

# **Increasing Safety and Well-Being of Children: Results of a Selective Prevention Intervention**

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# Funding

- **Five year U.S. DHHS, Children's Bureau grant to demonstrate methods for preventing and intervening with child neglect**
- **Grant number 90CA 1580 to University of Maryland, Baltimore. Diane DePanfilis, Principal Investigator; Howard Dubowitz and Esta Glazer-Semmel, Co-Principal Investigators**

# Why neglect prevention?

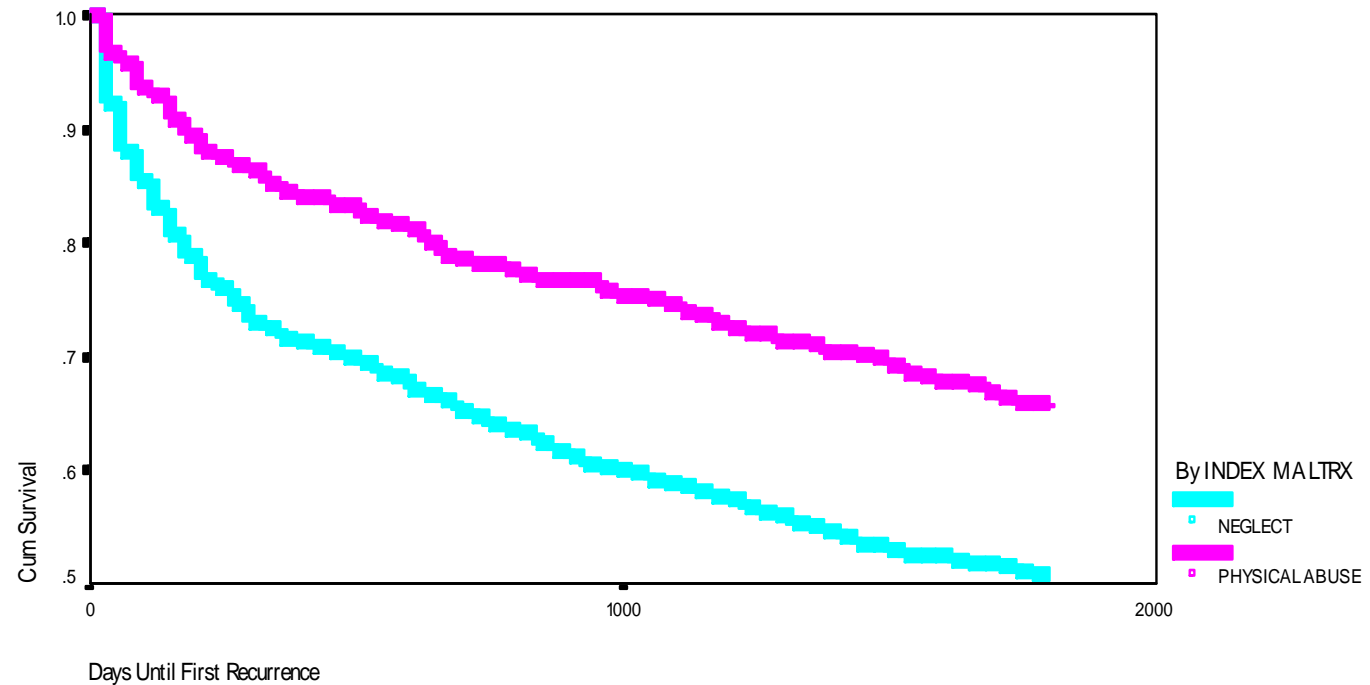
- Many families struggle to meet the basic needs of their children.
- The consequences of neglect are equally, if not more damaging than other forms of child maltreatment.
- Our mandated systems often get involved too late. We need to understand more about what models are most successful to reach and intervene with families early.



*For example: Comparison of recurrences over 5 years between neglect and physical abuse cases - n = 1167*

Figure 17. Survival (Without Recurrence)

Over Five Years



DePanfilis, D. (1995). Epidemiology of Child Maltreatment Recurrences.  
Doctoral Dissertation. University of Maryland at Baltimore.

# Purpose of Study

- To explore the relationship between length of service and outcomes of a five-year federally funded demonstration project to help families prevent neglect

# Intervention Research Questions

- Is there change over time in:
  - risk factors?
  - protective factors?
  - child safety or well being outcomes?

# Intervention Research Questions

- Does length of services affect change over time in:
  - risk factors?
  - protective factors?
  - child safety or well being outcomes?

# Intervention: Random assignment

## ■ 3-Month Intervention

- Emergency assistance
- Home based counseling services
- Family Assessment
- Referrals for other services if indicated
- Service coordination and facilitation

## ■ 9-Month Intervention

- Emergency assistance
- Home based counseling services
  - Family Assessment
  - Outcome driven service plans
  - Service Referrals
- Service coordination and facilitation

*Social work interns followed an intervention manual to deliver services to both groups.*



# Data Collection Methods

- **Self directed, computer assisted interview**
  - Standardized self-report measures administered at baseline, case closure, and six-month follow-up
- **Standardized self report and observational measures**
  - Administered at 30 days; three and six months, and closure
  - Intern driven → integrated with intervention

# Data Analysis

## Repeated Measures Analysis

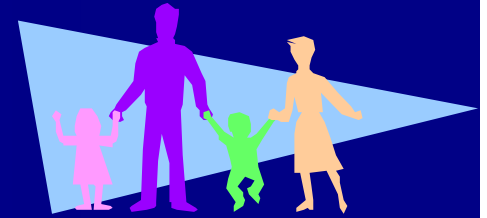
- Assess change over time
- Baseline → Closing → 6-month Follow-up
- Comparison of length of service- 3 months vs. 9 months

# What conditions do children experience in West Baltimore?\*

- **Poverty** – up to 58% of children live in poverty.
- **Truancy** – 39% miss > than 20 days/year.
- **Child abuse & neglect** – 39 per 1000 children.
- **Juvenile arrest rates** – 130 per 1000 children.
- **Teen pregnancy** – 16% of females ages 10-17 give birth.

\*Baltimore City Data Collaborative, 2001

# Target Population



- **Geographic location**

- The family lives in the West Baltimore Empowerment Zone

- **Family demographics**

- Child between 5 and 11 years living in the household

- **Basic needs may be unmet**

- **Presence of at least 2 risk factors**

- **Voluntary status**

- There is no current CPS involvement
- The family is willing to participate

# Study sample: Caregiver demographics

- 154 families
- 86% African American
- Mean age= 39 years old
- 98% female (151 females, 3 males)
- 58% unemployed, 19% employed full-time, 8% employed part-time, 10% in training, 5% retired
- 5% married, 65% never married, 13% separated, 10% divorced, 7% widowed
- 62% had less than high school degree

# Study sample: Child demographics

- Average number of children in families = three
  - 17% have one child
  - 25% have two children
  - 27% have three children
  - 31% have four or more children
- Mean age = 9 (range 1 month to 21 years)
- 49% female and 51% male
- Relationship to caregiver
  - 78% are children
  - 14% are grandchildren
  - 8% are other relative

# Constructs in this Analysis

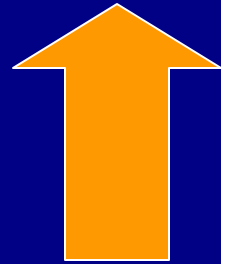
## Decrease Risk Factors:

- Caregiver depressive symptoms
- Parenting stress
- Life stress



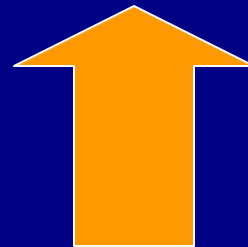
## Enhance Child Safety

- CPS reports
- Physical Care
- Psychological care



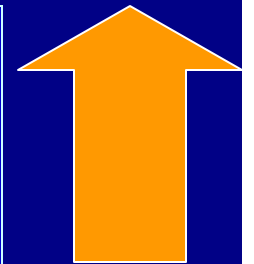
## Increase Protective Factors:

