The Society for Clinical Child and Adolescent Psychology (SCCAP): Initiative for Dissemination of Evidence-based Treatments for Childhood and Adolescent Mental Health Problems

With additional support from Florida International University and The Children's Trust.

SOCIETY OF CLINICAL CHILD & ADOLESCENT PSYCHOLOGY

practice into science into practice

DIVISION 53

American Psychological Association

The Children's Trust

FIU Center for Children and Families

Keynote

Evidence-Based Practices for Bipolar Spectrum Disorders in Youth

Mary Fristad, Ph.D., ABPP

Professor of Psychiatry, Psychology and Nutrition

Director of Research & Psychological Services,

Division of Child & Adolescent Psychiatry

The Ohio State University

SOCIETY OF CLINICAL CHILD & ADOLESCENT PSYCHOLOGY

practice into science into practice

DIVISION 53

American Psychological Association

The Children's Trust

FIU Center for Children and Families

Just Because I'm Bipolar

14 Year Old 8th Grader
Former MF-PEP Study Participant

Just because I'm bipolar
I'm not a freak
I'm not weird
I just want to be noticed
Just because I'm bipolar
I still have feelings
I still have emotions
I just have trouble expressing them
Just because I'm bipolar
I can still be trusted
I can still be reliable
Just because I'm bipolar—I'm still a normal kid

Evidence-Based Practices for Bipolar Spectrum Disorders (BPSD) in Youth

Mary A. Fristad, PhD, ABPP
Professor, Psychiatry, Psychology & Nutrition
The Ohio State University
Division of Child & Adolescent Psychiatry

Conflict of Interest/Funding

- Dr. Fristad receives royalties from
  - CFPSI: *MF-PEP and IF-PEP Workbooks*
  - Guilford Press:
    - *Raising a Moody Child: How to Cope with Depression and Bipolar Disorder*
    - *Psychotherapy for Children with Bipolar and Depressive Disorders*
  - APPI:
    - *Clinical Manual for Management of Bipolar Disorder in Children and Adolescents*
    - *Children's Interview for Psychiatric Syndromes (ChIPS)*

Keynote Goals

- Participants will learn:
  - ***Rationale for biopsychosocial treatment***
  - Summary of evidence-based psychotherapy
  - Resources for families of children with BPSD

Environmental Contributions to Manic Symptoms in Youth

- Not much known– draw on literature from
  - ***Adults with BPD***
  - Adolescents with MDD
  - At-risk populations
  - Youth with BPD
- Impact on onset and course

Environmental Effects on Adults with BPD

- ***Overview***
- Physical and sexual abuse
- Lack of diagnosis/treatment
- Family climate (expressed emotion)
- Stressful life events (SLE)
  - measurement issues
- Social Support

Precipitants of Episodes in Adults with BPD

Goodwin & Jamison, Manic-Depressive Illness, 2007, Oxford, p. 138

- Onset of early episodes more likely related to stressful life events (SLE) than onset of later episodes, consistent with kindling hypothesis
- Significantly more SLE before manic episodes
- Work-related SLE– may be particularly important in mania and hypomania
- Cyclothymia is associated with ↑ stress response, consistent w/ it being in the BP spectrum
- Bidirectional: mania often results in SLE
- SLE often lead to
  - sleep loss, which can precipitate mania
  - Alcohol/drug use, which can lead to sleep loss and/or mania

The Role of Psychosocial Stress in the Onset and Progression of Bipolar Disorder and its Comorbidities *Post & Leverich, 2006, Development and Psychopathology, 18: 1181-1211*

- Preclinical studies in multiple animal species document the lifelong impact of early life stress (in the pertinent developmental window) on neurochemistry, endocrine responsivity and behavior
- In humans, early, severe environmental adversity is linked to
  - Earlier age of onset
  - More serious, complicated, treatment-resistant course (rapid cycling, suicide attempts, longer illness duration, more substance abuse, alcohol abuse, PTSD, more lifetime Axis I disorders, greater symptom severity)
- Childhood trauma > impairing than trauma in adulthood
  - Leads to increased negative life events in adulthood

