



# THE NEW HAVEN MOMS PARTNERSHIP

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- Yale Center for Clinical and Translational Research
- Child Health and Development Institute
- Harvard Center on the Developing Child

# Maternal Mental Health

- WHO definition: “ a state of well-being in which a mother realizes her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her “community.”
- Mental health is not the same as the absence of mental illness, but rather a mother’s ability to adapt and cope
- Most common disorder in mental health is depression; depression is strongest link to child outcomes

# Impact on Children

- Less likely to engage in positive parenting practices and preventive child health practices
- Parental depression linked to
  - lack of school readiness and early school success:
  - impairments in cognitive and motor function
  - increased risk for mental illness



Smith MV et al, 2009; *AMJ Public Health* 63(120); NICHD Early Child Care Research Network. 1999. *Developmental Psychology* 35(5): 1297-1310. Kavanaugh, 2006. *Ambulatory Pediatrics* 6(1): 32-37. Surkan, 2012, *Pediatrics* 130 (4)

# Mental Health and Employment

- People with mental health problems have the highest "want to work rate" [of out of work people] with up to 90% wanting to work.
- Even for people with more common types of mental illness, such as depression, only about half are adequately employed.

Institute on Employment Studies; Promoting Independence and Recovery through Work: Employment for People with Psychiatric Disabilities, Briefing Document for the National Governors Association, Center For Best Practice (NGA) Webcast Transforming , 2011

# EF and Depression and Trauma in Adults

- Antidepressants, psychotherapy improve attention and the remaining executive functions (Herrera-Guzman, 2010 *Psychiatry Research*)
- Inhibitory control is a trait marker of major depressive disorder (Schmid, 2011 *Archives of Clinical Neuropsychology*)
- Verbal learning, memory, attentional processes etc. associated with severity of depression (Godard, *J Psychiatry Research* 2011)
- Decreased EF in PTSD and depression: need to allocate resources to cope with psychological distress (Twamley EW, 2009, *J International Neuropsychological Society*).
- Impaired processing speed irreversible marker of recurrent depression ( Halvorsen, 2011; *J Clinical & Experimental Neuropsychology*)

# EF & Features of Depression

- Unclear if EF is product or cause of depression
- **Excessive rumination** overloads f. lobe, decreases EF
- Impairments in **abstraction ability**, leads to overly concrete thinking, prevents from appreciation of intricacies of events or interpersonal relationships.
- **Memory problems** (impairment in short-term verbal and non-verbal/visospatial memory and LTM), leads to difficulties processing new and reevaluating old information.
- Not fundamental deficit, but reduced capacity



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Ensuring the Emotional Health of Our City's Families

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# Our Target Population



Low-income, African American and Latina  
pregnant and parenting women in New Haven



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# The New Haven Mental health Outreach for MotherS (MOMS) Partnership

- All Our Kin
- Clifford Beers Guidance Clinic
- Housing Authority of New Haven
- New Haven Health Department
- New Haven Healthy Start
- State of CT Department of Children & Families
- State of CT Department of Social Services
- The Diaper Bank
- Yale Child Study Center & Psychiatry
- Advisory Committee of 40+ local and state leaders



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# Connectors: Community Mental Health Ambassadors

- Unique understanding of the experience, language and/or culture of low-income mothers
- Conduct culturally appropriate mental health care and outreach



