Supporting the Needs of Low-Income Families to Improve Parent and Child Outcomes

28th International Research Congress Congress
Dublin, Ireland
Perceived Benefits of a Mindfulness-Based Intervention among Homeless Women and Young Children

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University of Virginia School of Nursing

STTI 28th International Nursing Research Congress
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Presentation Objectives

• To describe the impact of homelessness on maternal, infant, and young child outcomes
• To discuss the tenets of a mindfulness-based stress reduction intervention aimed at improving the parent-child relationship
• To describe clinical implications of study findings

I have no conflicts of interests to declare.
Family Homelessness

- Families, most often single mothers with young children, are the fastest growing segment of the homeless population in the US.
- ~2.5 million children are homeless in the US
  - >50% of children are <5 years old
- Many parents and children who are homeless have faced adverse experiences placing them at heightened risk for mental health and development concerns

(Fazel et al. 2014)
Family Homelessness

• >80% children exposed to a serious violent event by age 12
• Children 3 times more likely to have behavioral and emotional issues
  – Increased prevalence aggression, antisocial behavior, depression, anxiety
• >90% of homeless women have been physically or sexually assaulted
  – Rates of PTSD are 3-fold higher

(Biel et al. 2014)
Family Homelessness

• Parents who experience homelessness:
  – Report greater difficulty providing sensitive caregiving
  – Report more frustration in the parenting role
  – Experience a high rate of involvement with CPS and separations from their children
• After entering shelter, the daily lives of these families continue to be highly stressful

(Narayan et al. 2017)
Family Homelessness

Substantial evidence supporting parenting as a critical mediator for the relationship between contextual sources of stress and adversity and child wellbeing

(DeCandia et al. 2017)
PACT Therapeutic Nursery

• Offers specialized child care services for children under the age of 3 and their families experiencing homelessness

• Program focused on mental health interventions to promote attachment and enhance family stability
  – Quality child care
  – Activities to promote attachment
  – Family support in accessing medical and other resources
  – Speech and language, physical, and occupational therapies
Mindfulness-Based Stress Reduction

• The quality of awareness that arises through intentionally attending to present moment experience in a non-judgemental and accepting way

• Growing research support for MBSR’s role in
  – Reducing anxiety
  – Reducing depressive symptoms
  – Reducing stress
  – Improving quality of life
  – Reducing chronic pain

(Smith et al. 2015)
Study Purpose

To explore the perceived benefits of participating in a MBSR program among mother-child dyads receiving services at PACT
Study Methods

• Qualitative, descriptive approach
  – Quantitative data on maternal depressive symptoms via CES-D
• Convenience sample of 17 mothers
• MBSR- 8 week session
  – There is more right with you, than wrong with you
  – Perception and creative responding
  – The pleasure and power of being present
  – The shadow of stress
  – Finding the space for making choices
  – Working with difficult situations
  – Cultivating kindness towards self and others
  – The eighth week is the rest of your life
<table>
<thead>
<tr>
<th>Demographic Characteristic</th>
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<tbody>
<tr>
<td>Maternal age</td>
<td>30.9 (SD 5.4)</td>
</tr>
<tr>
<td>Race</td>
<td></td>
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<tr>
<td>African American</td>
<td>12 (71%)</td>
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<tr>
<td>White</td>
<td>5 (29%)</td>
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<tr>
<td>Education</td>
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<tr>
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<tr>
<td>Unstable housing</td>
<td>3 (17%)</td>
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<td>Transitional housing</td>
<td>3 (17%)</td>
</tr>
<tr>
<td>Experiencing IPV in previous 12mo</td>
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<td>Yes</td>
<td>15 (88%)</td>
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<tr>
<td>No</td>
<td>2 (12%)</td>
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</table>
MBSR Participation

- 100% of enrolled mothers participated in at least 5 sessions
- 82% of enrolled mothers participated in 6 sessions
- 65% of enrolled mothers participated in all 8 sessions
- Every participant practiced mindfulness techniques >3 days per week
Qualitative Themes

- Me time
- Child well-being
- Dyadic connectedness
- Self-regulation
“Me Time”

“Take that moment and just be myself”

– “I learned how to stop and take a minute...instead of yelling ‘leave mommy alone’ I say ‘give mommy a couple of minutes to get herself together...I need to calm down and when I finish calming down I’ll call you over and we can talk about it’”
Maternal Self-Regulation