- Parenting attitudes
- Parenting competence
- Family functioning
- Social support



## Enhance Child Well-Being

- Child behavior

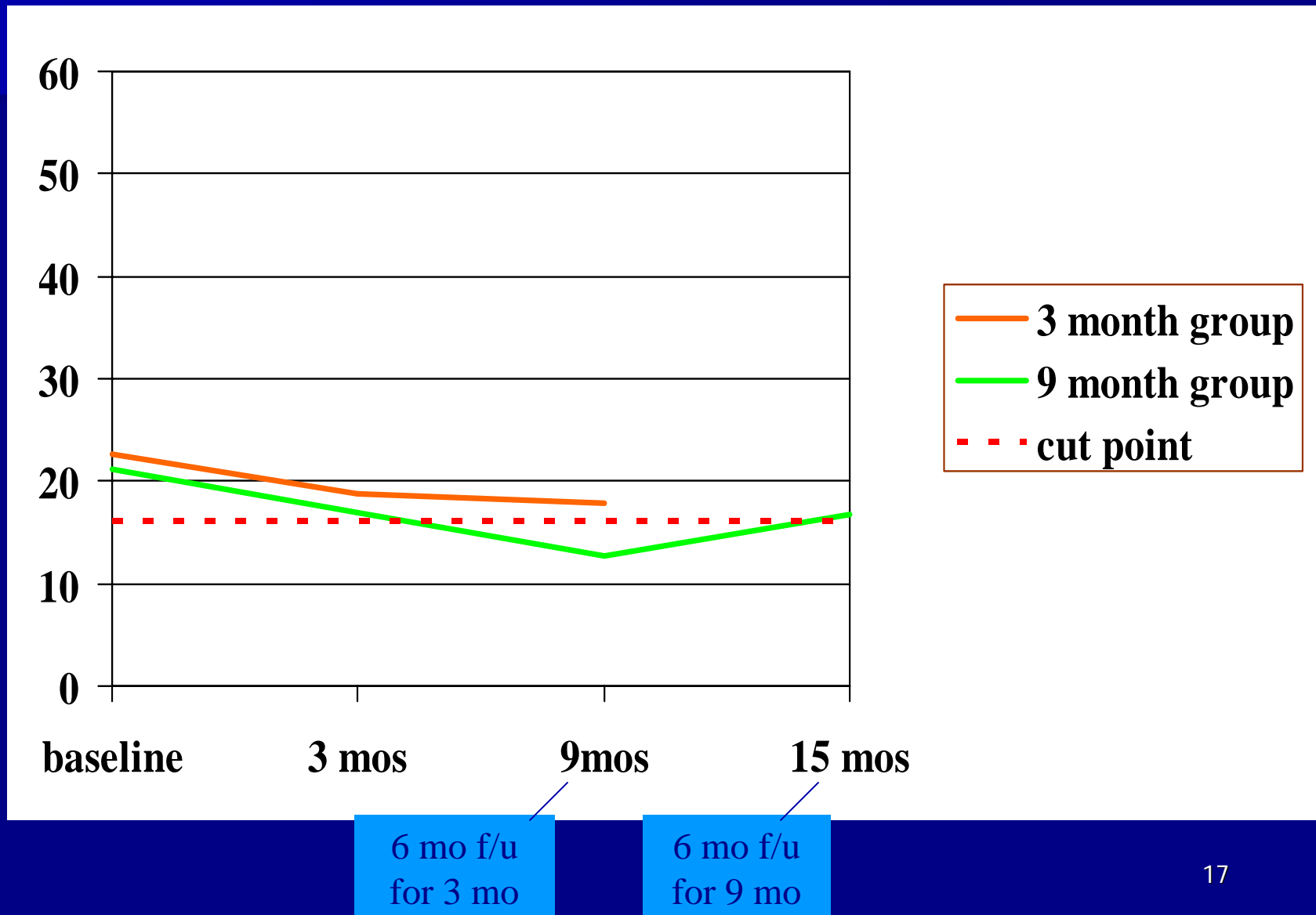


# Results: Risk Factors

- **Caregiver depressive symptoms**
  - **Statistically significant main effect of time ( $F=18.239, p<.0005$ ).**
    - **CES-D total score decreased from baseline ( $M=21.91, SD=12.03$ ) to closing ( $M=15.70, SD=11.35, p<.0005$ ) and from baseline to 6-month follow-up ( $M=16.84, SD=11.81, p<.0005$ )**
  - **Statistically significant interaction between time and group ( $F=3.185, p=.045$ ).**
    - **9 month group had larger decrease in scores from baseline ( $M=21.14, SD=11.44$ ) to closing ( $M=12.76, SD=9.82$ ) than did 3 month group ( $M=22.69, SD=12.65$  at baseline and  $M=18.69, SD=12.08$  at closing).**



