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Psychosocial Interventions for Maternal Depression: Impact on School Age Children

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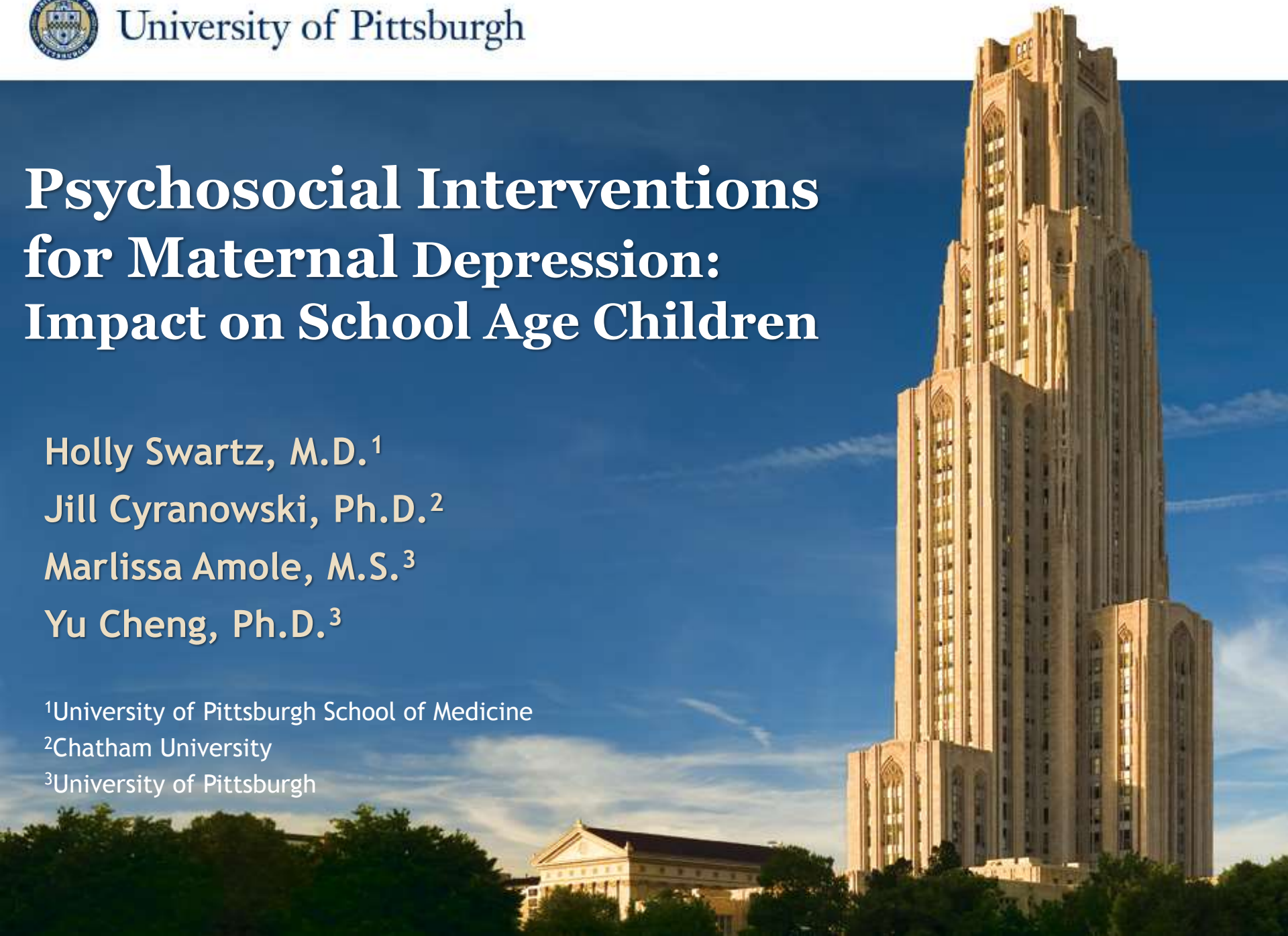