• **MANUALIZED**



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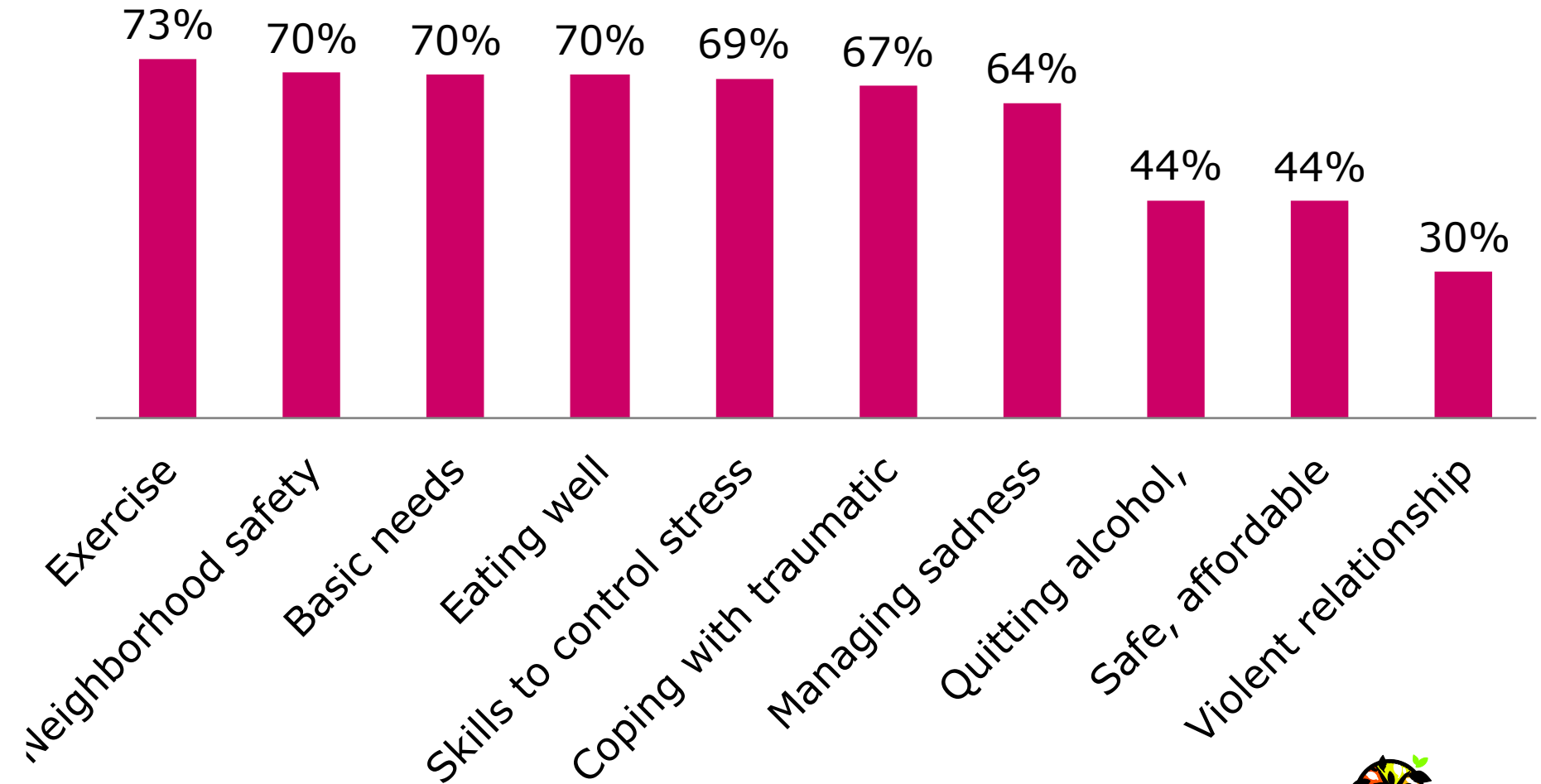
# Goals of Mothers

- 1.) Securing stable employment
- 2.) "Making my child proud"
  - "I am the voice for my child"
  - "I am my child's inspiration"
  - "When you don't take care of yourself you don't take care of your child"



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# Mothers (N=1,207) Needed Support With....