# Interpretation is Complicated: Depressive Symptoms (N=125)



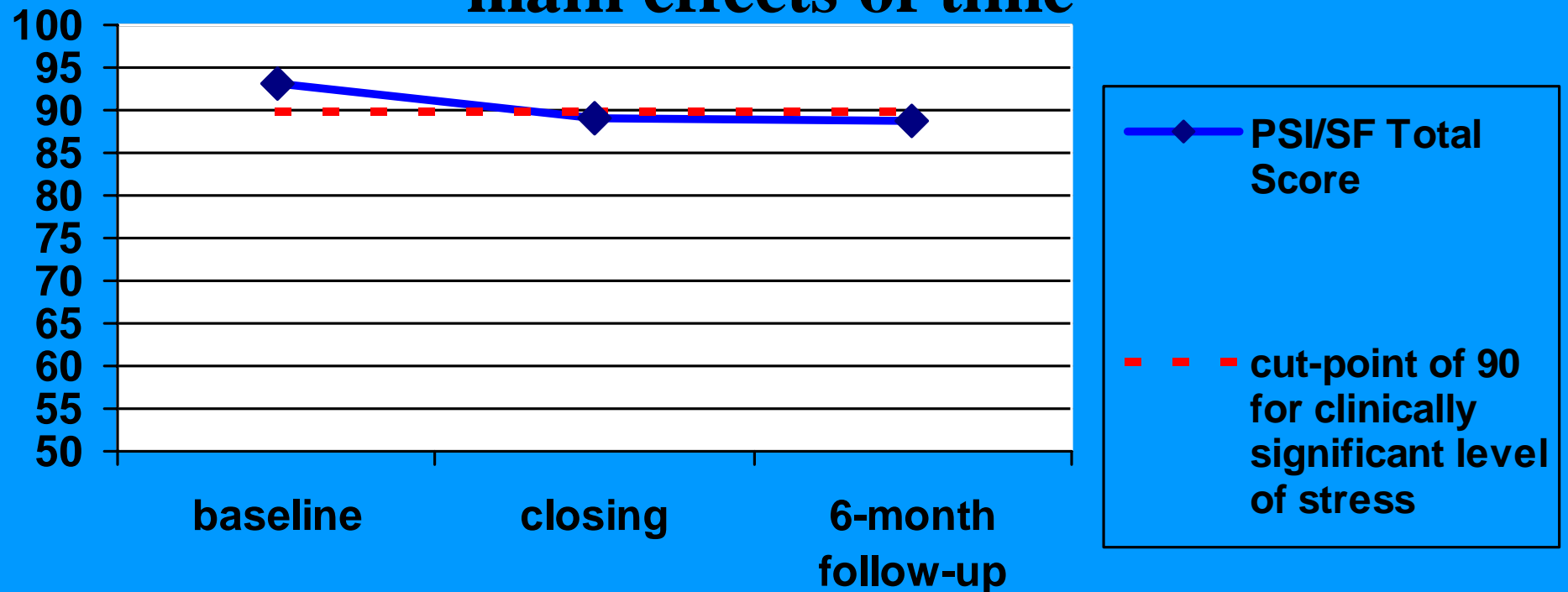
# Results: Risk Factors

## ■ Parenting stress

- **Total PSI scores significantly decreased from baseline** (M=93.24, se=1.6) **to case closure** (M=88.99, se=1.63, p=.001) **and from baseline to the 6-month follow-up** (M=88.83, se=1.74, p=.002).
- **PSI parental distress subscale significantly decreased:** (M=33.23, SD=7.37) **to closing** (M=31.05, SD=7.59, p<.0005) **and from baseline to 6-month follow-up** (M=31.23, SD=7.51, p=.001)
- **PSI difficult child subscale score significantly decreased from baseline** (M=33.03, SD=8.22) **to closing** (M=31.72, SD=7.58, p=.021) **and from baseline to 6-month follow-up** (M=30.77, SD=7.88, p<.0005)
- No statistically significant main effect of group (p=.141) or interaction between group and time (p=.157). No change in parent-child dysfunction interaction subscale.

# Results: Parenting Stress

## Parenting stress total score: Significant main effects of time



# Results: Risk Factors

## ■ Life stress

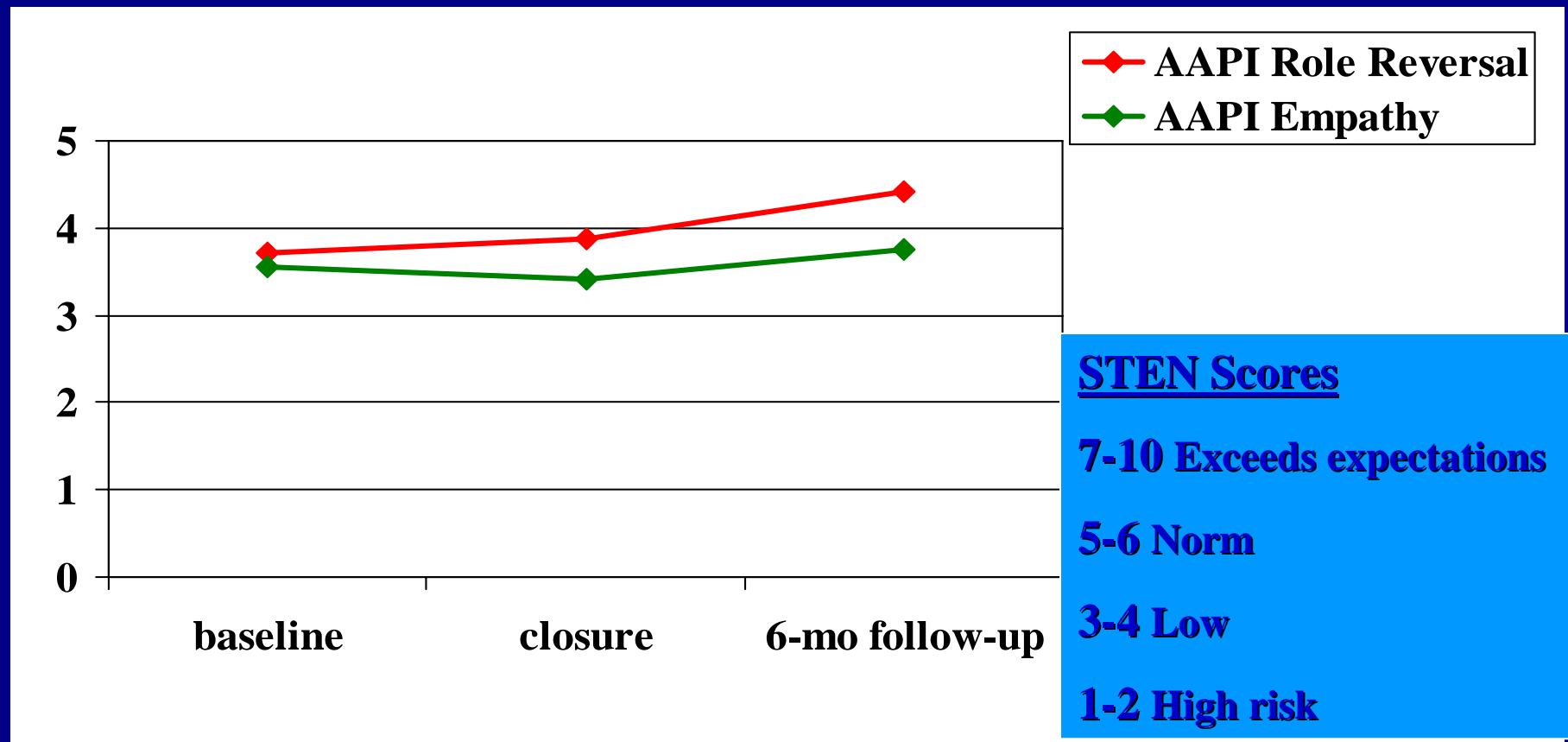
- **Everyday Stressors Index total score significantly decreased from baseline (M=47.90, SD=10.22) to closing (M=43.88, SD=10.60,  $p<.0005$ ) and from baseline to 6month follow-up (M =42.23, SD=11.27,  $p<.0005$ ).**
- **No statistically significant difference between 3 mo and 9 mo groups over time.**

# Results: Protective Factors

## ■ Parenting attitudes

- **AAPI Role-Reversal Subscale - significant effect of time ( $F = 16.689, p < .0005$ )**. Increase in the parent-child role reversal subscale scores from baseline ( $M=3.72, se=.18$ ) to 6-month follow up ( $M=4.41, se=.19, p < .0005$ ) and from case closure ( $M=3.87, se=.18$ ) to 6-month follow up ( $p < .0005$ ).
- **AAPI Empathy subscale - significant effect of time** ( $F = 3.563, p = .031$ ). Increase from case closure ( $M=3.42, se=.19$ ) to 6-month follow up ( $M=3.76, se=.19, p = .008$ ).
- No change in AAPI Parental Developmental Expectations subscale or Parental Value of Corporal Punishment subscale. (In NORM range at all points in time).
- No statistically significant main effect of group or interaction between group and time.

# Results: Parenting Attitudes (N=125)



# Results: Protective Factors

## ■ Parenting competence

- **Parenting Satisfaction subscale scores significantly increased** from baseline (M=31.82, SD=5.73) to closing (M=33.61, SD=6.55,  $p = .001$ ) and from baseline to 6-month follow-up (M=34.45, SD=6.46,  $p < .0005$ )- No group differences.

## ■ Family functioning

- No statistically significant changes in the Self Report Family Inventory SFI subscales: conflict, cohesion, leadership, expressiveness or health.

# Results: Protective Factors

## ■ Social support

- **SPS Guidance subscale scores significantly increased from baseline** (M=11.18, SD=2.38) to closing (M=11.85, SD=1.96,  $p=.002$ ) and from baseline to 6-month follow-up (M=11.87, SD=1.93,  $p=.003$ ).
- **SPS Attachment subscale scores-** Significant effects of group were found ( $F = 6.682$ ,  $p=.011$ ). The 9-month intervention group had a significantly higher overall mean score (M=11.78,  $se=.19$ ) than the 3-month intervention group (M=11.09,  $Se=.19$ ). No effect of time. No other differences in other subscales.