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Overview

1

Rationale for focusing on Very High Risk Families

- depressed mothers and their school age children with psychiatric disorders

2

Role of psychotherapy in addressing maternal depression

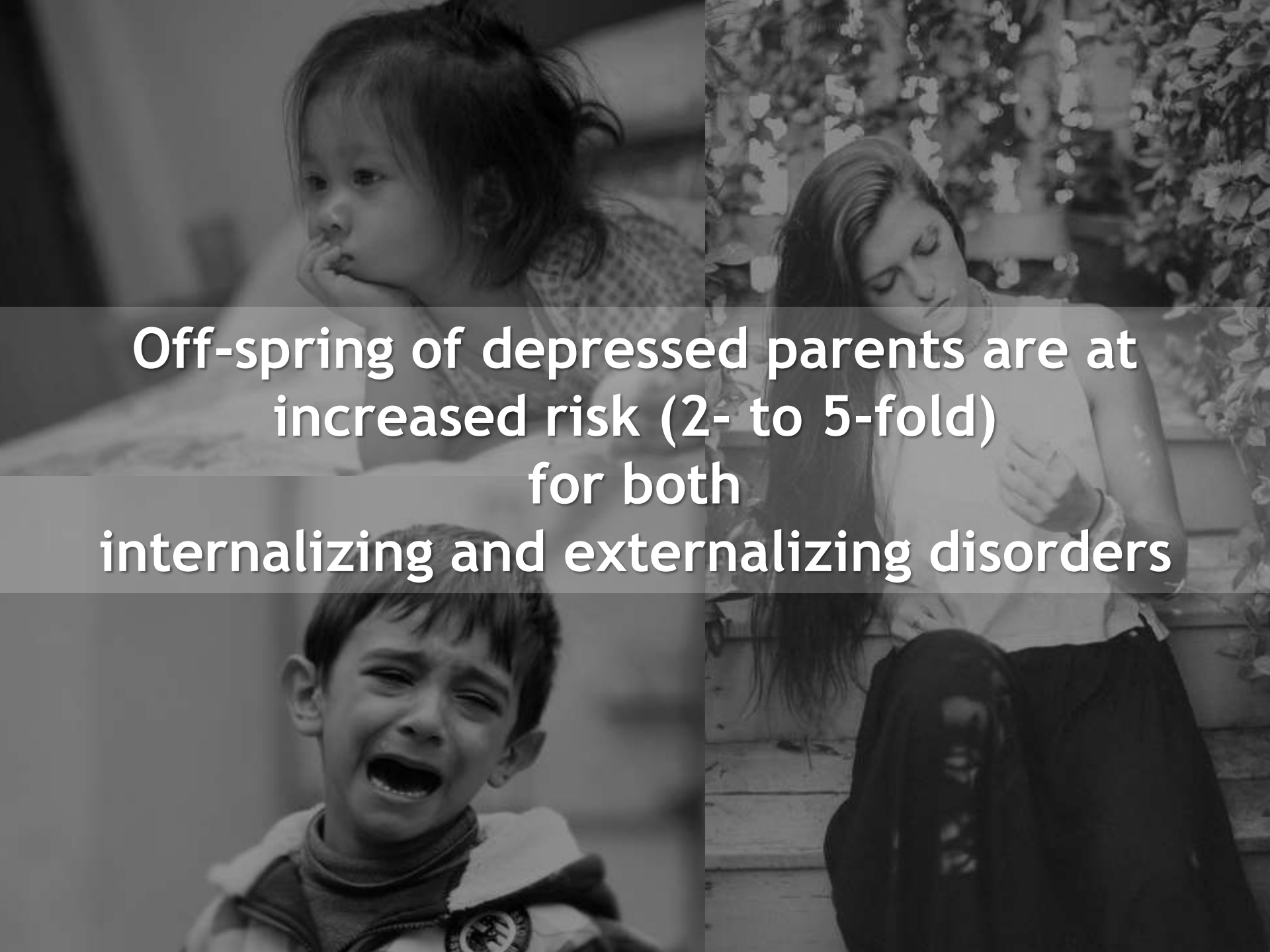
3

Moms Study

4

Future directions


Twenty percent of women experience a lifetime episode of depression
Two-thirds are mothers



Off-spring of depressed parents are at increased risk (2- to 5-fold) for both internalizing and externalizing disorders

Families At Risk

- **High Risk Family**
  - One generation with psychiatric disorder(s)
  - Second generation at increased risk
- **Very High Risk Family**
  - Two generations with established psychiatric disorders

Impact of Maternal Depression on Children

- Exacerbates child's course of illness[1]
- Interferes with child's treatment[2]
- Enduring negative consequences in adulthood[3]

[1] Hammen et al., 1991; [2] Brent et al., 1998; [3] Weissman et al., 2006

Treatment for Very High Risk Families

- Depressed mothers have difficulty managing treatment needs of the family
- Decreased rates of treatment seeking for mothers who put their own needs last

Nicholson, Sweeney, & Geller, 1998; Swartz et al., 2005

Maternal Depression Treatment in High Risk Families

Successful treatment of maternal depression with antidepressant medication has an indirect positive influence on at-risk children.

Observational data:

Children of mothers who remitted had lower prevalence of psychiatric disorders and fewer psychiatric symptoms than children of mothers who did not remit[1]

Randomized trial
(escitalopram v. buproprion v. combination):
Improvement in maternal depression symptoms was related to improvement in children's depressive symptoms only in those whose mothers received escitalopram, a finding mediated by improved parenting.[2]

[1]Pilowsky et al., 2008; Garber et al. 2011 [2]Weissman et al., 2015

Questioned Raised by Earlier Studies

- Intervening with Very High Risk Families?
- Role of psychotherapy?
- Mechanism(s) driving reciprocal relationships between mothers and children

Psychotherapy for Maternal Depression in Very High Risk Families

Women with mood disorders endorse threefold preference for psychotherapy over medication[1]

Meta-analysis of effects of psychological treatments for maternal depression: effect size = 0.35[2]

- 8 trials
  - 7 trials involved women with post-partum depression or women with children < age 5
  - 1 trial in Very High Risk Families: compared Interpersonal Psychotherapy (IPT) to treatment as usual[3]

No studies comparing active psychotherapy for Very High Risk Families

[1]McHugh RK et al., 2013; [2]Cuijpers P et al, 2015; [3]Swartz HA et al., 2008

Barriers to Treating Maternal Depression Treatment in Very High Risk Families

Depressed mothers of children in mental health treatment have difficulty engaging in their own mental health treatment[1]

- Overwhelmed
- Stigma[2]
- Custody issues[3]
- Fragmentation of maternal/child mental health care services[4]
- Limited resources: time and money

[1] Swartz et al., 2005 [2]Nicholson et al., 1996; [3]Hearle et al., 1999; [4]England et al., 2009