“It’s not worth the drama”

— “I don’t let stress consume me. I focus more on how can I improve this? This is a test, this is a trial, let’s figure it out...I would stress about things I couldn’t’ do anything about instead of focusing on the things I could work on”

— “She [daughter] would have terrible tantrums...I was like a ticking time bomb every time. I always take time out to listen to my [tingsha] bells before I say anything so I’ll say something in a positive way instead of always being negative”
Dyadic Connectedness

“I’m opening my arms rather than pushing away”

– “When I took a step back and put myself in her [daughter] shoes I could see things completely differently”

– “I now realize it’s not always what you say, but how you say things”

– “To engage during mealtime, to talk about the food that’s on their plate, and make any conversation just to engage...don’t just sit there watching TV...you might be eating together, but you’re not eating together”
Child Well-Being

“It’s my temperament that’s calming him down”

- “I showed her [daughter] other ways of how to get my attention without her throwing stuff at me or kicking me”

- “He sits much better in circle time...he’s paying attention, and following directions”

- “They’re drawing back into mom...like every day my child makes sure she’s on my lap just to be here”
Improvements in Depressive Symptomatology

• Pre-MBSR CESD-R mean: 21.4
  – 82% of mothers >16

• Post-MBSR CESD-R mean: 17.1
  – 53% of mothers >16

“It’s not like the struggles aren’t still there, but I now feel better about how we’re going to get through this time”
Conclusions and Directions for Future Research

• MBSR intervention was feasible, acceptable, and easily integrated into PACT services

• Examine objective measures of program success (short- and long-term)
  – Maternal, Parenting, Child Outcomes

• Evaluate “dose” necessary

• Examine in RCT
Acknowledgements

• Study Team
  – Carole Norris-Shortle, LCSW-C, LMFT
  – Kim Cosgrove, LCSW-C
  – Lauren Marks, MSW, LCSW

• PACT Therapeutic Nursery staff

• PACT Families

For more information, please contact me at jalhusen@virginia.edu
Baby BEEP: A Tele-Health Intervention for Depressed, Low-Income Mothers

Linda Bullock, PhD, RN, FAAN
Associate Dean for Research
University of Virginia School of Nursing
and
Emily Evans, PhD, RN
Linda Bullock, PhD, RN, FAAN and Emily Evans, PhD, RN

• Learner Objectives
  – Learner will describe the barriers that prevent young mothers accessing care for depression.
  – Learner will describe how Peplau’s Theory of Nurse Patient Interaction was used in Baby BEEP
  – Learner will apply Baby BEEP intervention to other vulnerable populations.

• We have no conflict of interest
• Employer: University of Virginia, School of Nursing
• Grant Funding: NIH/NINR: NR05313
Prevalence of Antepartum Depression in the US

• Antepartum depression prevalence by trimester
  – 1\textsuperscript{st} trimester = 7.4%
  – 2\textsuperscript{nd} trimester = 12.8%
  – 3\textsuperscript{rd} trimester = 12.0%

• Prevalence of APD in rural women
  – Rates as high as 47%

Bogen et.al, 2013; Gaynes et al., 2005; Mora et al., 2009
Consequences of Depressed Mothers

- Poor Health Practices
- Inadequate Prenatal Care
- Abuse of Drugs and Alcohol
- Poor Pregnancy and Birth Outcomes
- High Risk for Postpartum Depression

Dimidjian & Goodman, 2009; Muzik et al, 2009
Barriers to Care for Rural Women with Antepartum Depression

- Risks of taking anti-depressive medications during pregnancy
- Cultural stigma
- Higher levels of stress
- Limited resources
- Lack of transportation
- Inadequate Support

Jesse and Swanson, 2007
Baby BEEP Study

Demographics of US Women who smoke during pregnancy

- Rural
- Low education
- High stress levels
- High risk for depression

NIH/NINR: NR05313: Nursing Smoking Cessation Intervention during Pregnancy

Bullock, Everett, Mullen, Geden, Longo & Madsen (2009)
Baby BEEP Study Specific Aims

Primary aim – To test the nurse-delivered telephone social support intervention versus smoking cessation educational booklets to decrease smoking during pregnancy
Baby BEEP Intervention

• Nurse-delivered telephone social support
  – Weekly telephone calls throughout pregnancy with graduated schedule of telephone calls post-delivery
  – 24 hours - 7 days/week. On call through a 1-800 pager system