# Targeted Outcomes

## ■ Child Safety

### ■ CPS involvement

### ■ Physical Care

- Household furnishings
- Overcrowding
- Household sanitation

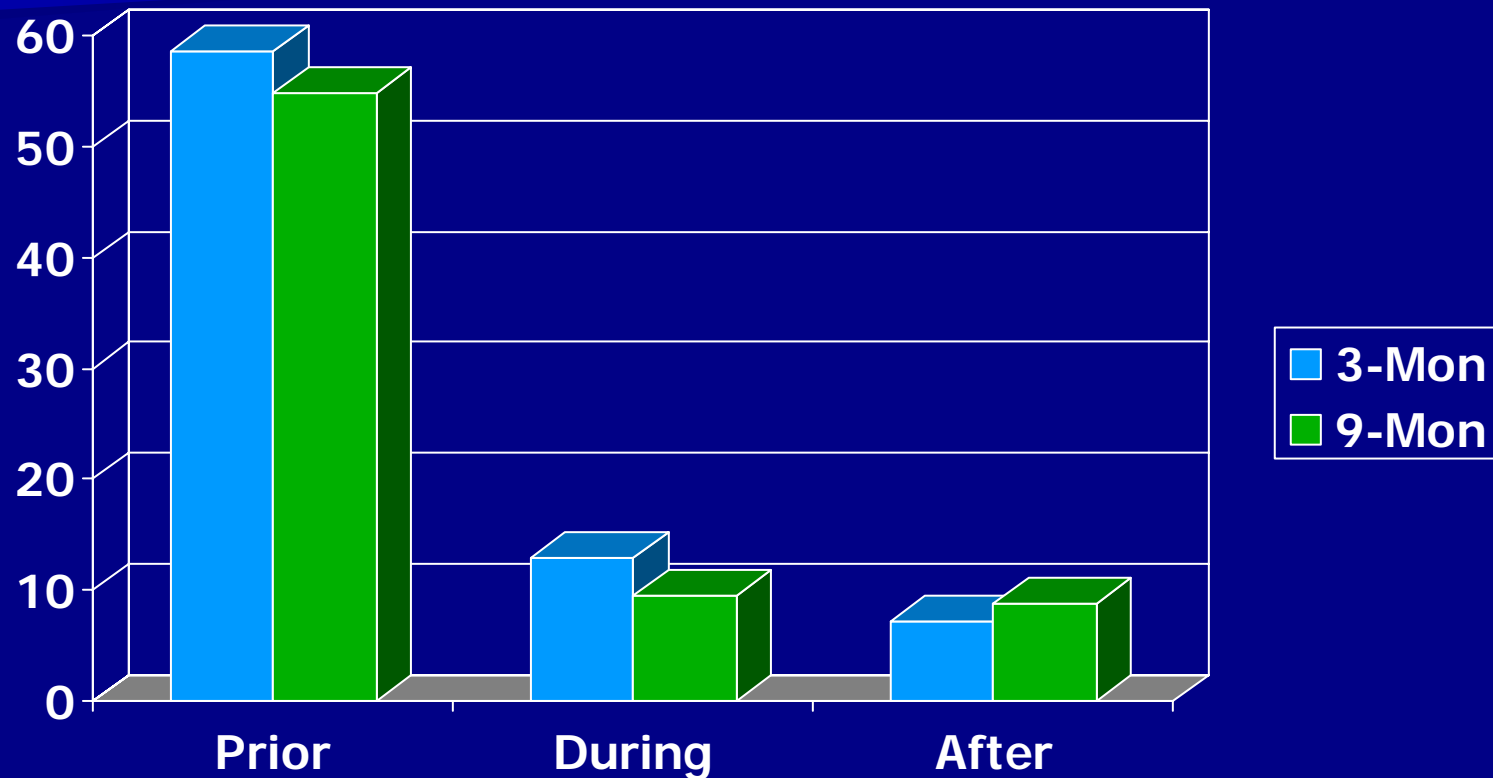
### ■ Psychological Care

- Mental health care
- Parental teaching/stimulation of children

## ■ Child Well Being

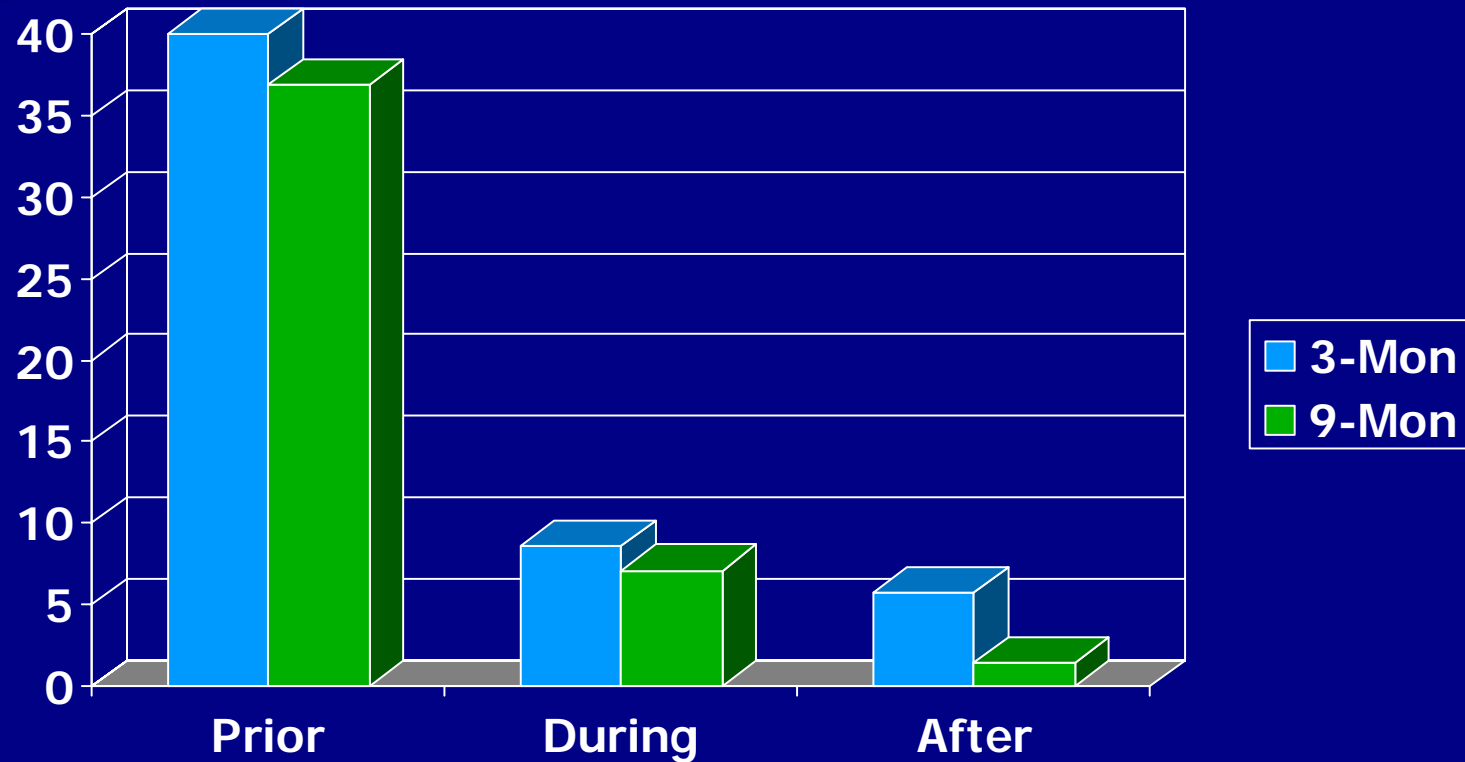
### ■ Child Behavior

# Child Safety: CPS Reports



- **Non-significant treatment group differences. Logistic regression model to determine whether length of service predicted status of CPS reports was non-significant.**