Study Goal

To evaluate the effects of two brief psychotherapies for maternal depression

- Impact on maternal outcomes
- Impact on child outcomes

Psychotherapy for Depressed Mothers of Psychiatrically Ill Children

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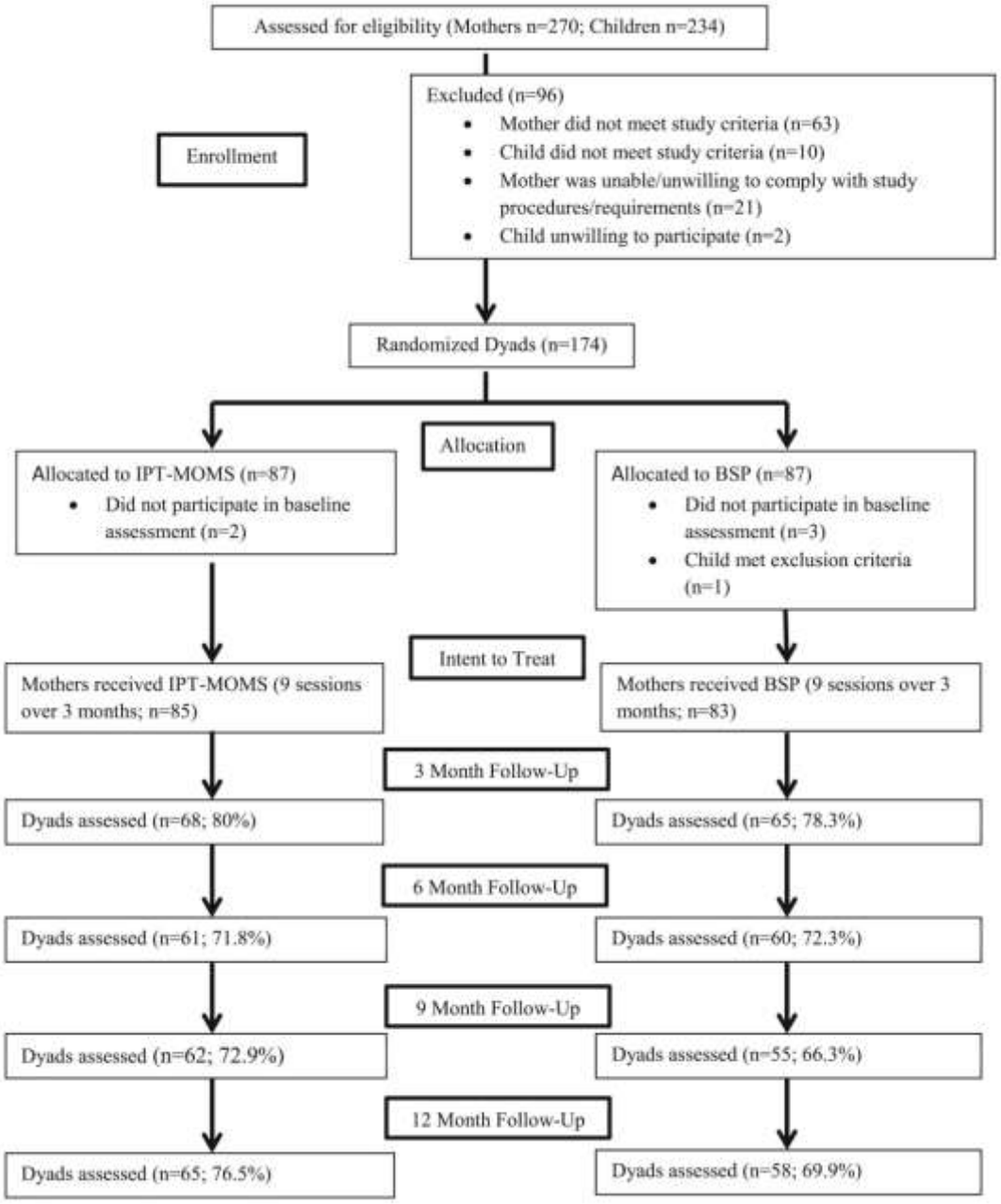


- Recruited in pediatric mental health settings ("bottom up" sampling)
- Children: Age 7-18, current or recent internalizing disorder (KSADS), receiving MH treatment
- Mothers: current episode of major depressive disorder (DSM-IV; SCID), HRSD-25 ≥15
- Children were treated openly in the community
- Mothers received 9 sessions of Interpersonal Psychotherapy (IPT-MOMS) v. Brief Supportive Psychotherapy (BSP) over 3 months

Swartz et al. JAACAP 2016

IPT-MOMS

- Pre-treatment Engagement Session (1 session)[1]
- IPT-B (8 sessions)[2]
- Specific set of strategies directed toward addressing core issues facing depressed mothers

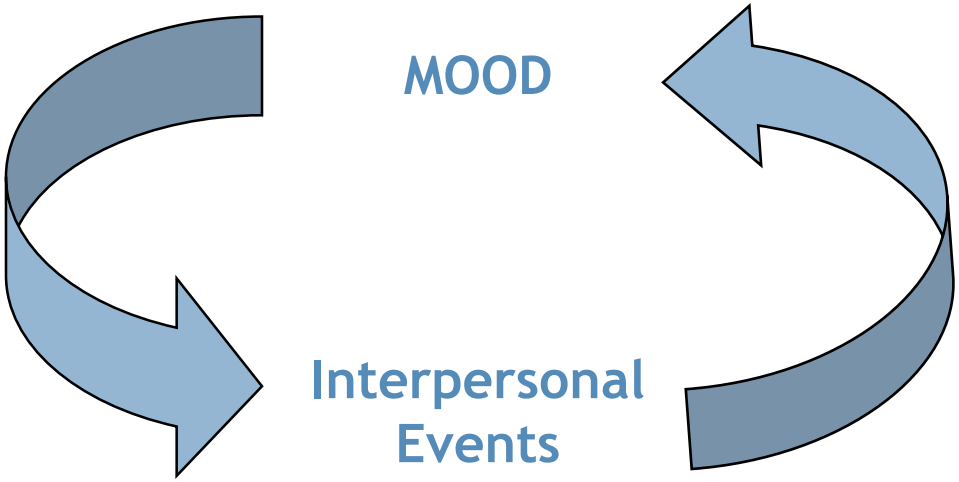
[1]Swartz et al., *Prof Psychol Res Prac*, 2007; Grote et al. *Social Work* 2007 [2]Swartz et al., *Am J Psychotherapy*, 2014

Interpersonal Psychotherapy (IPT)

Goals:

symptom alleviation & improved social functioning

Builds on empirical findings that **interpersonal (IP) issues are linked to depressed mood** & that depression impairs IP functioning



The Four IPT Problem Areas

- Role Transition
- Role Dispute
- Grief (complicated bereavement)
- Interpersonal Deficits

Klerman et al., 1984; Weissman et al., 2000

IPT-MOMS[1]

