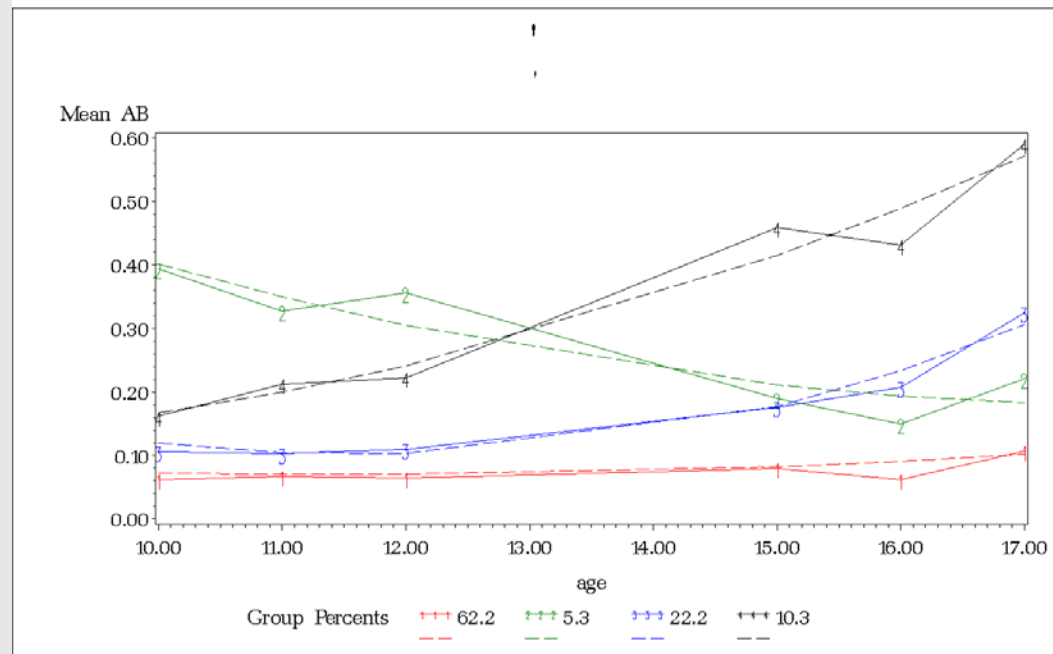
Developmental Trajectories of Youth Antisocial Behavior Ages 10-17



4 group solution with highest BIC score, all posterior probabilities $\geq .85$

Trajectory Group Differences on Juvenile Court Petitions

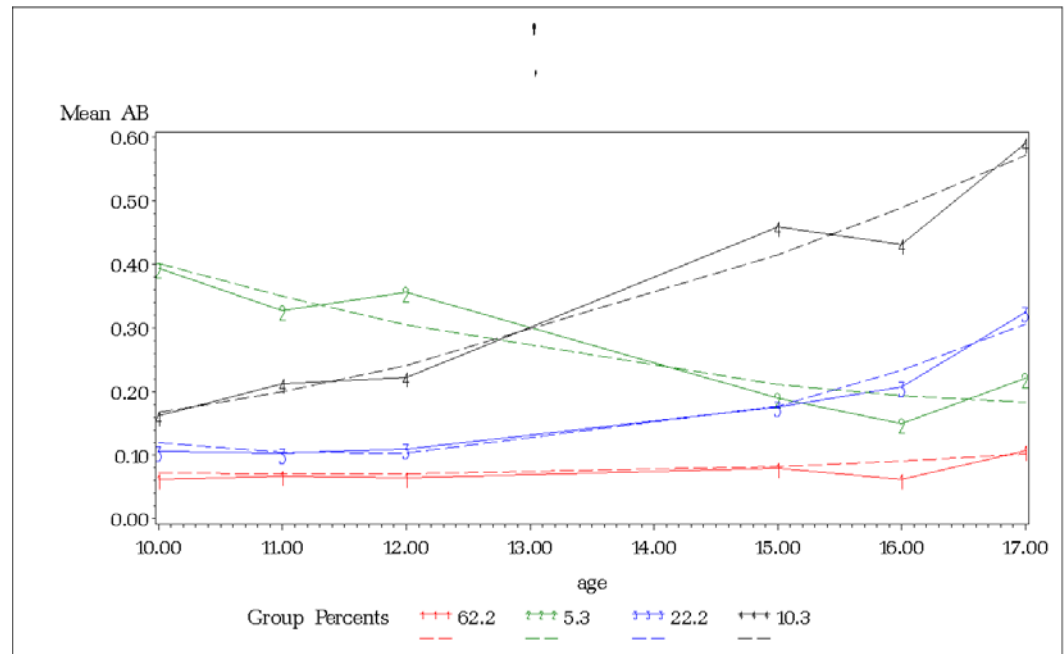
- Low Stable -- 62% sample: 25%
- High 'Decreasing' -- 5% of sample: 60%
- Late Increasing -- 10% sample: 49%
- High Increasing -- 22% sample: 78%