# Child Safety: Indicated CPS Reports



- **Non-significant treatment group differences. Logistic regression model to determine whether length of service predicted status of CPS reports was non-significant.**

# Increase in Child Safety

## ■ Physical Care

- CWBS Household furnishings
- CWBS Overcrowding
- CWBS Household sanitation

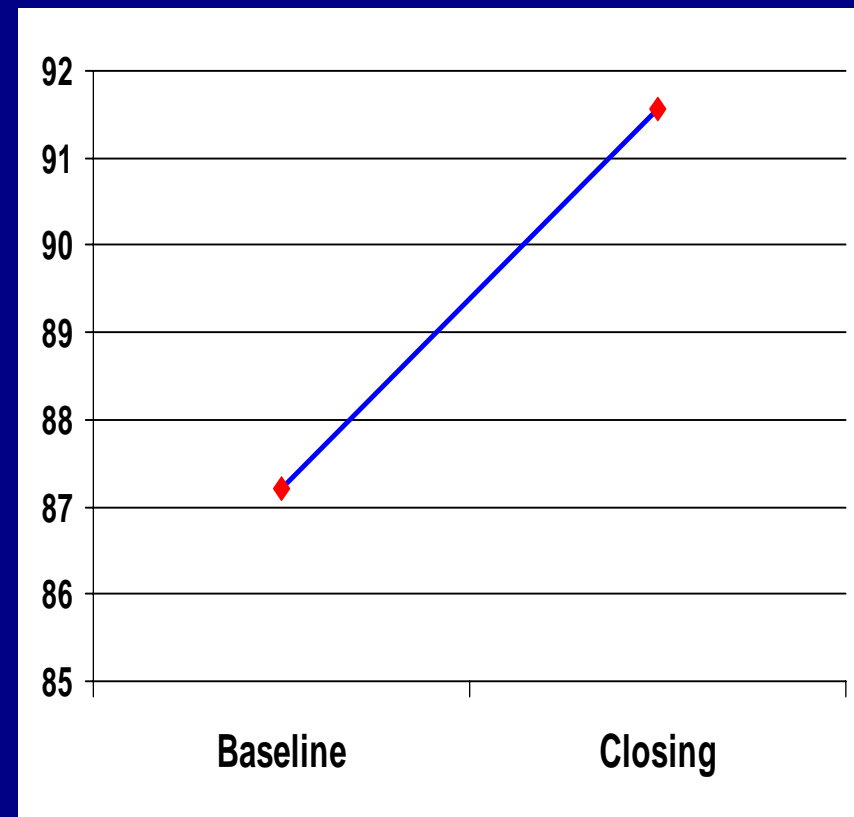
## ■ Psychological Care

- CWBS Mental health care
- CWBS Caregiver teaching stimulation of children

# Child Safety: Physical Care

## ■ Household Furnishings\*

- Measure: Child Well-Being Household Furnishing subscale
- Score:
  - 100 = Adequate
  - 88 = Marginal
  - 64 = Moderately Inadequate
- Score **increased from baseline** (M= 87.2) to **Closing** (M= 91.56, p= .005)

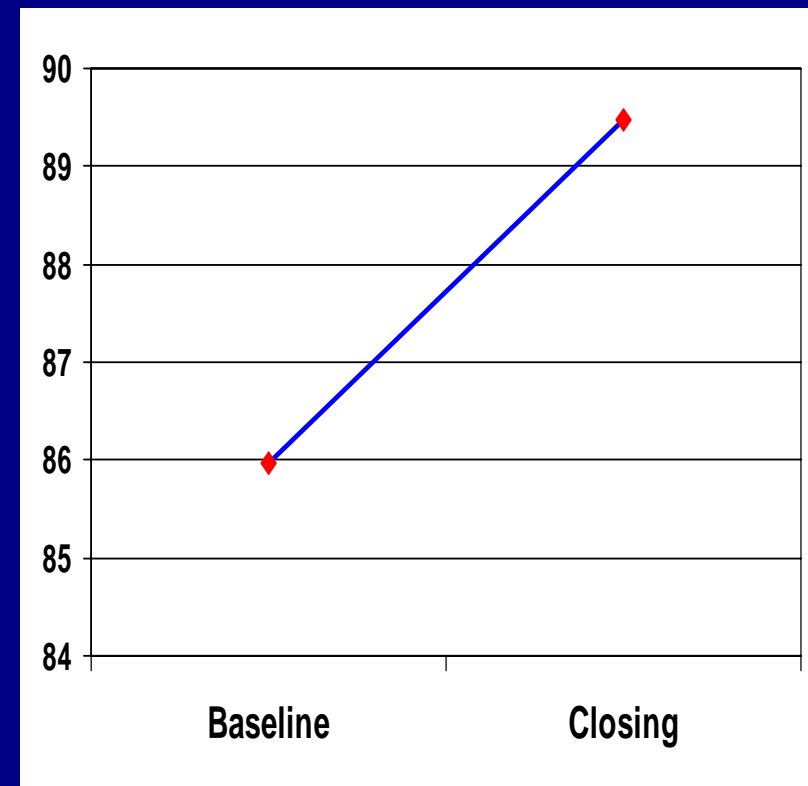


\*N= 100; 3 mos= 49; 9 mos= 51

# Child Safety: Physical Care

## ■ Overcrowding\*

- Measure: Child Well-Being Overcrowding subscale
- Score:
  - 100 = No overcrowding
  - 82 = Mild overcrowding
  - 62 = Moderate overcrowding
- Score **increased from baseline** (M= 85.97) to **Closing** (M= 89.47, p= .028)

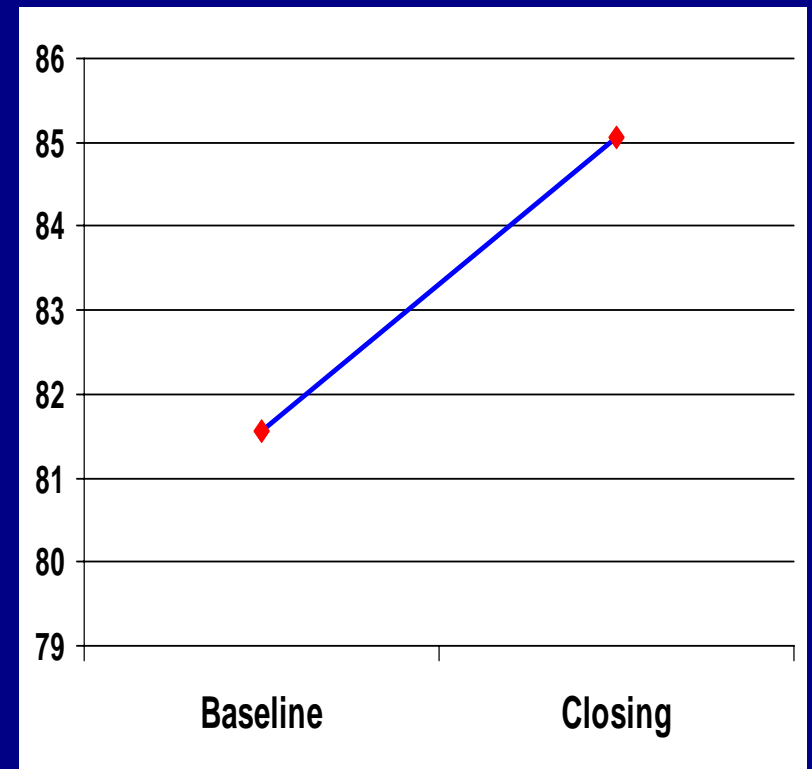


\*N= 105; 3 mos= 54; 9 mos= 51

# Child Safety: Physical Care

## ■ Household Sanitation\*

- Measure: Child Well-Being Household Sanitation subscale
- Score:
  - 100 = Adequate
  - 71 = Mildly inadequate
  - 38 = Moderately Inadequate
- Score **increased from baseline** (M= 81.57) to **Closing** (M= 85.05, p= .038)