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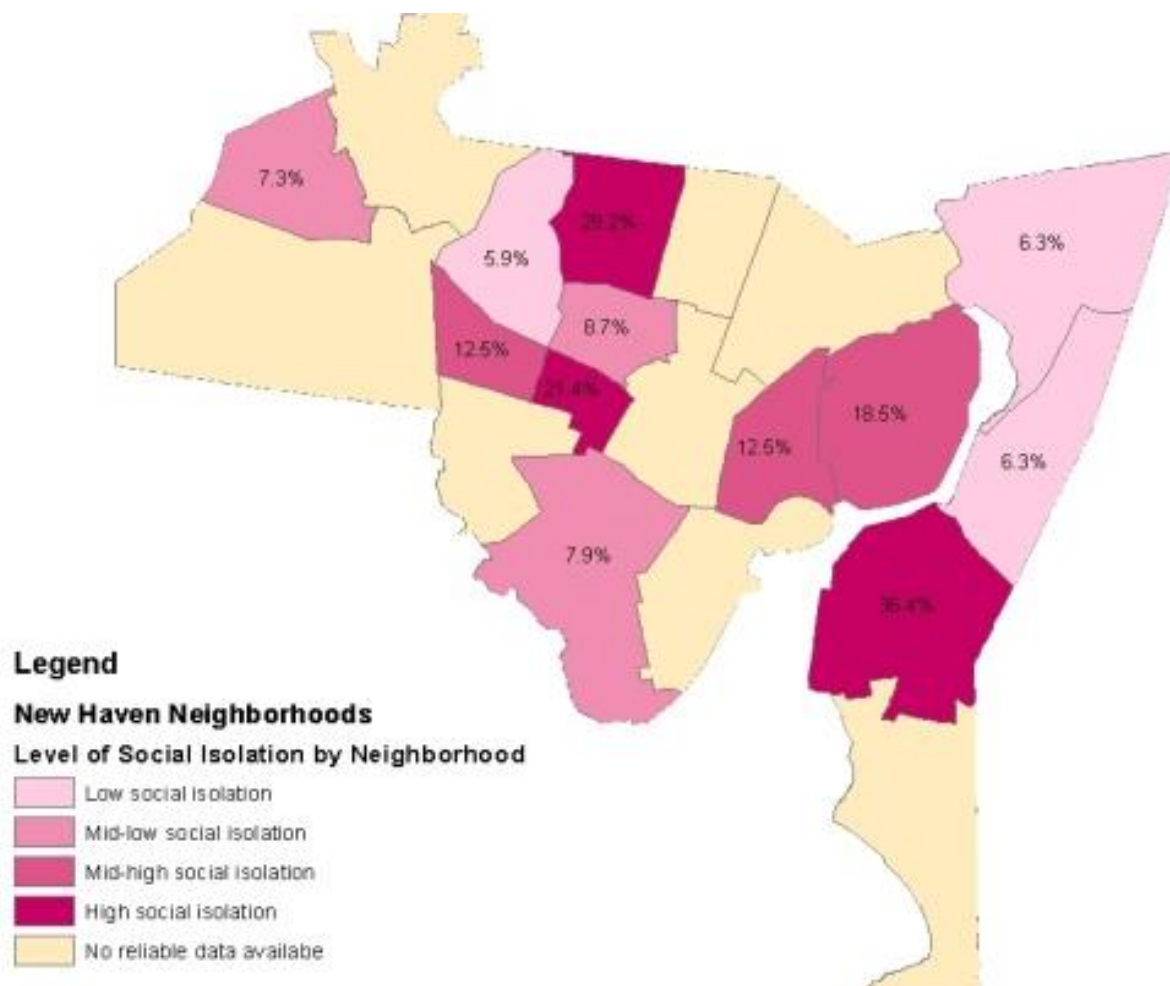
# Improve Maternal Mental Health or Improve Family Economic Security?

- Ali, Hawkins & Chambers, 2010 increasing economic security, improves depression
  - 45% no longer met clinical depression with \$2K increase over 6 months
- Improving depression increases economic security (Sledge, 2008 & 2010)
- Effect size for cognitive gains in children as a result of treating maternal depression (0.42)
- Effect size for increasing family household income \$4K annually (0.41)