• Content of intervention
  – Validation of feelings
  – Support
  – Information regarding resources
  – Encouragement
  – Role playing
Baby BEEP Outcome Measures

- Interview using standard questionnaires at:
  - baseline
  - late pregnancy
  - 6 weeks post-partum

- Questionnaires included:
  - Demographics
  - Cohen’s Perceived Stress Scale
  - Prenatal Psychosocial Profile
  - Mental Health Index 5

Cohen, et al., 1983; Curry et al., 1994; Ware & Gandek, 1998)
Demographics of Baby BEEP Participants (N = 695)

- Mean age = 23.5 years
- Married = 68%
- Ethnicity
  - 92% Caucasian
  - 3.5% African American
  - 1.5% Hispanic
  - 1.9% American Indian
- High School diploma = 63%
Secondary Data Analysis of Telephone Social Support from Phone Logs

- Six research nurses kept detailed logs of every call to women in their case load
- Qualitative descriptive study of subset of logs
  - Participants whose MHI-5 score was less than 65 (indicative of depression) at baseline AND Time 2 assessment (28 – 34 wks gestation) (n=12)
  - Participants whose MHI-5 score was less than 65 at baseline and GREATER THAN 65 (not depressed) at Time 2 assessment (n=12)
## Demographics and Interaction Dose

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<thead>
<tr>
<th>Demographics</th>
<th>Depressed (n = 12)</th>
<th>Not Depressed (n = 12)</th>
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<td><strong>Demographics</strong></td>
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<tr>
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<td>6</td>
<td>3</td>
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<td>Perinatal Abuse</td>
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<td>4</td>
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<td>No</td>
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<tr>
<td><strong>Phone Interactions</strong></td>
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<td>Starting point (in weeks)</td>
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<tr>
<td>Number of weeks from starting point to delivery</td>
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<td>23</td>
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<tr>
<td>Number of calls (per patient)</td>
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<tr>
<td>Minutes per call</td>
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<td>Total minutes</td>
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## Psychosocial Variables

<table>
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<tr>
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<th>T&lt;sub&gt;1&lt;/sub&gt; Under 24 wks GA</th>
<th>T&lt;sub&gt;2&lt;/sub&gt; 28 – 36 wks GA</th>
<th>T&lt;sub&gt;3&lt;/sub&gt; 6 wks PP</th>
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<tr>
<td>MHI-5 (Depression)</td>
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<td>45</td>
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<td><strong>Prenatal Psychosocial Profile</strong></td>
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<td><strong>Other Support</strong></td>
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<td>Depressed</td>
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<td>46</td>
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<td><strong>Partner Support</strong></td>
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<td>48</td>
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<td><strong>Self-Esteem</strong></td>
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<tr>
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<td>34</td>
<td>36</td>
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<tr>
<td><strong>Stress</strong></td>
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<td>Depressed</td>
<td>12</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Not Depressed</td>
<td>11</td>
<td>10</td>
<td>8</td>
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</table>
Comparison of MHI-5 Scores over Time by Groups

![Graph showing comparison of MHI-5 scores over time by groups. The graph indicates a trend where non-depressed groups have higher scores compared to depressed groups, with scores increasing over time from T1 to T3.](image)
Peplau’s Theory of Interpersonal Relationships

“Interpersonal relations is a conceptual framework derived in large part from empirical study of human interactions.” (Peplau, 1997, p. 162)

<table>
<thead>
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<th>Phases of relationship</th>
<th>Nursing roles</th>
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<tr>
<td>• Orientation</td>
<td>• Stranger</td>
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<tr>
<td>• Identification</td>
<td>• Surrogate</td>
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<tr>
<td>• Exploitation</td>
<td>• Teacher</td>
</tr>
<tr>
<td>• Resolution</td>
<td>• Resource</td>
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<tr>
<td></td>
<td>• Counselor</td>
</tr>
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<td></td>
<td>• Leader</td>
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Peplau’s Phases of Relationship

**Orientation**
The initial phase of the relationship where the patient and nurse meet and become oriented to their relationship and its parameters.

**Identification**
The first part of the working stage of the relationship. Nurse and patient become aligned in goals and purpose. Patient learns to trust nurse and identifies her as source of help.

**Exploitation**
The second part of the working stage of the relationship. The patient recognizes and is willing to use nursing services and the nurse acts in a variety of roles to assist patient in obtaining goals.