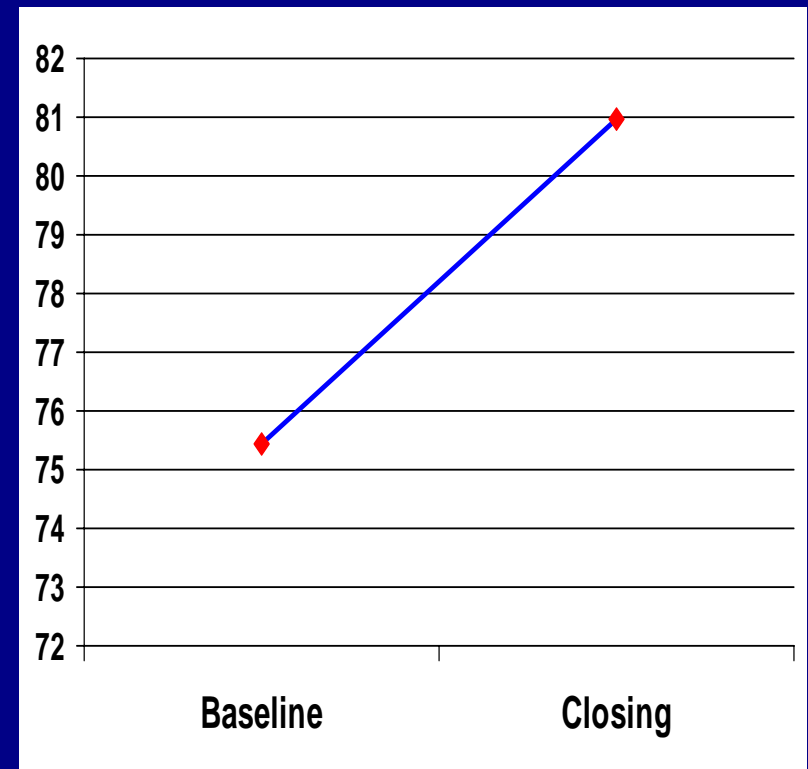


\*N= 100; 3 mos= 50; 9 mos= 50

# Child Safety: Psychological Care

## ■ Mental Health Care\*

- Measure: Child Well-Being Mental Health Care subscale
- Score:
  - 100 = Entirely adequate
  - 69 = Marginal
  - 50 = Moderately Inadequate
- Score **increased from baseline** (M= 75.44) to **Closing** (M= 80.98,  $p = .016$ )



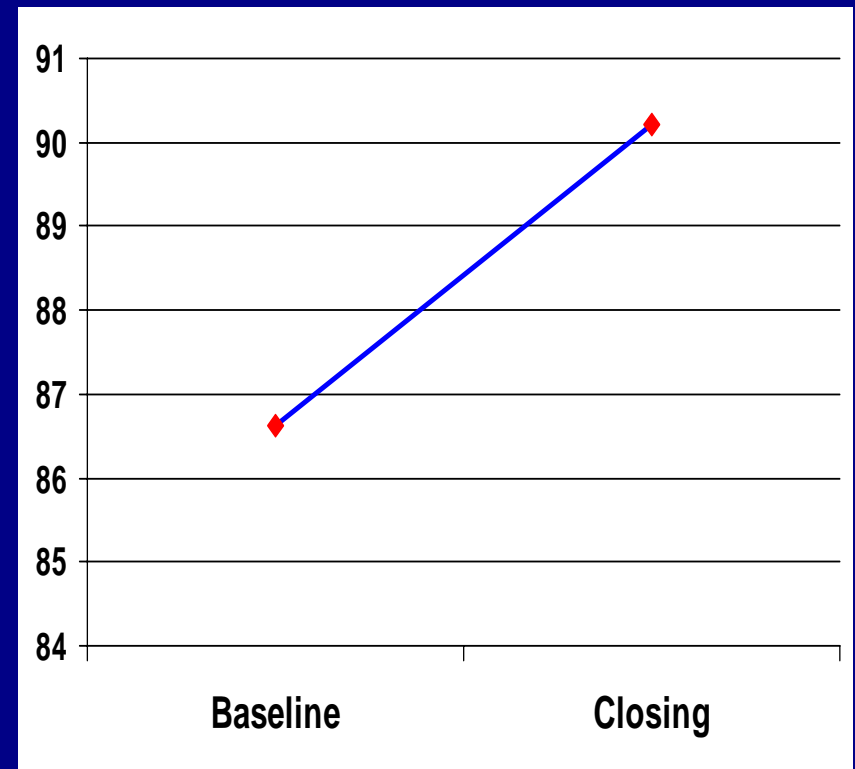
\*N= 96; 3 mos= 53; 9 mos=43



# Child Safety: Psychological Care

## ■ Caregiver Teaching/Stimulation of Children\*

- Measure: Child Well-Being Teaching/Stimulation of Children subscale
- Score:
  - 100 = High activity
  - 84 = Moderate activity
  - 70 = Passive approach, some deprivation
- Score **increased from baseline** (M= 86.63) to **Closing** (M= 90.21,  $p= .004$ )