Define an additional IPT problem area

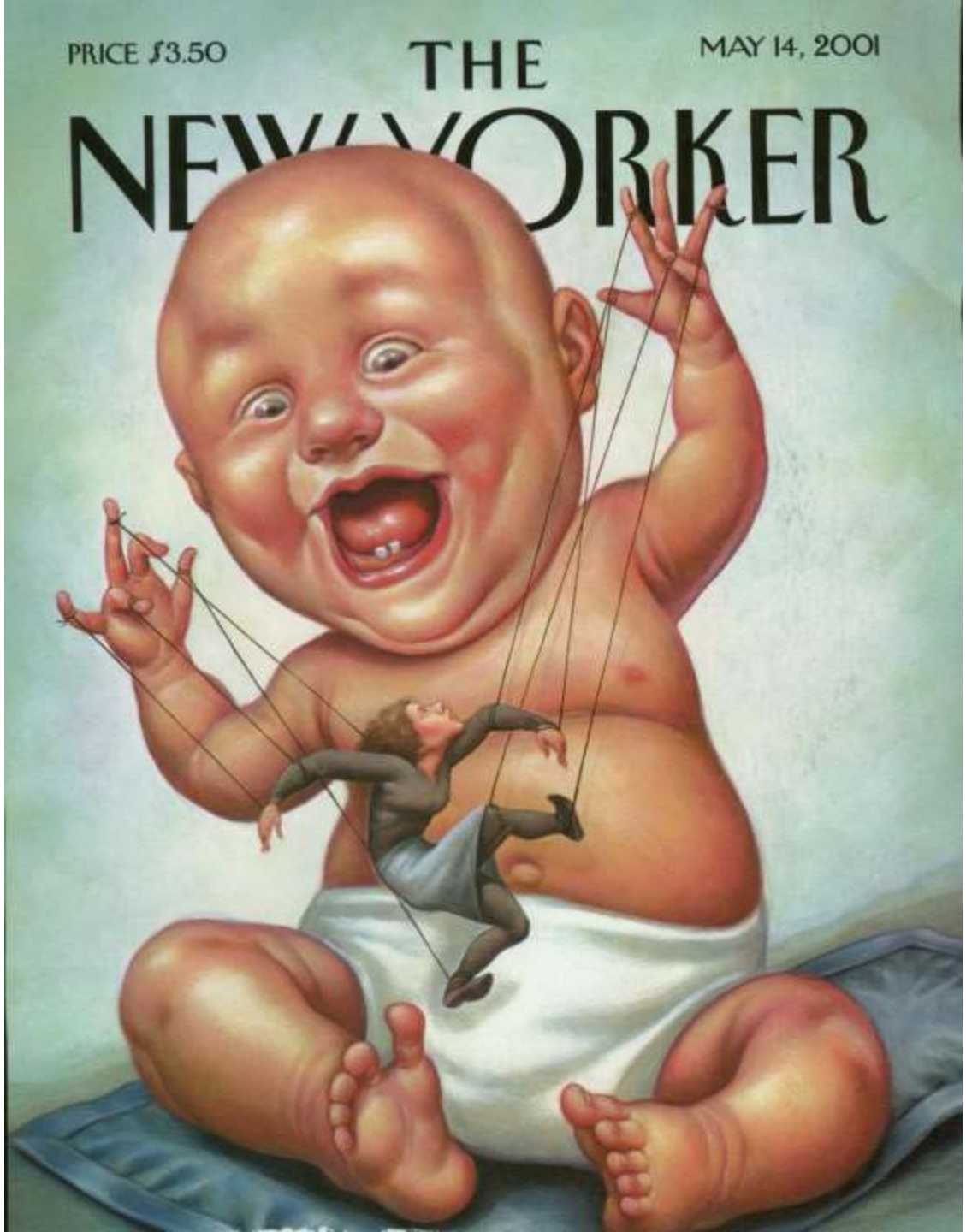
- Parenting an Ill Child
- Sub-type of Role Transition

Goals

- Mourn the old role (parenting a "normal" child)
- Normalize ambivalent feelings associated with new role (parenting an ill child)
- Enhance mastery of new role
- Address and alleviate maternal guilt

[1]Swartz et al., unpublished manual


MOTHER
BLAME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IPT-MOMS Strategies

Help mothers to

- Interface more *effectively* with child's health care providers
- Prioritize self-care
- Build social support
- Find new ways to *positively* connect with child
- Tolerate uncertainties associated with child's course and prognosis (uncouple child course from maternal course)

Brief Supportive Psychotherapy (BSP)

- Rooted in Rogers' Client-Centered Therapy[1]
- Manualized approach with evidence of efficacy[2]
- Non-directive approach
- Emphasizes patient strengths

[1]Rogers CR 1951; [2]Markowitz JC 2014

BSP Strategies

1. Patient determines the therapy agenda
2. Use of reflective listening
3. Open-ended questions
4. Facilitates exploration of affect
5. Empathic support
6. No specific framework for explaining or resolving distress

Do's and Don'ts
Brief Supportive Psychotherapy

DO	DON'T
Make an emotional connection	Problem solve for the patient
Follow affect	Structure the session
Let it linger	Be too active
Encourage catharsis	Interrupt the patient's feelings
Build the alliance	Interpret transference
Emphasize patient's strengths (but not to avoid negative affect)	Assign homework
	Give up (or the patient will, too)

Markowitz JC. *Focus*, 2014

Non-Specific Strategies to Engage Depressed Mothers

- Flexible scheduling
- Meet mothers face-to-face at their child's appointment
- Phone sessions (up to 2/3 of sessions)
- Avoid using the word "depressed" (substitute "overwhelmed")
- Collaboration with child providers to locate "MIA" moms