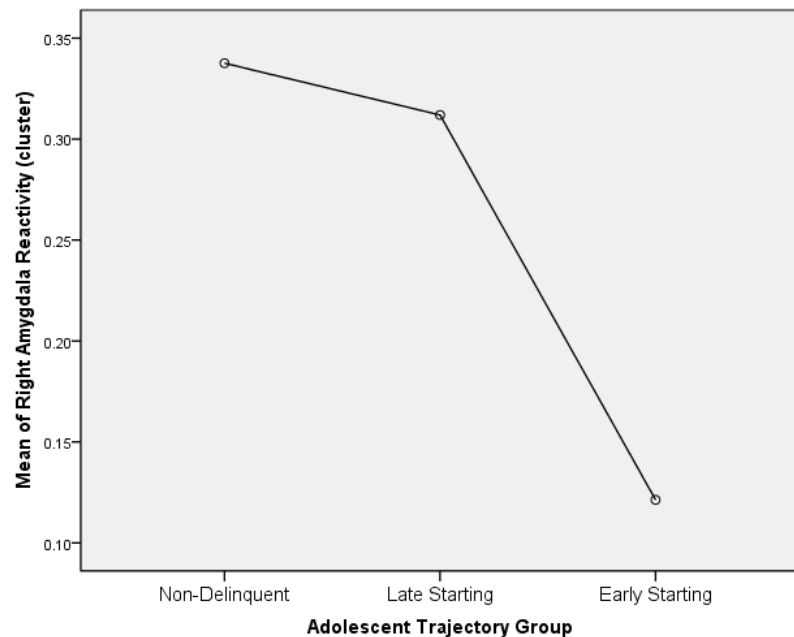
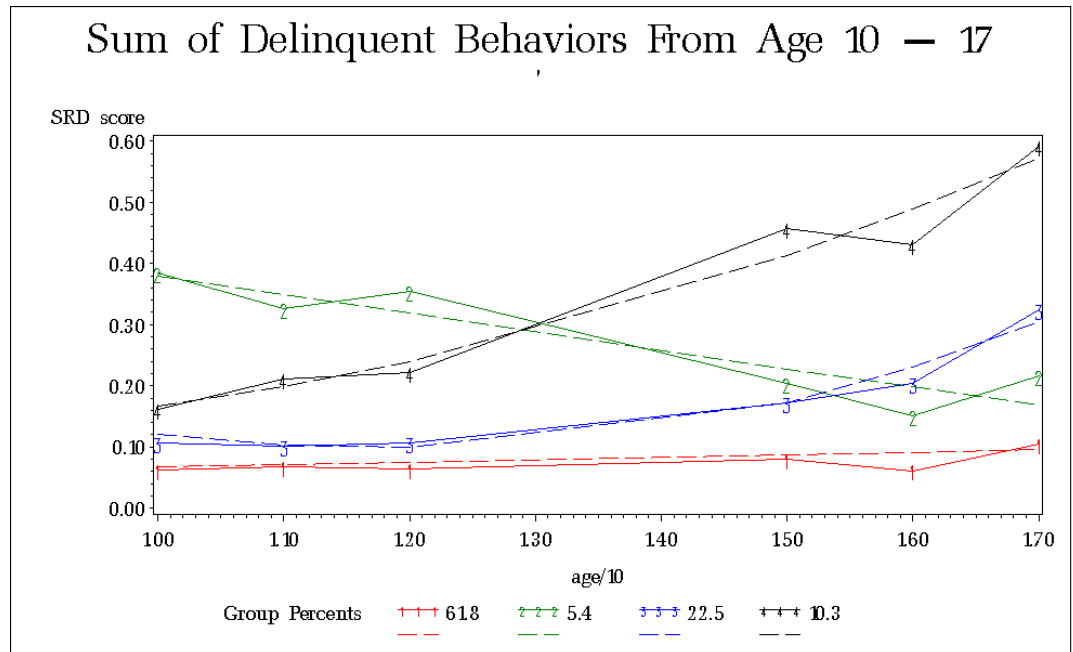
Trajectory Group Differences based on Early Childhood Risk Factors