**Resolution**
The final stage of the relationship where goals have been met to the mutual satisfaction of the participants and the relationship ends.
### Orientation
Called client to see how things are going..., she is lonesome in new place with boyfriend....Client does not talk about what she is feeling very much. I told her that she can beep me anytime that she would like to talk. (#628, depressed)

### Identification
I asked how her weekend had gone. She said that it had been fine, and that she hadn't been able to cut back at all over the weekend. I told her that's okay, and said that I don't call just to check up on her smoking. I told her that we can work on that week to week, but that we can talk about whatever she wants. She said that would be great. (#358, Not Depressed)

### Exploitation
I asked my client if she knew of the suicide hotline phone # and she said yes. She tried to get (Friend name) to call it, but she won't. I told my client that she could call it too, but my client said that Dawn is okay right now but will keep that in mind. I told her that Dawn is very lucky to have her and the best thing she can do for her friend is to "be w/ her". (#127, Depressed)

### Resolution
She is still not smoking. She said when family came for Christmas, everyone smoked outside. I am so proud of her. Her partner is smoking outside as well. She is glad that she will have a smoke free home for her baby girl. (#258, Not Depressed)

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Evans, Drake, Deutsch, & Bullock, 2017
Peplau’s Nursing Roles

- Stranger
- Leader
- Surrogate
- Counselor
- Teacher
- Resource

Evans & Bullock, 2016
Example of **RESOURCE** from Baby BEEP Telephone Logs

Definition:

“Provides specific answers to questions usually formulated with relation to a larger problem.”

Quotes:

She said she wants to quit. *I asked her if it would be okay to suggest something,* she said sure. I suggested to maybe not try to just quit cold turkey, *but to try to smoke 10 cigs/day for a week, then 9/day for a week, and so on.* She said that sounded good ..... (#127, Not Depressed)

She had a doctor's appointment scheduled today to check her blood pressure, but that she cancelled it because she was really tired. *I asked when her next appointment is,* and she said next Tuesday. I cautioned her to be very conscious of any changes in her vision or of any headaches, or epigastric pain..... (#333, Depressed)

*Helped client explore options for transportation tomorrow to local job fair...*  
*Father might take her if he finishes deer hunting in time*  
*Sister most likely won’t be willing or available*  
*Aunt may very well be able/willing. (#525, Depressed)*
Example of **TEACHER** from Baby BEEP Telephone Logs

**Definition:**
“Teaching always proceeds from what the patient knows and it develops around his interest in wanting and being able to use ...information.” May encompass several other roles.

**Quotes:**
*Explored the possibilities for babysitting*-client thinks her half-brother’s grandmother ...would watch him without charge for job hunting.... (#127, Depressed)

She looked up...information on AIDS,... and will go over with (friend’s name). *I told her that she is one smart woman and that (friend) is so lucky* (#127, not depressed)
Example of **COUNSELOR** from Baby BEEP Telephone Logs

**Definition:**
Facilitates “self-renewal, self-repair, and self-awareness” within the individual. Helps patient to understand better how they feel about themselves and how s/he feels about what is happening.

**Quote:**
Client was crying. She said her grandfather had committed suicide over the weekend. *We talked about this for a few minutes and how hard this is for her and for her grandmother.* ...She said her BP was up yesterday….. *We talked about some relaxation techniques... I asked if she could stop by the health department for BP checks too and she said she will find out....* (#406, Depressed)
Example of **LEADER** from Baby BEEP Telephone Logs

Definition

“Individual patients identify with nurses and expect them to offer direction during the current difficulty.” (Peplau, 1991)

Example from Phone log:

*I asked how quitting on the 24th went, and she said not so good. She said that she and her boyfriend have decided that there will be no smoking in their new apartment. She thinks that this will keep her from smoking, and she is making quitting by the move her new goal. I asked when they are moving, and she said in the next couple of weeks. I said that quitting is a very hard thing to do, and I said that I'm glad that she's set a new goal. She is trying to keep her smoking low, under 5, usually 2-3/day. I said that this is fantastic, and she's a very strong woman to do this.* (#366, Depressed)
Most Frequent Topics addressed in BABY BEEP Nurse-Patient Interactions: Group Differences

- Nurse
- Boyfriend
- Doctor
- Home
- Wants
- Needs
- Quit
- Hoped
- Husband
- Mom