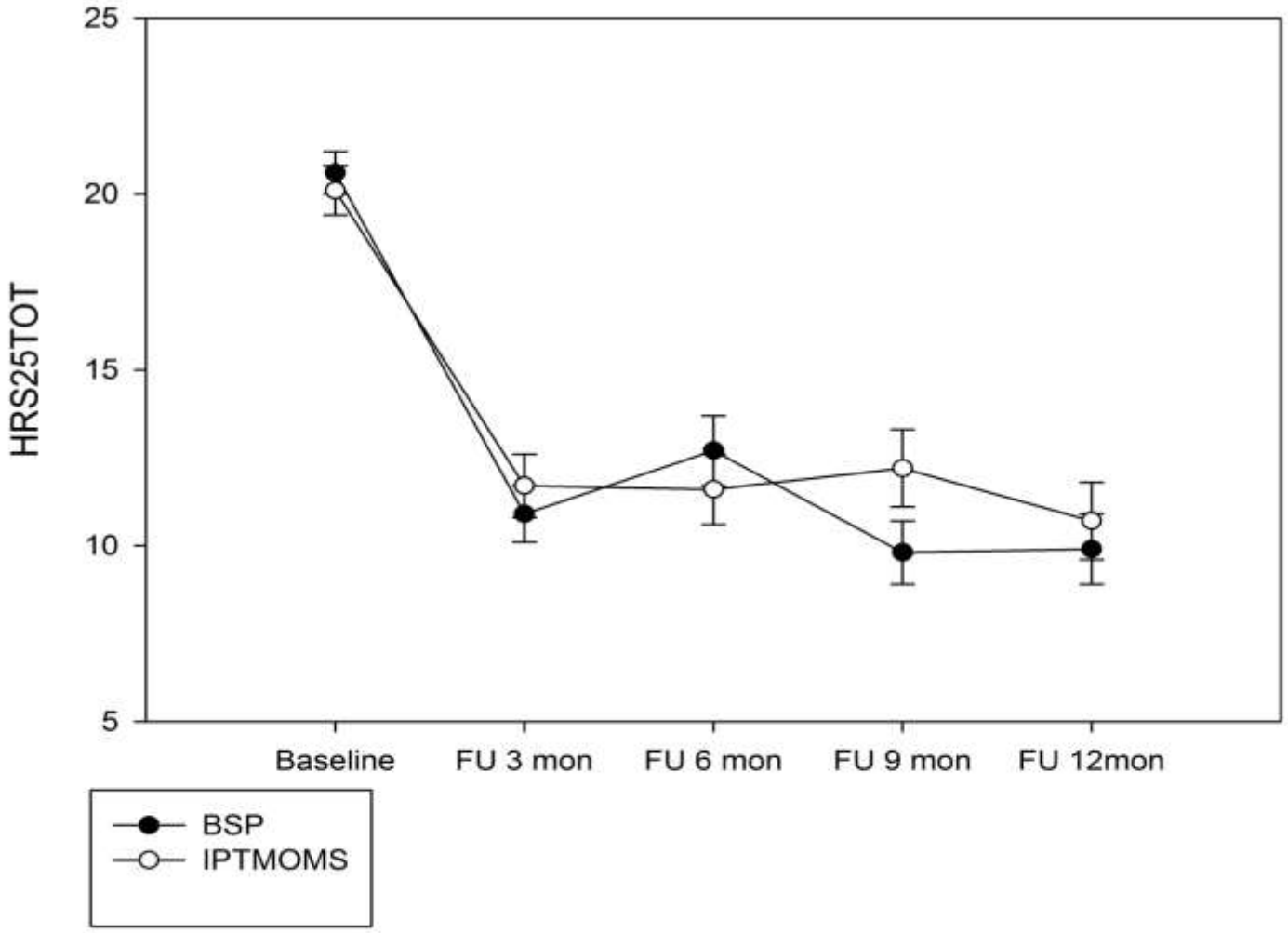
Mothers (n=168) Demographic and Clinical Data

Variable	BSP Moms (N = 83)	IPT Moms (N = 85)	p
Age	44.6 (6.7)	45.0 (7.8)	0.59
Race/Ethnicity			
Hispanic	0 (0%)	0 (0%)	1
White	67 (80.7%)	66 (77.7%)	0.62
Married	43 (51.8%)	36 (42.4%)	0.20
Total Income < $30k	25 (30.1%)	28 (32.9%)	0.69
On antidepressants, n (%)	4 (4.8)	9 (10.6)	.25
On anticonvulsants, n (%)	4 (4.8)	5 (5.9)	1
On benzodiazepines/sedatives/hypnotics, n (%)	2 (2.4)	4 (4.7)	.68
Lifetime diagnosis of anxiety–DSM-IV, n (%)	59 (71.1)	59 (69.4)	.81
More than 3 lifetime major depressive episodes, n (%)	36 (43.4)	40 (47.1)	.63

Child (n=168) Demographic and Clinical Data

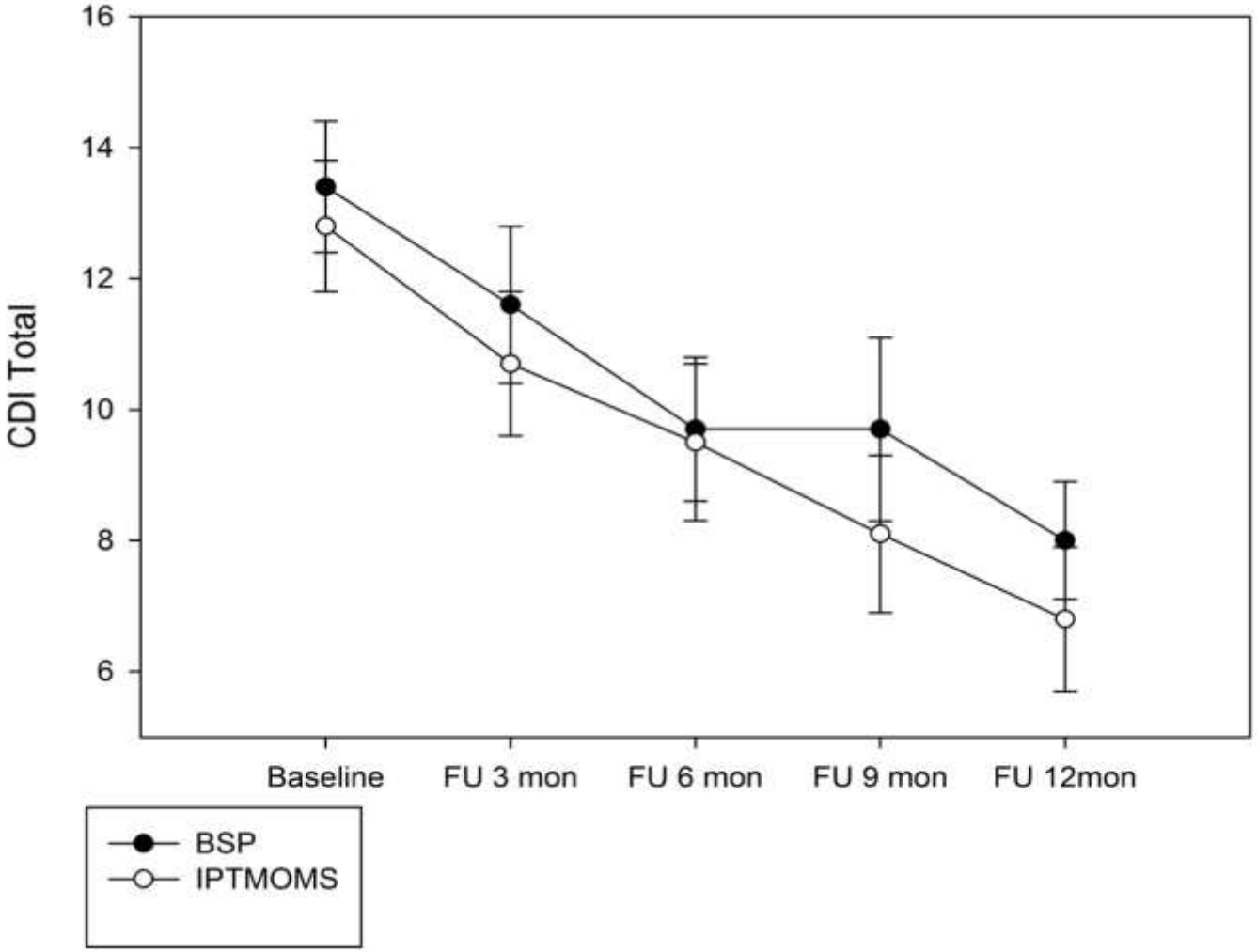
Variable	BSP Kids (N = 83)	IPT Kids (N = 85)	p
Age	13.9 (2.8)	14 (2.9)	0.56
Girls	51 (61.5%)	48 (56.5%)	0.51
Y/N KSADS Diagnoses			
Current Externalizing	34 (41.0%)	44 (51.8%)	0.16
Number of KSADS Diagnoses			
Externalizing Disorders	0.6 (0.8)	0.7 (0.8)	0.18
Internalizing Disorders	1.7 (1.0)	1.6 (1.0)	0.57
On antidepressants	44 (53%)	36 (42%)	.17