Environmental Effects on Adults with BPD

- Overview
- ***Physical and sexual abuse***
- Lack of diagnosis/treatment
- Family climate (expressed emotion)
- Stressful life events (SLE)
  - measurement issues
- Social Support

Early Physical and Sexual Abuse Associated with an Adverse Course of Bipolar Illness *Leverich et al (2002) Biol Psych, 51:288-297*

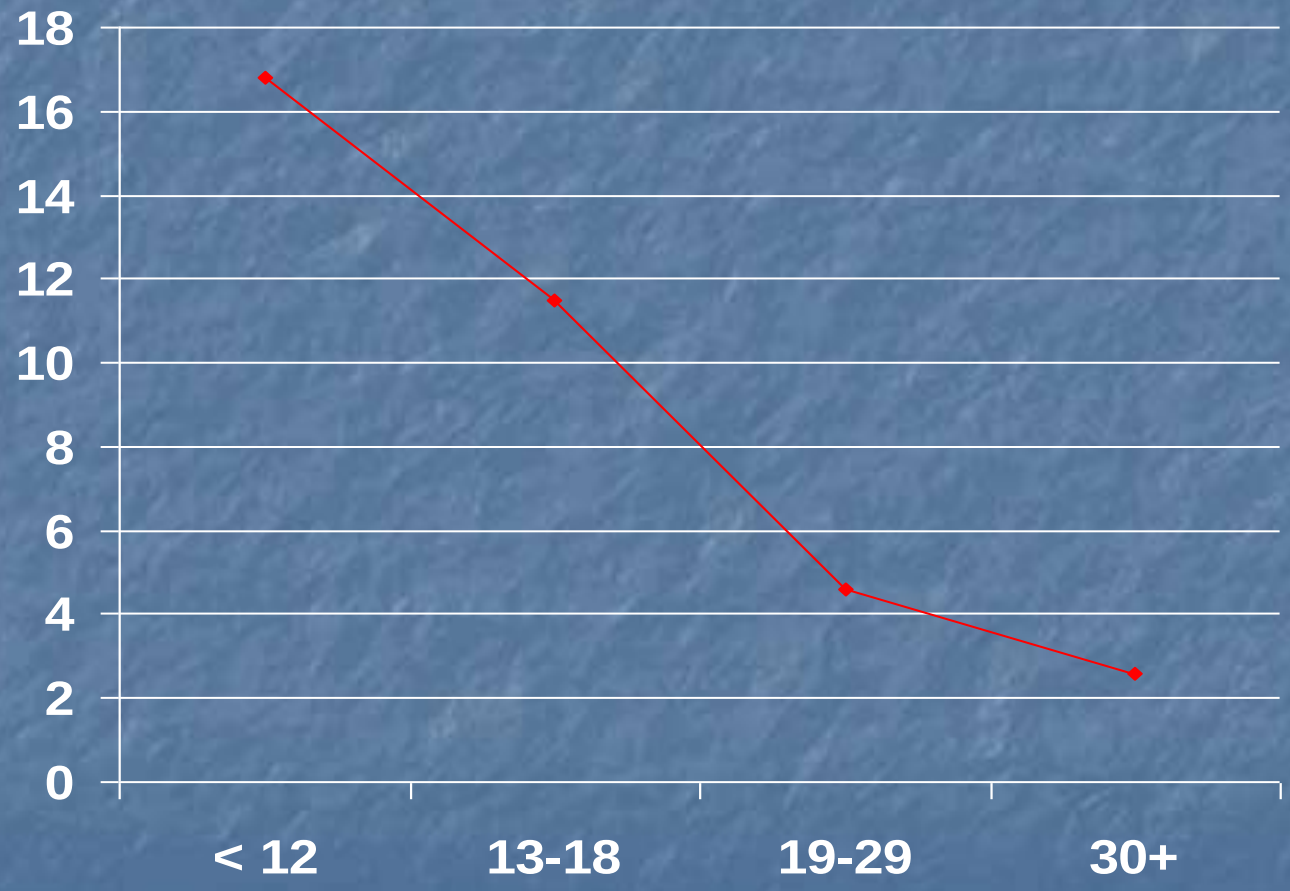
- 651 outpatients with BP-I or BP-II
  - 377 females, 49% abused (36% physical, 43% sexual)
  - 274 males, 36% abused (31% physical, 21% sexual)
- Abuse associated with:
  - Earlier onset
  - More Axis I, II and III dxs
  - Faster cycling
  - Higher rate of suicide attempts
  - More psychosocial stressors occurring before the first and most recent episode