Not Depressed  Depressed
Conclusions

• Peplau’s Theory of Interpersonal Relations can inform clinical practice for nursing care of pregnant women.
• This study makes explicit what a telephone support, therapeutic relationship “looks and sounds like”.
• The Baby BEEP intervention can be used to serve other rural patients with access issues and health issues that would be improved with additional nursing support.
Using Conditional Cash Transfer Programs for Engaging Low-Income Parents in Health Promoting Programs

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Leonard and Helen Stulman Professor
Johns Hopkins School of Nursing

Amie Bettencourt, PhD
ChiPP Project Director, The Fund for Educational Excellence

Sigma Theta Tau International Conference
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July 28, 2017
DISCLOSURE

Under an agreement between Rush University Medical Center and Dr. Deborah Gross, Dr. Gross is entitled to revenue from sales of the Chicago Parent Program described in this presentation. This arrangement has been reviewed and approved by the Johns Hopkins University in accordance with its conflict of interest policies.
Learning Objectives

1. Describe the qualities of an effective conditional cash transfer (CCT) program based on the principles of behavioral economics

2. Describe the use of a CCT program in public schools for improving parent engagement in an evidence-based parenting program

3. Examine the advantages and disadvantages of CCT programs for promoting healthy behavior in vulnerable populations

4. Apply the findings to other community-based programs struggling to engage low-income families in health behavior change
The Problem We Want to Solve: Part 1

- Social, emotional, and behavioral difficulties among top 5 chronic disabilities affecting US children*
- In 2016, 48% of Baltimore City Schools’ kindergarteners not socially-behaviorally ready to learn
- Social-behavioral readiness skills develop in context of supportive, consistent, responsive parenting relationship

Halfon et al. (2012) *The Future of Children*
The Cost of Not Being Socially-Behaviorally Ready to Learn*

By 4th grade, Baltimore City kindergarteners who are *not* socially-behaviorally ready to learn are:

- Up to 80% more likely to be retained in grade
- Up to 80% more likely to receive supports/services through IEP/504 Plan
- Up to 7 times more likely to be suspended/expelled

What is the estimated cost of not being socially-behaviorally ready?

- Grade retention: $11,153/student/year
- IEP/504 services: ~ $10,000/student/year
- Suspensions/Expulsions:
  - Staff time addressing behavior
  - Lost school funding from student absence
  - Lost parent wages
  - Greater likelihood of school drop-out, juvenile justice involvement, unemployment

In Baltimore City:

- 85% of Baltimore’s public school children live in poverty
- Over 30% have experienced 2+ ACEs
- In a recent survey,
  - 43% of high school students witnessed violence once/week
  - 39% knew someone killed before reaching adulthood
- Parents want a better life for their children, but many are struggling emotionally, financially
The Problem We Want to Solve: Part 2

Participation rates in parenting programs are low

• Only 20-30% of eligible population typically enroll

• Of those enrolled, ~ 1/3 never attend

• Participation particularly low among low-income, urban families

• Low rates of completing skill-building “homework” assignments
When parent participation rates are low:

- Fewer families receive help
- Treatment effects diminished
- Interventions become unsustainable
- Program delivery costs rise exponentially*
  - When 15 parents enroll and attend: $88/parent/session
  - When 15 parents enroll and 1 attends: $939/parent/session

What are Conditional Cash Transfer Programs (CCT)?

- Cash incentives conditioned on recipient behavior
- Based on behavioral economics/operant conditioning theories
- Financial incentives used to strategically influence decision-making
- CCT’s shown to be effective for improving a range of health and child outcomes in low resource countries*

*e.g., Fernald et al. (2008). Role of conditional cash transfer programmes for child health, growth, and development: an analysis of Mexico’s Oportunidades. *Lancet*, 371, 828-837
What makes Conditional Cash Transfer Programs (CCT) effective?