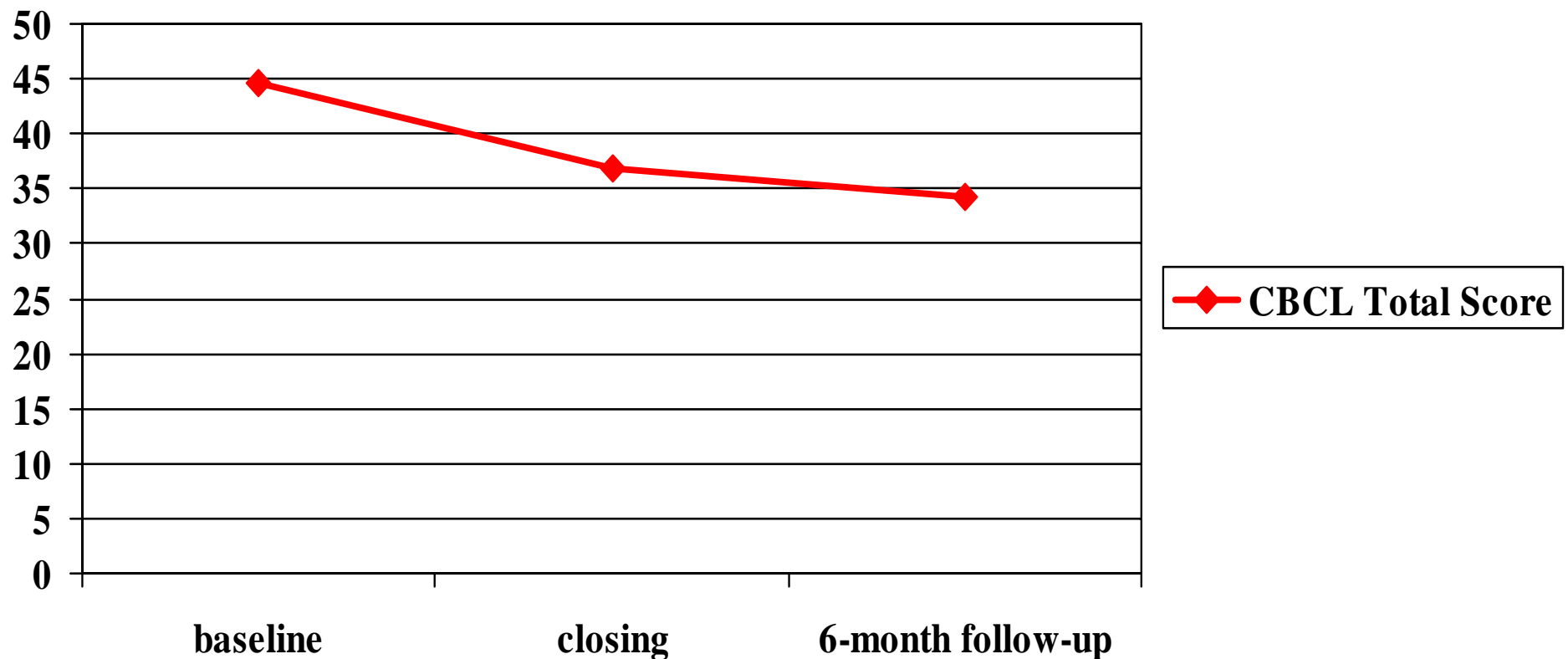


\*N= 60; 3 mos= 33; 9 mos=27

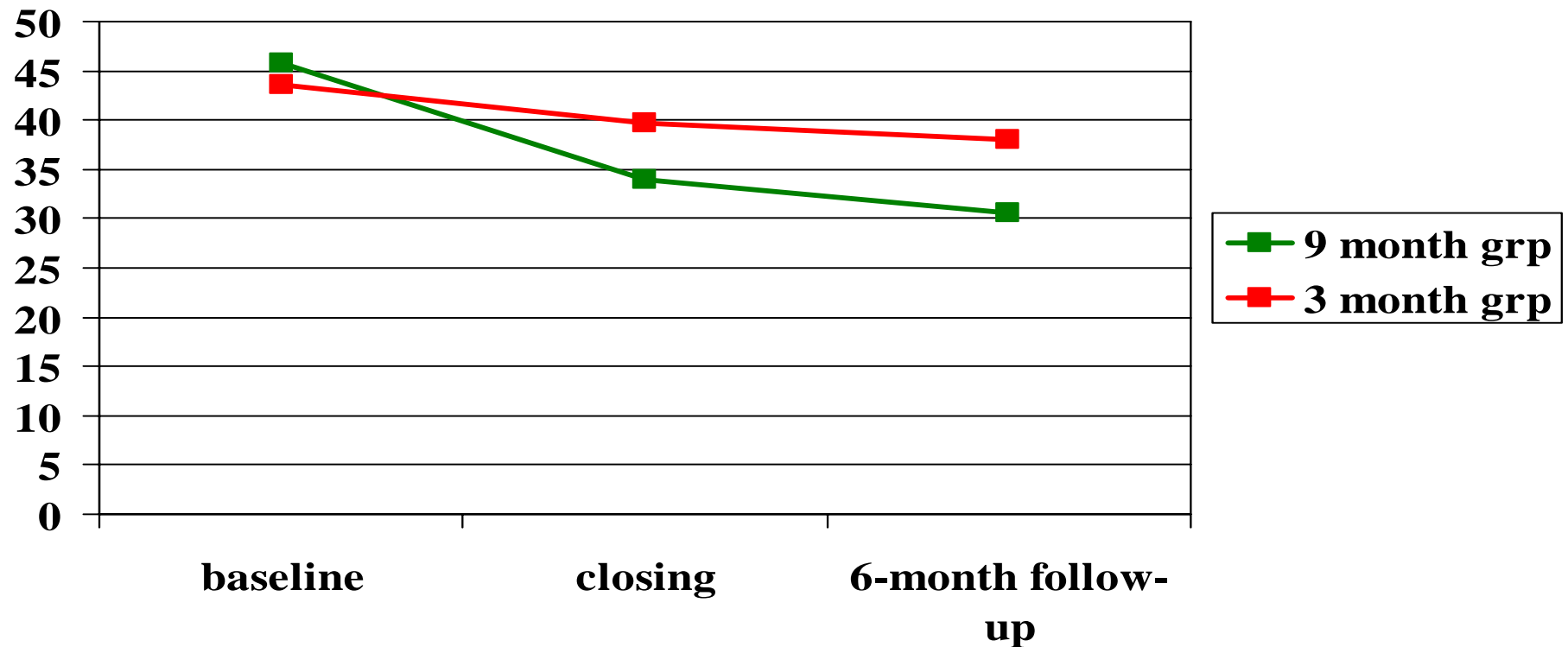
# Results: Child Behavior

- **CBCL Total Problem raw scores decreased** from baseline (M=44.61, se=2.96) to closing (M=36.80, se=2.59,  $p<.0005$ ) and from baseline to 6-months follow-up (M=34.29, se=2.56,  $p<.0005$ ).
- **Interaction between time and treatment group** suggest 9 month and 3 month groups perform differently across time. The 9 month group had larger decrease in scores from baseline to closing and from closing to 6 month follow up than did 3 month group.
- **Internalizing and externalizing CBCL raw scores significantly decreased** from baseline to closing, and from baseline to 6 month follow up.
- 
- **Whereas internalizing raw scores of two groups are similar at baseline, 9 month scores are lower at both closing and 6-month follow-up than 3 month scores.**

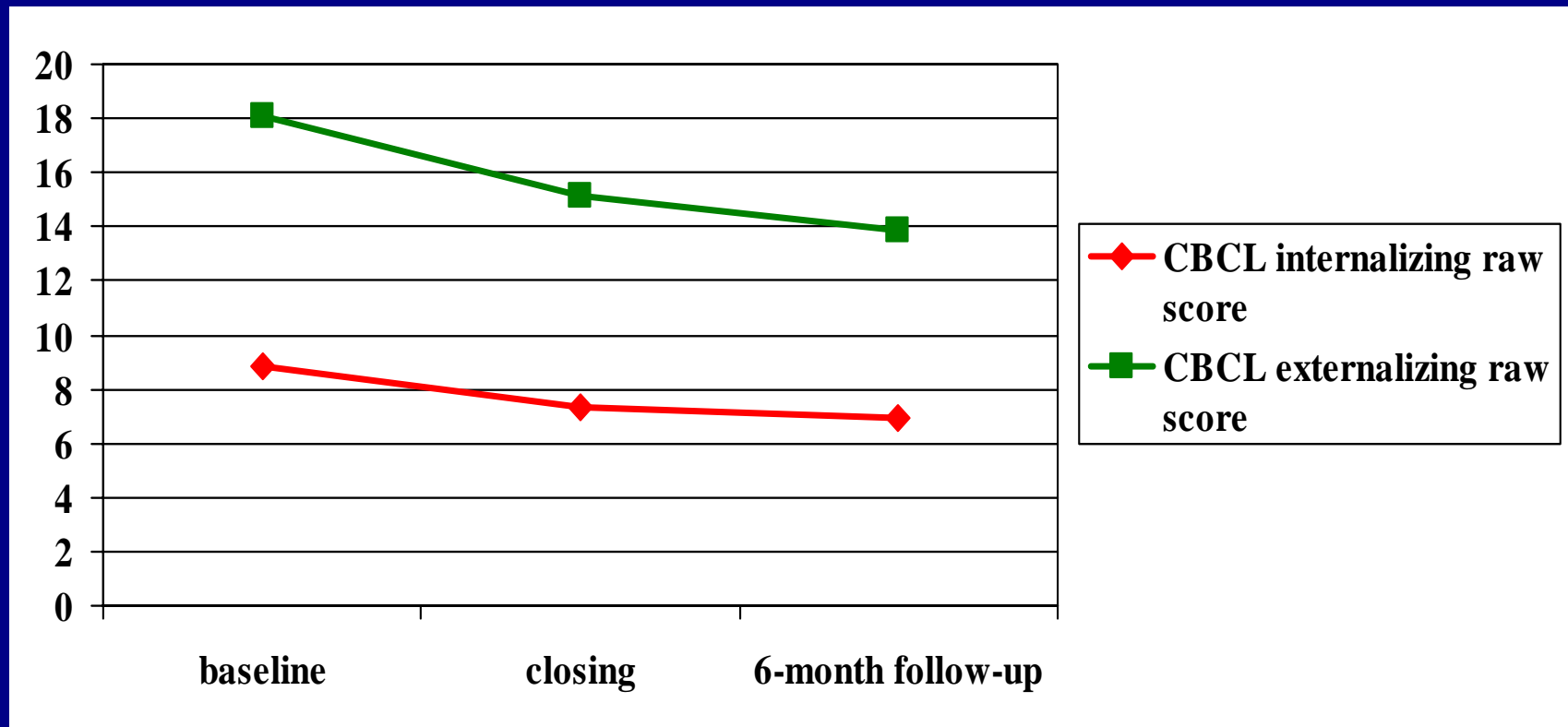
# Results: Child Behavior CBCL Total Score (N=111)