Environmental Effects on Adults with BPD

- Overview
- Physical and sexual abuse
- ***Lack of diagnosis/treatment***
- Family climate (expressed emotion)
- Stressful life events (SLE)
  - measurement issues
- Social Support

Early Age of Onset Linked to Longest Delay to Treatment

Leverich et al (2007) J Ped 150: 485-490



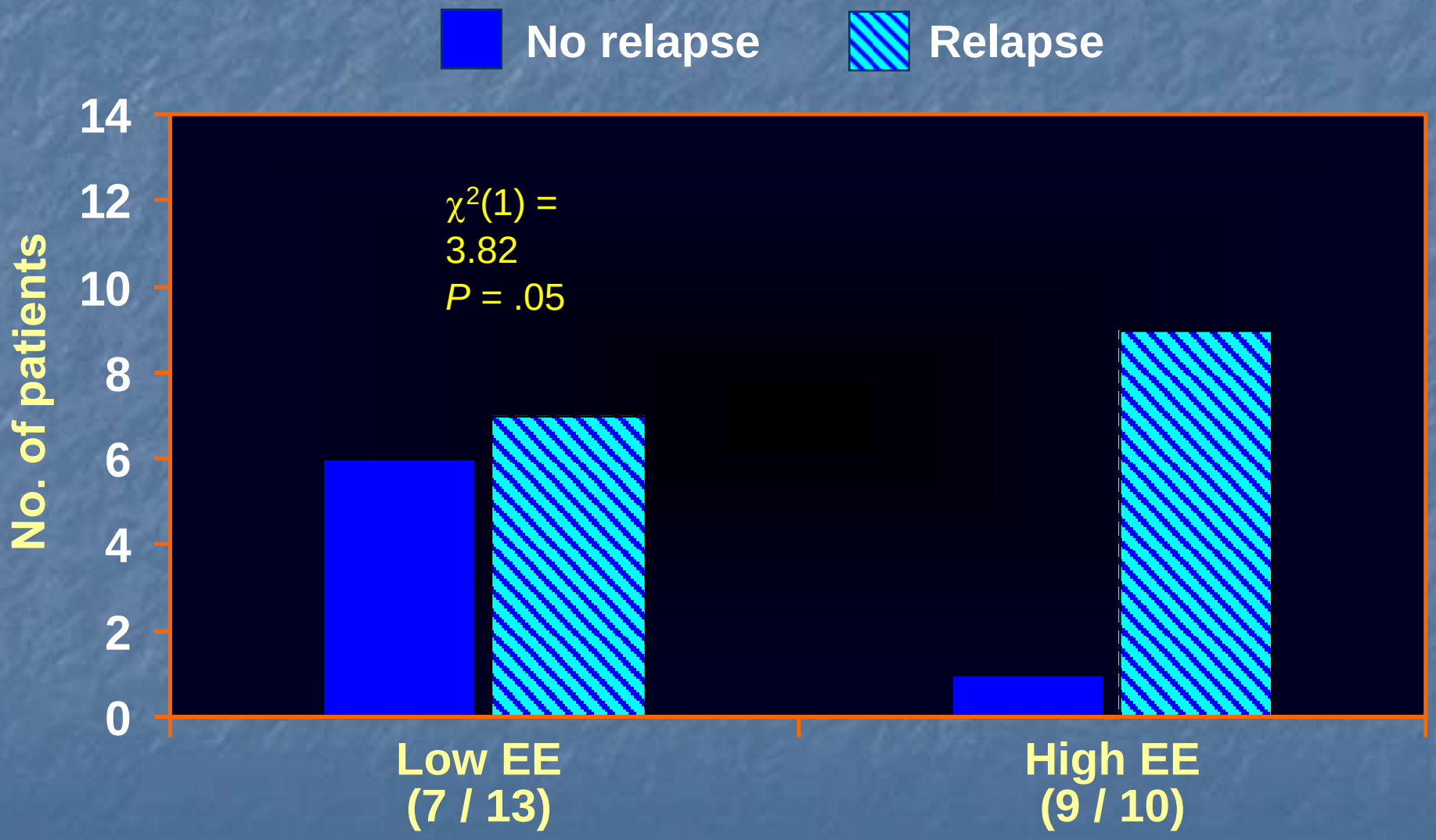
480 outpts w/ BPD retrospectively rated for onset and prospectively followed for one year