To be most effective, incentives need to be:

• Of sufficient magnitude, but not so large as to be coercive
• Immediate
• Simple to understand
• Conditioned on behaviors within recipient’s control
• Linked to outcomes the recipient values
Presentation Purpose

• Examine the feasibility, acceptability, sustainability, and impact of CCTs for promoting parent participation in parenting program called the Chicago Parent Program (CPP) in an urban public school system:
  – Attendance rates
  – CPP “homework” completion rates
  – Quality of participation during CPP sessions

• Describe parents’ perceptions of the *importance* of incentives for motivating:
  – Enrollment
  – Attendance
  – PT homework completion rates
Chicago Parent Program

- Evidence-based program
- Designed in collaboration with African American and Latino parents
- 12 2-hour PT group sessions
- Video vignettes + group discussion
- 10 weekly skill-building “homework” assignments
- Refreshments, free childcare
- Max enrollment 15 parents/PT group
- Offered in English and Spanish

Gross et al. (2009) Prev Science, 10, 54-65;
Conditional Cash Transfer (CCT)

- Bank debit card
- Parents received debit card at enrollment
- $15 loaded for each 2-hour CPP session attended
- $5 for each CPP “homework” assignment submitted
- Incentive loaded electronically within 48 hrs of session
- Parents can earn up to $230 for participation
Why this amount?

• Linked to parent opportunity cost to attend
  • Parent cost to attend $27/session*
    – Minus est. cost of paying for childcare ($5)
    – Minus est. cost of refreshments ($2)
  • Incentivize two aspects of participation
    – Attendance
    – Submitting “homework” completion checklists
  • Attendance is observable, higher incentive

Baltimore Sample (n=372)

- 12 schools serving > 90% low-income families
- Parents/Guardians of Pre-K students
  - 78% Mothers; 10% fathers
  - 58% Single-parent households
  - 68% African American
  - 24% Latino
  - 5% Non-Latino White
  - 69% ≤ high school diploma or less
  - 67% annual household income < $20,000
  - 46% employed full or part-time
Participation Rate

• 78% of enrolled parents attended ≥ 1 CPP session
• Quality of group participation high\(^1\)*
  – Based on group leader ratings
  – Mean score = 24 (range = 7-28)
• Attendance rates:\(^1\)
  – 67% of sessions attended
  – 66% of homework assignments completed
• Average total CCT/parent\(^1\): $120

\(^1\) For all who attended any CPP groups to date; n=372

## Reasons for Not Attending

<table>
<thead>
<tr>
<th>Reason Given</th>
<th>Enrolled, Never Attended (n=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Schedule (e.g., got a job; shift changed)</td>
<td>42</td>
</tr>
<tr>
<td>Unknown</td>
<td>17</td>
</tr>
<tr>
<td>Moved away</td>
<td>4</td>
</tr>
<tr>
<td>Busy schedule</td>
<td>3</td>
</tr>
<tr>
<td>Medical</td>
<td>3</td>
</tr>
<tr>
<td>Childcare</td>
<td>3</td>
</tr>
<tr>
<td>Did not know groups had started</td>
<td>2</td>
</tr>
<tr>
<td>Life stressors</td>
<td>2</td>
</tr>
<tr>
<td>School</td>
<td>2</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>2</td>
</tr>
<tr>
<td>Lack of interest</td>
<td>1</td>
</tr>
</tbody>
</table>
### How Important Is the Money?

<table>
<thead>
<tr>
<th>What led you to decide <strong>today</strong> to enroll in this parent group?</th>
<th>Important</th>
<th>#1 Most Important</th>
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<tbody>
<tr>
<td>Extra money to attend</td>
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<td>2%</td>
</tr>
<tr>
<td>Extra money for using new parenting skills</td>
<td>67%</td>
<td>4%</td>
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<tr>
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<td>95%</td>
<td>22%</td>
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<tr>
<td>Learn better ways to communicate with child</td>
<td>95%</td>
<td>19%</td>
</tr>
<tr>
<td>Chance to talk with other parents</td>
<td>92%</td>
<td>4%</td>
</tr>
<tr>
<td>Free meal while attending</td>
<td>63%</td>
<td>0%</td>
</tr>
<tr>
<td>Help with disciplining child</td>
<td>71%</td>
<td>10%</td>
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<tr>
<td>Parent or teacher recommended I sign up</td>
<td>68%</td>
<td>0%</td>
</tr>
<tr>
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<td>96%</td>
<td>34%</td>
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<tr>
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Johns Hopkins University School of Nursing
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</tbody>
</table>

Johns Hopkins University School of Nursing
How Important Was the Money?  
(Collected after last parent group session)

<table>
<thead>
<tr>
<th>Thinking back, how important was the money in getting you to sign up for the parent group?</th>
<th>% endorsing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Made no difference</td>
<td>45%</td>
</tr>
<tr>
<td>Yes, made a small difference</td>
<td>28%</td>
</tr>
<tr>
<td>Yes, made a big difference</td>
<td>28%</td>
</tr>
</tbody>
</table>
Does the importance of the CCT at enrollment predict attendance? (n=372)

<table>
<thead>
<tr>
<th>Degree to which CCT motivated enrollment</th>
<th>% of CPP sessions attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money did not motivate me to sign up</td>
<td>43%</td>
</tr>
<tr>
<td>Money important but not the most important motivator</td>
<td>56%</td>
</tr>
<tr>
<td>Money was the most important motivator for signing up</td>
<td>59%</td>
</tr>
</tbody>
</table>

F=4.7, p = .009
What did they use the money for?