Hamilton Rating Scale for Depression 25-Item



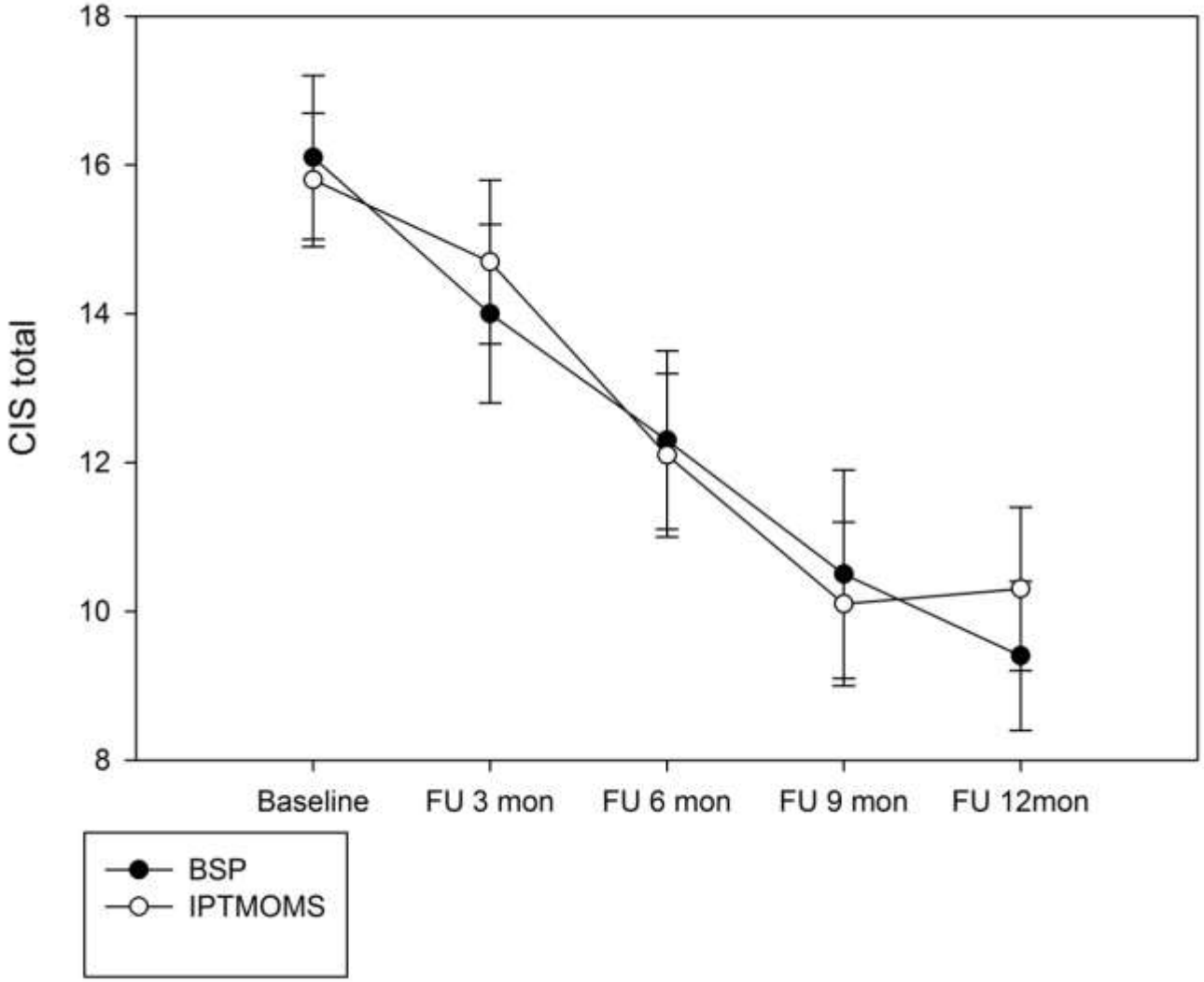
Time effect $F(4, 503) = 96$, $p < 0.0001$