Environmental Effects on Adults with BPD

- Overview
- Physical and sexual abuse
- Lack of diagnosis/treatment
- ***Family climate (expressed emotion)***
- Stressful life events (SLE)
  - measurement issues
- Social Support

Bipolar Disorder and Environmental Stress

Family Expressed Emotion (EE) Predicts Relapse in a 9-Month Follow-Up of Adults w/ Bipolar Disorder



Miklowitz DJ, et al. *Arch Gen Psychiatry.* 1988;45(3):225–231.

Environmental Effects on Adults with BPD

- Overview
- Physical and sexual abuse
- Lack of diagnosis/treatment
- Family climate (expressed emotion)
- ***Stressful life events (SLE)***
  - measurement issues
- ***Social Support***

Effects of Stress and Social Support on Recurrence in Bipolar Disorder

Cohen, Hammen, Henry & Daley (2004) J Aff Dis 82: 143-147

- Prospectively followed 52 adults with BP-I q 3 mos for ≤ 12 mos
- Baseline "total network support score" = perceived SS from best friend, parent and romantic partner
- Depressive recurrence predicted independently by ↑ stress and ↓ social support levels after controlling for duration of illness and medication compliance
- SS did *not* moderate impact of stress
- No differential effect based on source of support

Stressful Life Events (SLE) & BPD in Adults

Johnson & McMurrich, 2006
Development and Psychopathology, 18: 1169-1179

- Family criticism and SLE predict ↑ symptoms and relapse over time *Miklowitz & Johnson, 2006*
- SLE predict
  - 4-fold ↑ in relapse risk *Ellicott et al, 1990*
  - 3-fold↑ in time to recovery *Johnson & Miller, 1997*
- Predict specific symptoms
  - Depressive sxs predicted by:
    - SLE, EE and social support
    - Similar predictors for BPD and UPD
  - Manic sxs predicted by:
    - Schedule-disrupting and goal-attainment life events

Environmental Contributions to Manic Symptoms in Youth

- Not much known– draw on literature from
  - Adults with BPD
  - ***Adolescents with MDD***
  - At-risk populations
  - Youth with BPD
- Impact on onset and course

Stressful Life Events (SLE) & BPD in Youth

Johnson & McMurrich, 2006
Development and Psychopathology, 18: 1169-1179

- Life stress robustly predicts psychiatric symptoms, especially depression
- Maternal depression linked to ↑ stress reactivity and ↑ stress exposure
- Dependent life events may be particularly linked to mood disorders

Environmental Contributions to Manic Symptoms in Youth

- Not much known– draw on literature from
  - Adults with BPD
  - Adolescents with MDD
  - ***At-risk populations***
  - Youth with BPD
- Impact on onset and course