# Social Isolation (N=1,289)



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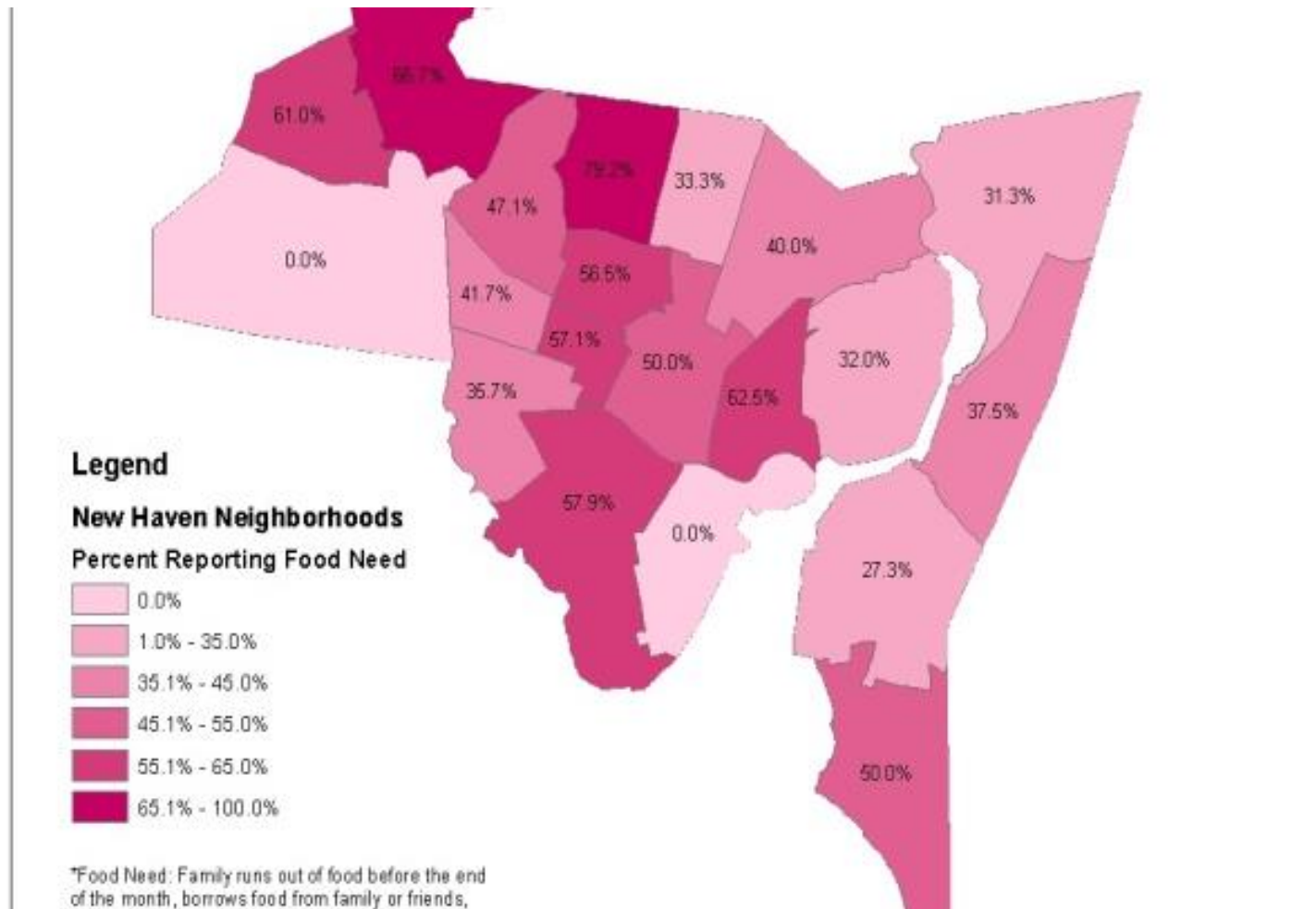