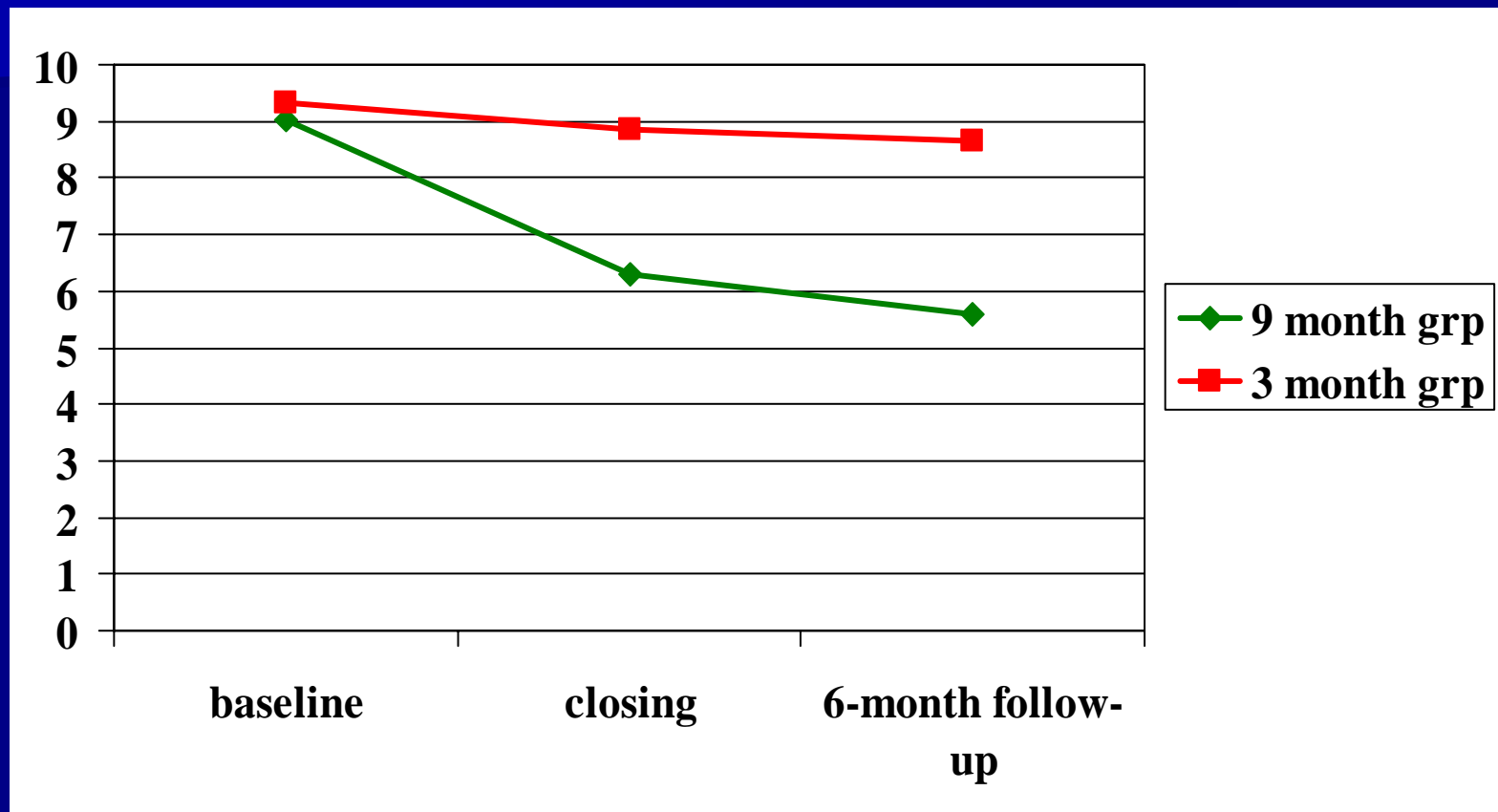
# Child Behavior: CBCL Total Score (N=111)



# Child Behavior: Internalizing and Externalizing Behavior – Main Effects of Time (N=111)



# Child Behavior: Internalizing Behavior (N=111)



# Conclusions

- Analyses suggest that intervention may have an effect on:
  - **Reducing Risk Factors**
    - depressive symptoms
    - parenting stress
    - life stress
  - **Increasing Protective Factors**
    - parenting attitudes and satisfaction
    - social support

AND.....

# Conclusions

- **Results suggest improvement in targeted outcomes:**
  - **Child Safety**
    - decreased CPS involvement
    - fewer housing problems
    - improved mental health care
    - enhanced parental teaching of children
  - **Child Well Being (Behavior)**
    - decreased externalizing behavior and internalizing behavior
- **Most positive effects endure six months following case closure.**



# Conclusions

- Differences in change over time between groups in:
  - Caregiver depressive symptoms
  - Child behavior
- No differences between groups in other domains (e.g., parenting stress, life stress, parenting attitudes, social support, household safety).

# Limitations

- Convenience (relatively small) sample
- Intervention delivered primarily by MSW interns
- Questions about fidelity of intervention (despite intervention manual)
- Short follow-up (only 6 months)

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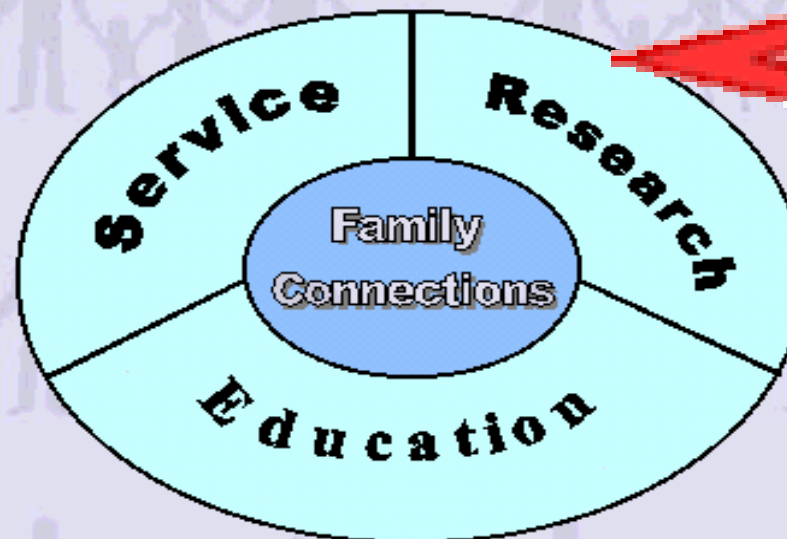


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