Child Depression Inventory (CDI)



Only time is significant $F(4, 438) = 14.9$, $p < 0.0001$

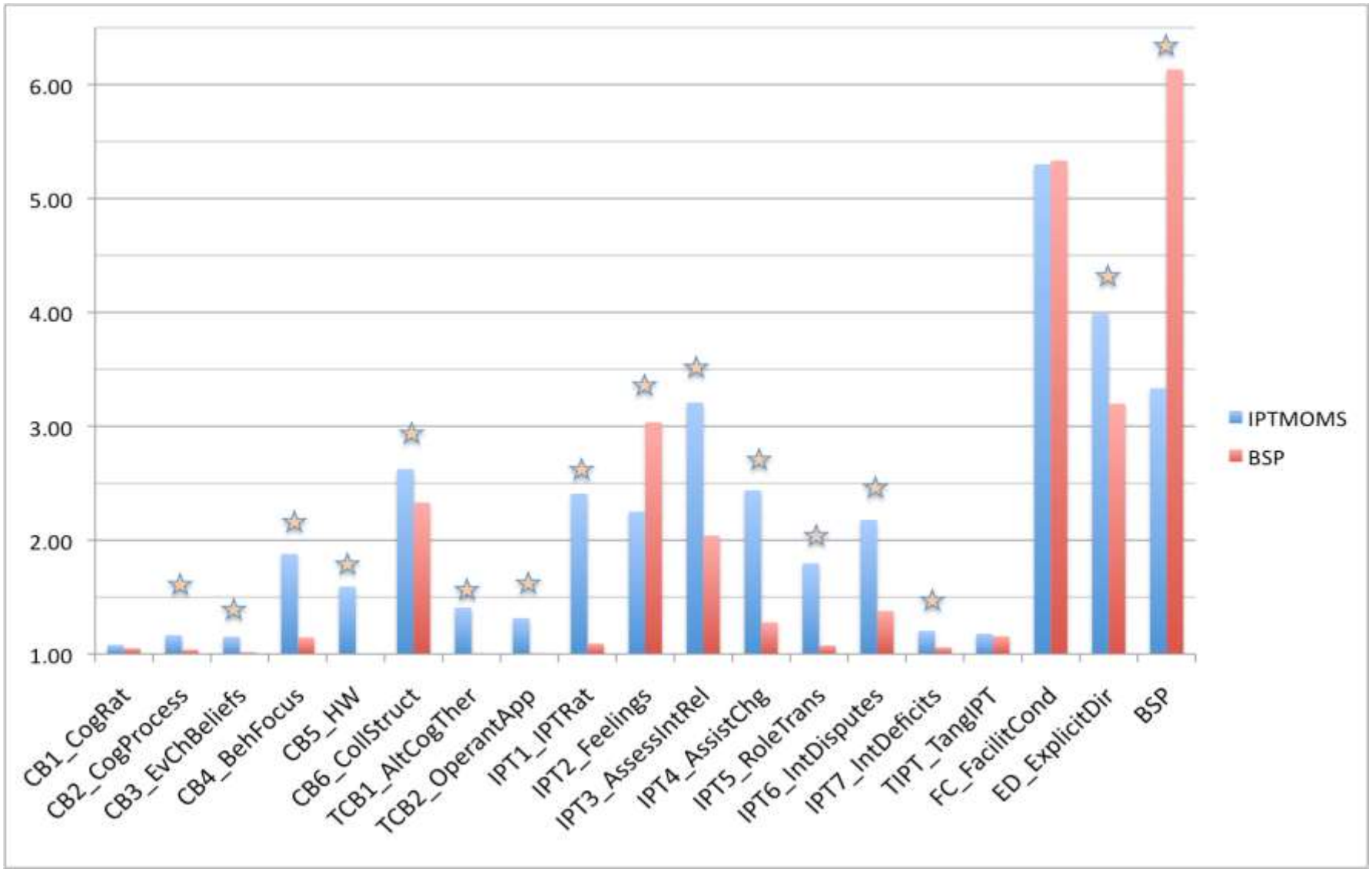
Columbia Impairment Scale (CIS)



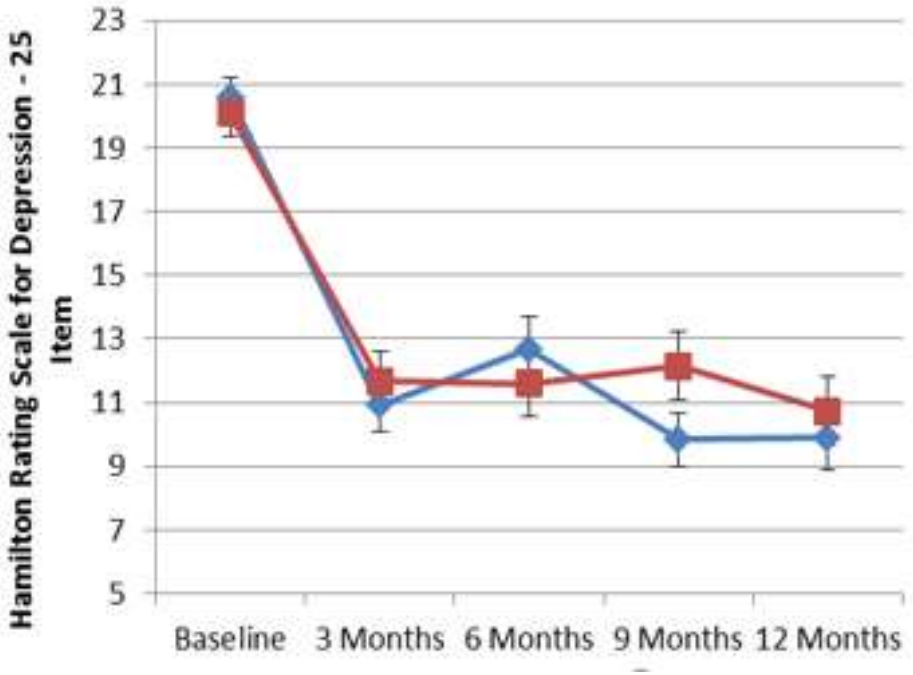
Additional Outcomes

Both groups received ≥6 psychotherapy sessions	87% percent (74/85) -- IPT-MOMS	82% (68/83) -- BSP
Mothers preferred IPT-MOMS over BSP	Mean CSQ scores: 28.6±3.3 -- IPT-MOMS, 26.5±4.8 for BSP ($t=2.8$, $df=101$, $p=0.006$)	
BSP children used more mental health services to achieve same outcomes	were more likely to receive antidepressant medication [56% (37/66) v. 38% (26/68); $x^2=4.3$, $p=0.04$]	had more outpatient mental health visits [median=9 (IQR=22) v. 6 (IQR=10); Wilcoxon $Z=1.98$; $p=0.05$]