Accounting for all other predictors in early childhood,

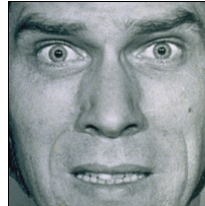
- Factors that discriminated high increasers from low stable: *maternal depression* at ages 1.5-3.5 years
- Factors that discriminated 'high decreasing' group: *rejecting parenting and maternal depression*



Amygdala reactivity and AB Trajectory Groups (N = 51)

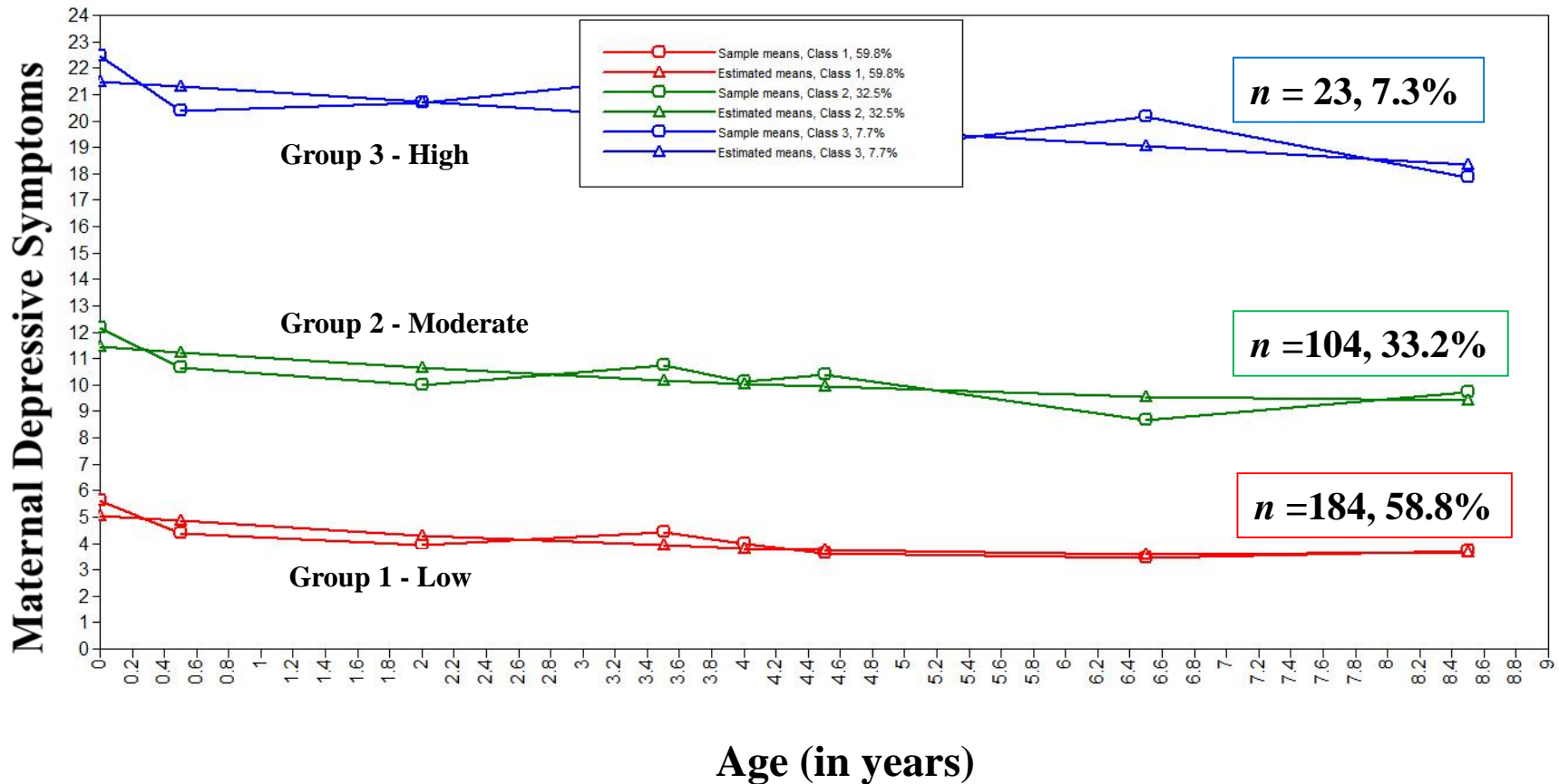


Early Rejecting Parenting, Amygdala Reactivity, and Young Adult Delinquency

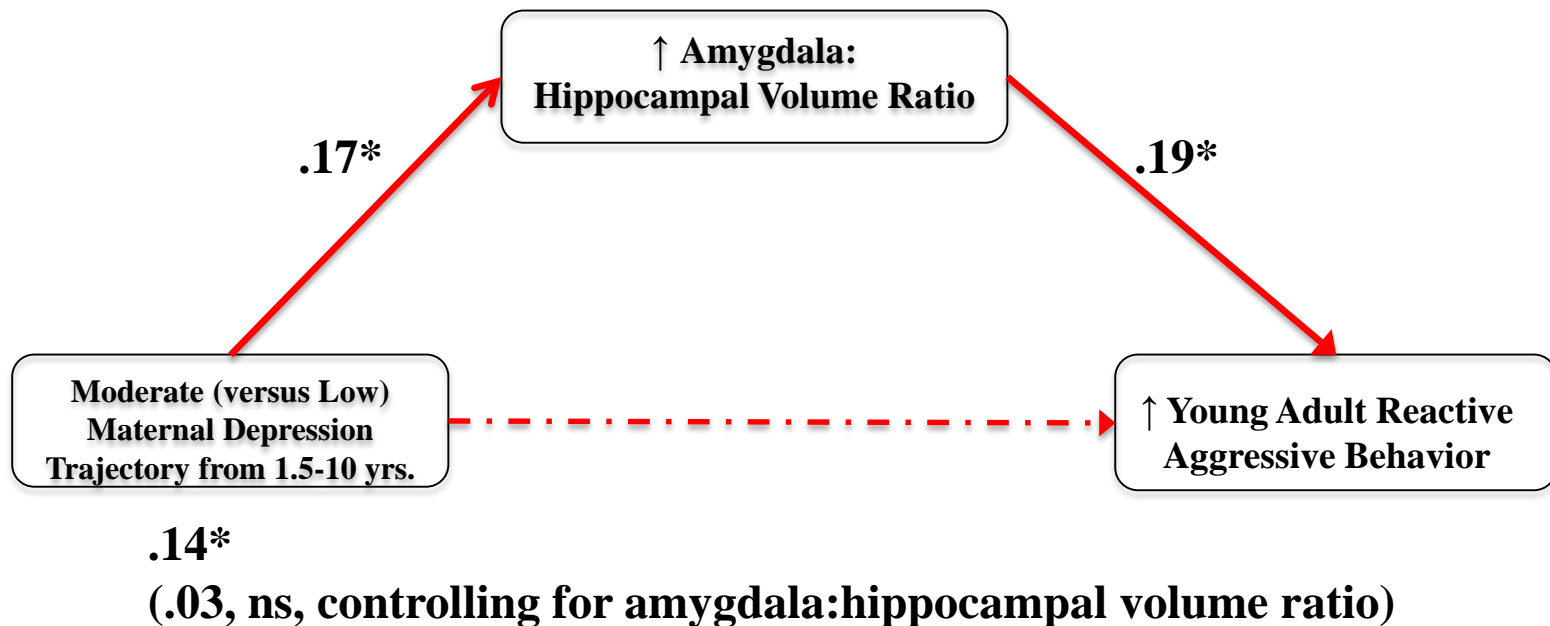


Age 1.5 SES controlled for in both regressions, * $p < .05$, + $p < .10$

Trajectories of Maternal Depression from Child Ages 1.5 to 10



Mediating Role of Brain Structure on Association between Exposure to Early Maternal Depression and Young Adult Aggressive Behavior



Summary of Findings

For boys, child and parenting precursors identifiable from 1.5-2 years of age

- Both independent and interactive long-term effects of parenting and child, including on brain and young adult aggression

Factors that compromise parenting also related to persistence of conduct problems

- Maternal depression, social support

Implications and challenges for early identification and treatment

- Multisystemic and tailored approach
- not child but dyad at risk
- Use of evidence-based interventions that address parenting and/or parental well-being