# Basic Needs (N=1,278)

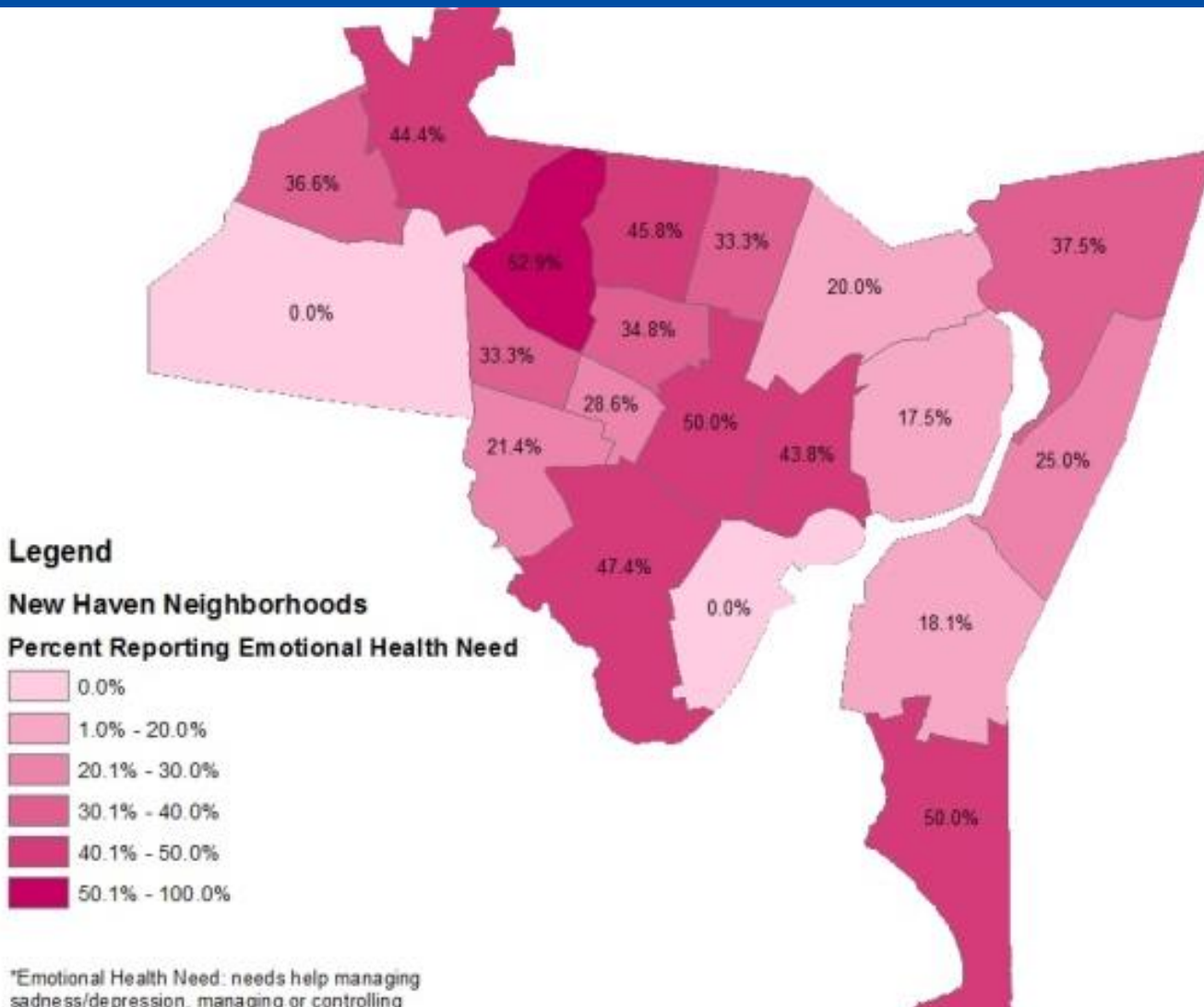


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# Emotional Health Need (N=1,213)



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# MOMS: Theory of Change



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**Basic  
Needs**

**Violence**

**Social  
Capital**

**Economic  
Advance-  
ment**



## **Impact on Moms**

- Maternal depression
- Maternal PTSD
- Maternal Substance Use



## **Impact on Parenting**

- Sensitivity
- Responsive-ness to cues
- Monitoring/EF
- Neglect
- Isolation
- Well child visits



## **Impact on Child**

- Externalizing internalizing symptoms/E F
- Adverse child experiences
- Child welfare referrals
- School attendance/a chievement

# One Approach: Innovation in Location

- Locate evidence-based mental health services in locations where families live, learn, work, play and network