Therapy Adherence Ratings Collaborative Study Psychotherapy Rating Scale (CSPRS-6)

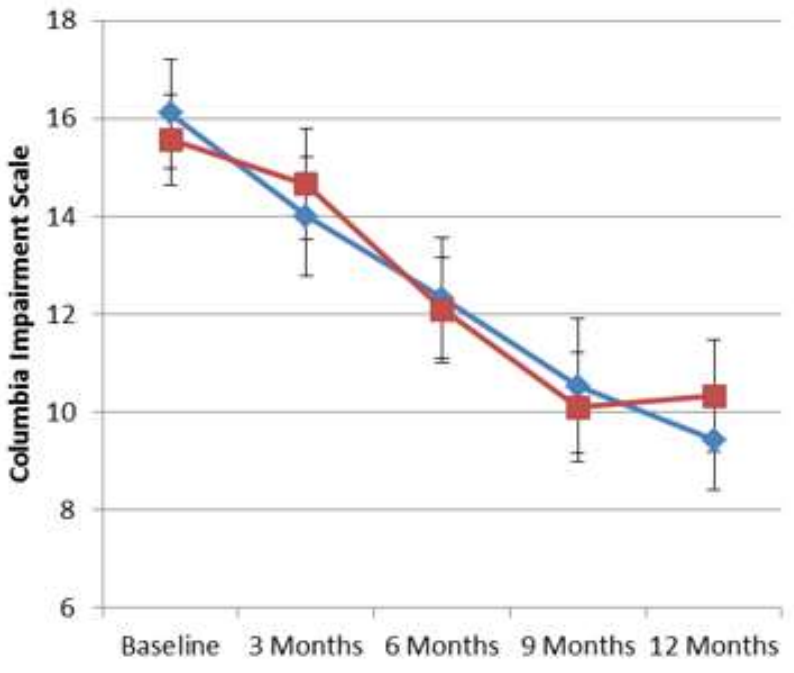


Maternal depression scores



Time effect F(4, 503) = 96, p < 0.0001

Child impairment scores



Time effect F(4, 432)= 19, *p* < 0.0001

No group differences by treatment

Mothers showed steep improvement from baseline to 3 months

Children steadily improved from baseline to 12 months

Children improved 3-6 months after mothers

Swartz et al. JAACAP 2016

Relationship Between Change in Maternal Depression and Child Outcomes

	Concurrent		Lag 1 (3 month)		Lag 2 (6 month)	
	Association(β)	p	Association(β)	p	Association (β)	p
CDI	0.04	NS	0.07	NS	0.08	NS
SDQ	0.04	NS	0.02	NS	0.05	NS
CIS	0.10	0.06	0.14	0.03	0.2	0.01

All models included the following co-variates: child age, child gender, family income, presence of externalizing diagnosis (y/n)

Children with and without Externalizing Diagnoses: Demographic and Clinical Data

Variable	Without Externalizing Diagnosis (N = 90)	With Externalizing Diagnosis (N = 78)	p
Child Age	14.8 (2.3)	12.9 (2.9)	< 0.0001
Maternal Age	45.8 (6.3)	43.3 (8.0)	0.025
% Girls	62 (69%)	37 (47%)	0.005
Child Depression Inventory, mean (SD)	12.5 (9.3)	13.2 (9.0)	.63
Columbia Impairment Scale, mean (SD)	14.5 (9.1)	17.4 (9.2)	.044
Strengths and Difficulties Questionnaire, mean (SD)	12.8 (6.1)	16.9 (6.2)	< 0.0001

Children with Internalizing Disorders Only (N=90)

Relationship Between Change Maternal Depression and Child Outcomes

	Concurrent		Lag 3 (3 months)		Lag 6 (6 months)	
	Association(β)	p	Association(β)	p	Association (β)	p
CDI	-0.01	NS	0.10	NS	**0.2**	**0.05**
SDQ	0.02	NS	0.07	NS	**0.19**	**0.01**
CIS	0.06	NS	**0.24**	**0.004**	**0.49**	**0.0002**

All models included the following covariates: child age, child gender, family income

Role of Parenting

- Change in parental depressive symptoms predicted change in child depressive symptoms[1]
  - Increasing parental acceptance partially mediated the relationship[1]
- Differential effects on child depression symptoms were partially explained by increases in maternal care and affection[2]
- Among children with internalizing diagnoses only, improvement in positive parenting mediates improvement in child depressive symptoms[3]

[1]Garber et al., 2009; [2]Weissman et al. 2015; [3]Swartz et al 2017

Future Directions

1. Exploring mediators of the relationship between maternal and child outcomes
2. Examining physiologic factors that are associated with maternal and child risk
3. Developing dyadic interventions to address the needs of very high risk families

Limitations

- Absence of an inactive comparator
- Relatively high attrition (27% over 12 months)
- Lower child psychiatric services utilization in the IPT-MOMS group resulted from decreased need for services or maternal difficulty in bringing children for care
- Fathers were not assessed

Conclusions

High risk, high yield population

Psychotherapy is an effective intervention for maternal depression in very high risk families: both IPT-MOMS and BSP work

But mothers prefer IPT-MOMS

Improvement in maternal depression is associated with improved child functioning, in a lagged fashion—more pronounced in those with internalizing diagnoses only

Difficult to recruit/engage/retain

Active outreach in multiple domains required

When mothers are treated, one can anticipate a 3-6 month delay in improved child functioning—so plan to provide families with extra support during this time period