<table>
<thead>
<tr>
<th>Items purchased</th>
<th>% reporting (N=250)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groceries</td>
<td>56%</td>
</tr>
<tr>
<td>Something fun/nice for my children</td>
<td>42%</td>
</tr>
<tr>
<td>Clothes for my children</td>
<td>28%</td>
</tr>
<tr>
<td>Gas</td>
<td>24%</td>
</tr>
<tr>
<td>Books or school supplies</td>
<td>22%</td>
</tr>
<tr>
<td>Phone, utilities, cable or other bills</td>
<td>20%</td>
</tr>
<tr>
<td>Took family or friends out to eat</td>
<td>18%</td>
</tr>
<tr>
<td>Cash from ATM</td>
<td>17%</td>
</tr>
<tr>
<td>Medicine</td>
<td>17%</td>
</tr>
<tr>
<td>Diapers</td>
<td>14%</td>
</tr>
<tr>
<td>Haven’t used it yet; saving</td>
<td>13%</td>
</tr>
<tr>
<td>Items for my home (e.g., TV, furniture, etc.)</td>
<td>13%</td>
</tr>
<tr>
<td>Something fun/nice for myself</td>
<td>11%</td>
</tr>
<tr>
<td>Clothes for myself</td>
<td>8%</td>
</tr>
<tr>
<td>Gifts for other people</td>
<td>4%</td>
</tr>
</tbody>
</table>
What parents said…

• “It started out that the money was the reason I got involved. Then, the program instruction and leaders were the reason I continued to come back.”

• “Sometimes my husband pays the rent, the bills, and we are stuck with nothing… when we use this card, we have used it to buy something to eat.”

• “If I do buy something, it is something that represents something significant that I have learned [from the group].”

• “You know, every Wednesday morning I have $20 in the [gas] tank.”

• “Uh huh. That was my gas every week.”

• “Because it was to help improve my child and [my] relationship… Every week that [homework] assignment was done with my child so I used it for her.”
Changes in High Rates of Child Behavior Problems: *Baseline to Post-intervention*

% of children with behavior problem scores in the “clinical range” (n=361)

<table>
<thead>
<tr>
<th>% Baseline</th>
<th>% Post-intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.0</td>
<td>25.2</td>
</tr>
</tbody>
</table>

*Measure: Eyberg Child Behavior Inventory*
Parent Satisfaction with CPP
(n=287)

• 69% report that attending CPP helped them “a lot” with relationships *other* than with their child

• 83% feel “much more confident” supporting their child’s success in school

• 68% feel “much more confident” managing their child’s behavior at home

• 83% would “highly recommend” CPP to a friend or relative
Study Limitations

• No control group to test CCT
• In U.S., CCT highly controversial
  • Is it coercive?
  • Should we be paying parents to “do what they are supposed to do”?
  • Are there unintended consequences (e.g., could it undermine intrinsic motivation)?
  • Who is going to pay for CCT?
Conclusions and Directions for Future Research

• Examine short-term impact
  • kindergarten readiness
  • school attendance
  • parent engagement in child’s education

• Evaluate long-term impact on academic outcomes
  • Identify comparison condition using propensity score matching
  • n = ~900 students

• Make the business case for PT + CCT:
  • Examine costs/benefits of PT + CCT on students’ academic outcomes
Thank you!

We thank the many parents, principals, school staff, group leaders, and funders for their commitment to improving the lives of young children.

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- Annie E. Casey Foundation
- Abell Foundation
- Irvin Stern Foundation
- T. Rowe Price Foundation
- Wright Family Foundation

And our partners: Baltimore City Public Schools, the Fund for Educational Excellence, and the Baltimore Education Research Consortium

For more information, please contact me at: debgross@jhu.eu