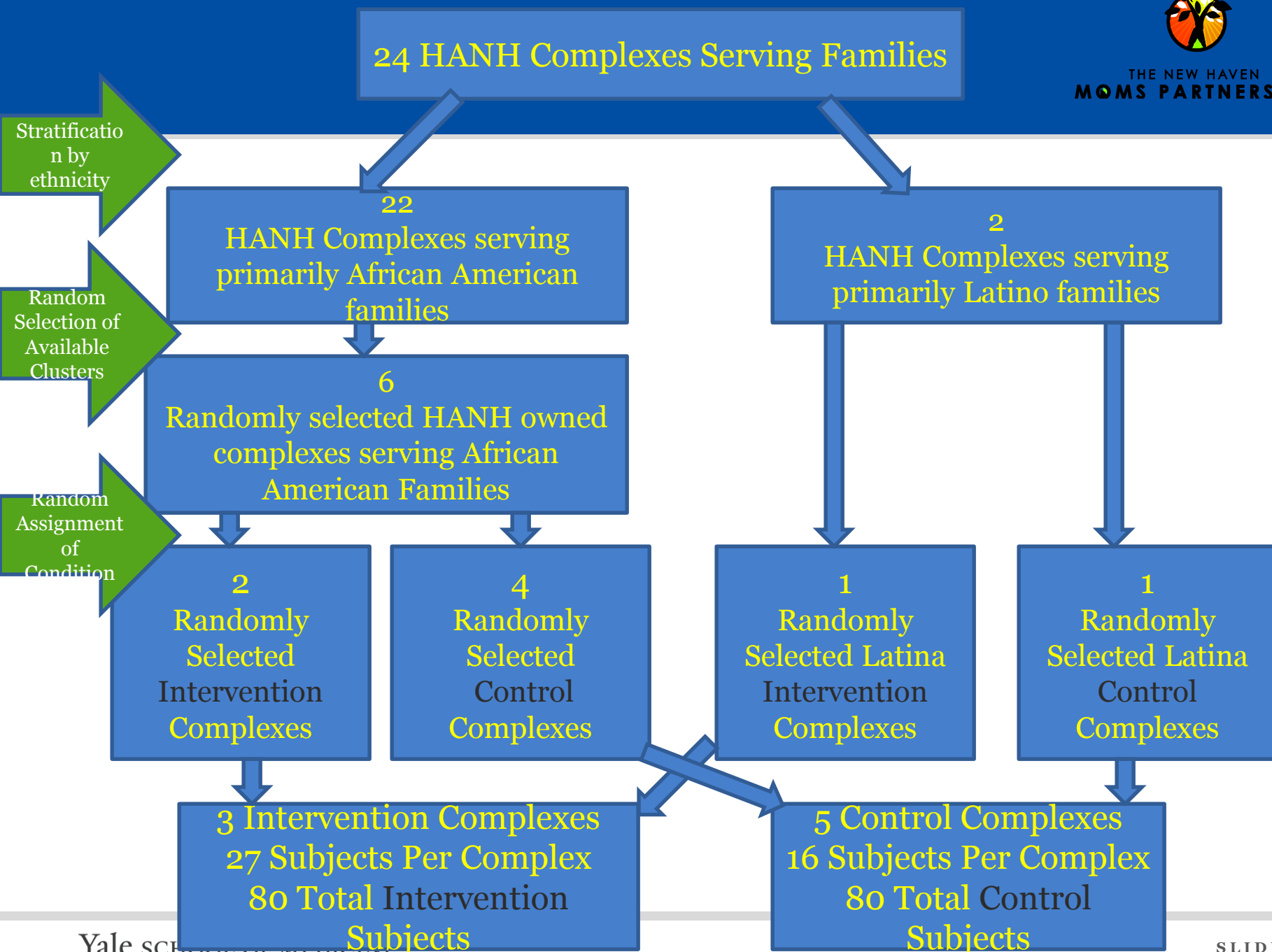
# Public Housing



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- Adapt an evidence-based CBT intervention for delivery in
  - 1) groups of low-income, pregnant and parenting women;
  - 2) public housing complexes
  - 3) teams (CMHAs & clinician)
  - 3) partnership with City of New Haven
- Randomized cluster design, 8 sessions and homework help (weekly), graduation
- Initially diminish stress and dysphoria
- Measure EF





# Cognitive Behavioral Therapy

- Bandura, 1977 embodies principles of behavior change that are universally relevant, i.e., potentially applicable across cultures.
- Social learning theory: *reciprocal determinism*, we both shape and are shaped by our environments.
- Flexible, to prevent, treat, and maintain after treatment

# Specifics of CBT

- Just as we have been taught to think and act in certain ways, we can also learn new, more adaptive ways to think and act when our old patterns are not helpful in dealing with our current situations.
- Pleasant activity scheduling, interpersonal skills training, and cognitive restructuring served as core elements
- Cultural relevance

# Features of CBT: Help to organize thinking

- Mothers are encouraged to shape aspects of their reality so as to reduce risk and severity of depressive episodes.
  - (1) identification of specific thoughts (e.g., “I’m worthless”) and behaviors that worsen or improve mood,
  - (2) provision of skills to make conscious choices that minimize the impact of harmful thoughts and behaviors, such as engaging in pleasant activities,
  - (3) acquisition of skills for disputing harmful thoughts, using cognitive restructuring techniques, and
  - (4) development of a personal sense of meaning and fulfillment in life.



# CBT & EF

EF Component	Measurement	CBT Concept
<b>Planning</b>	Stockings of Cambridge (SOC)	Setting Goals & Identifying Steps to Achieve Them; 5 Steps to Effective Problem Solving Homework
<b>Behavioral Regulation/Inhibitory Control/Self-Monitoring</b>	Color-Word subtask from the Stroop Color Word Test; BRIEF scales:	Breathing Exercises (as stress management tool); Identifying and Fixing Unhelpful Things We say to our children; Mood management: choosing to do pleasant activities

# CBT & EF

EF Component	Measurement	CBT Concept
<b>Metacognition/ Mental State Awareness</b>	BRIEF Scales: Initiate, Working Memory, Plan/Organize, Organization of Materials,	Recognizing Mood (Quick Mood Scale); Building understanding that mood is affected by (a) what we do, and (b) what we think; Identifying and Fixing Unhelpful Thoughts; Learning to shape one's personal reality moment-to- moment (Violet & Mary vignettes)

# Key Outcomes

- Maternal Mental Health (depression, trauma, substance abuse) (**primary**)
- Parental Functioning (**primary**)
- EF (**primary**)
- Child welfare services referrals
- Basic Needs (employment, food, housing, etc.)
- Healthcare Utilization

# Engagement



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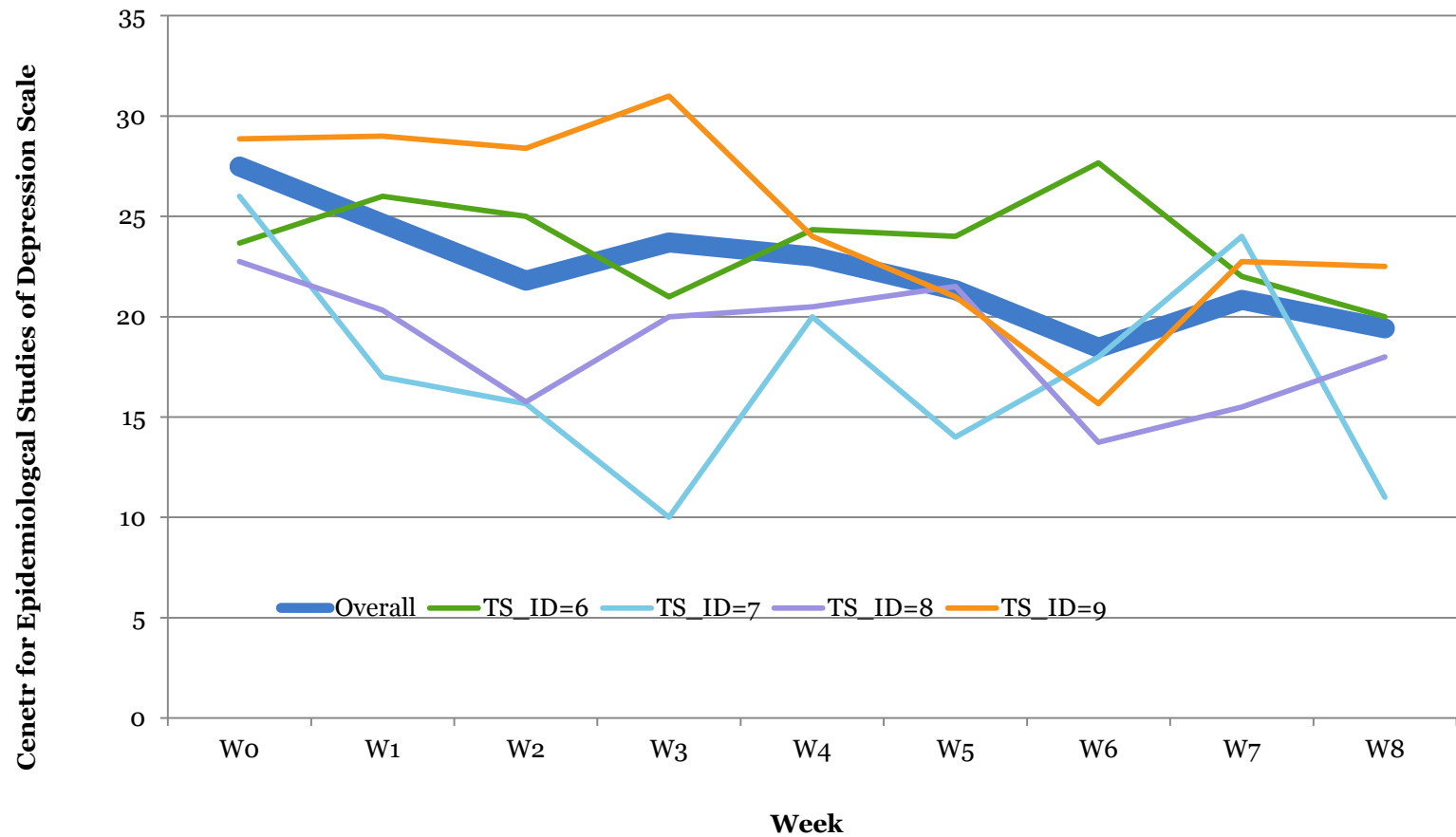
# 96% Adherence (n=77)



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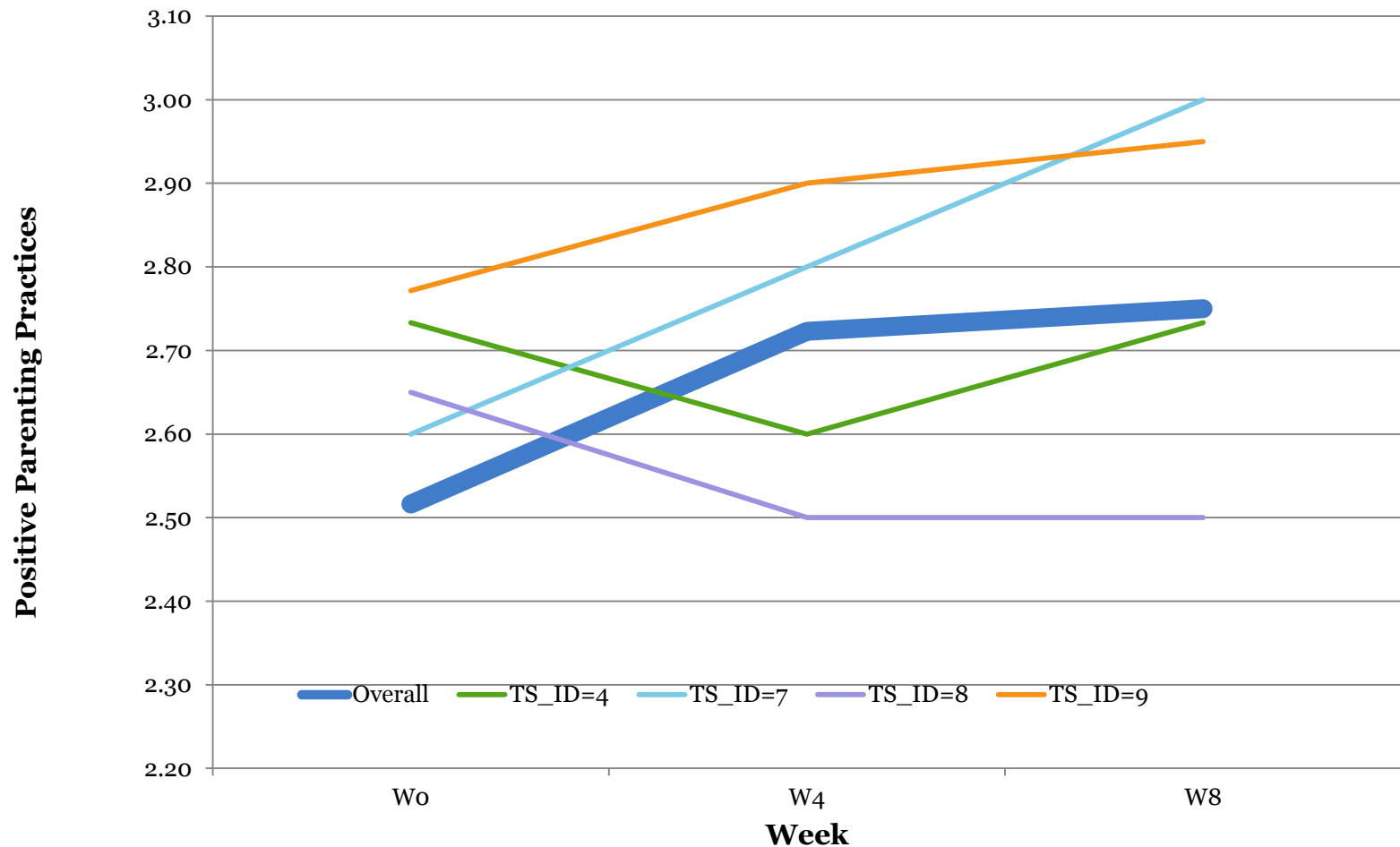


# MOMS Stress Management CBT (N=76)





# MOMS Stress Management CBT (N=78)



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Child Health & Development Institute





# Features of CBT

- *internal reality* (one's subjective mental reality)
  - *external reality* (the physical environment and all other aspects of one's reality). For mothers, aspects of external reality (e.g., material hardship, violence) often present seemingly insurmountable challenges.
- 
- Depression = life events → increase negative events, decrease positive supports, even worse if personal vulnerabilities
  - Life events → depression mediated by “self awareness”