Environmental Effects on Youth at High Risk for BPD

- ***Parenting***
- Biological impact (pre/perinatal)
- Family climate (expressed emotion)
- Stressful life events (SLE)
  - measurement issues
- Social Support

Early Child-Rearing Practices in Families with a Manic-Depressive Parent

Davenport, Zahn-Waxler, Adland & Mayfield (1984)
Am J Psych 141(2): 230-235

- 7 couples (1 partner with BPD) compared to normal control couples
  - Mothers from BPD couples (were)
    - ↓ attentive to their child's health needs
    - ↓ active with their child
    - ↑ overprotective, disorganized, unhappy, tense, ineffective
    - Emphasized performance in some achievement-related areas
    - Displayed more negative affect toward the child
  - Index parents
    - ↓ scores for social adjustment and family interaction
    - ↑ situational problems
  - 7 male infants of parents w/ BPD (5/7 families—other parent had UPD)
    - Insecure attachments
    - Problems w/ affect regulation, coping w/ stress
    - Aggressive responses were inappropriate, disproportionate and displaced
    - Difficulty with sharing, role-taking and perspective taking
- Problems persisted 4-5 years later

Environmental Effects on Youth at High Risk for BPD

- Parenting
- ***Biological impact (pre/perinatal)***
- Family climate (expressed emotion)
- Stressful life events (SLE)
  - measurement issues
- Social Support

Psychiatric Illness in a Clinical Sample of Children with Prenatal Alcohol Exposure

O'Connor et al (2002) J Drug Alcohol Abuse 28(4):743-754

- UCLA Fetal Alcohol and Related Disorders Clinic– referrals d/t heavy *in utero* alcohol exposure
- 23 children aged 5-13, IQ > 70
- FAS, 9%; Partial FAS, 17%; Any FAS, 26%
- Axis I, 87%
- Mood D/O, 61% (26%, MDD/ADDM; 35% BPD)

Environmental Effects on Youth at High Risk for BPD

- Parenting
- Biological impact (pre/perinatal)
- ***Family climate (expressed emotion)***
- Stressful life events (SLE)
  - measurement issues
- Social Support

Family Environment in Families w/ vs Families w/o Parental Bipolar Disorder

Romero, DelBello et al (2005) Bipolar Disorders 7:617-622

- 24 families w/ ≥ 1 parent w/ BPD vs 27 families with healthy parents (HF)
- Family Environment Scale (FES)
  - ↓ Cohesion, expressiveness (ctrl for SES)
  - 2 prts w/ BPD ↑ cohesion than 1 prt w/ BPD
  - Diagnostic status of children (38% +, 62% -) did not impact FES scores

Family Environment of Children and Adolescents with Bipolar Parents

Chang, Glasey, Ketter & Steiner (2001) Bipolar Disorders, 3:73-78

- 56 children aged 6-18 from 36 families
- Family Environment Scale (FES)
- Compared to norms:
  - ↓ Cohesion and Organization scales
  - ↑ Conflict scale
- Scores did not differ for
  - Families with 1 vs 2 parents w/ a mood d/o
  - Children with or without Axis I (54%) or BP (14%) dxs

Environmental Effects on Youth at High Risk for BPD

- Parenting
- Biological impact (pre/perinatal)
- Family climate (expressed emotion)
- ***Stressful life events (SLE)***
  - measurement issues
- Social Support

Stressful Life Events (SLE) & Offspring of Parents w/ BPD

Hillegers et al, 2004; Wals et al, 2005

- 140 offspring of 86 parents w/ BPD
- At 5-year follow-up (Hillegers et al, 2004)
  - 38—mood disorder
  - 5—BPD
  - Onset clearly related to cumulative severe SLE
  - Each event increased risk of future onset by ~10%
- In previous 14 months (Wals et al, 2005)
  - Dependent life events (DLE) predicted episodes
  - After controlling for baseline anx/depr sxs, DLE doubled the risk of onset

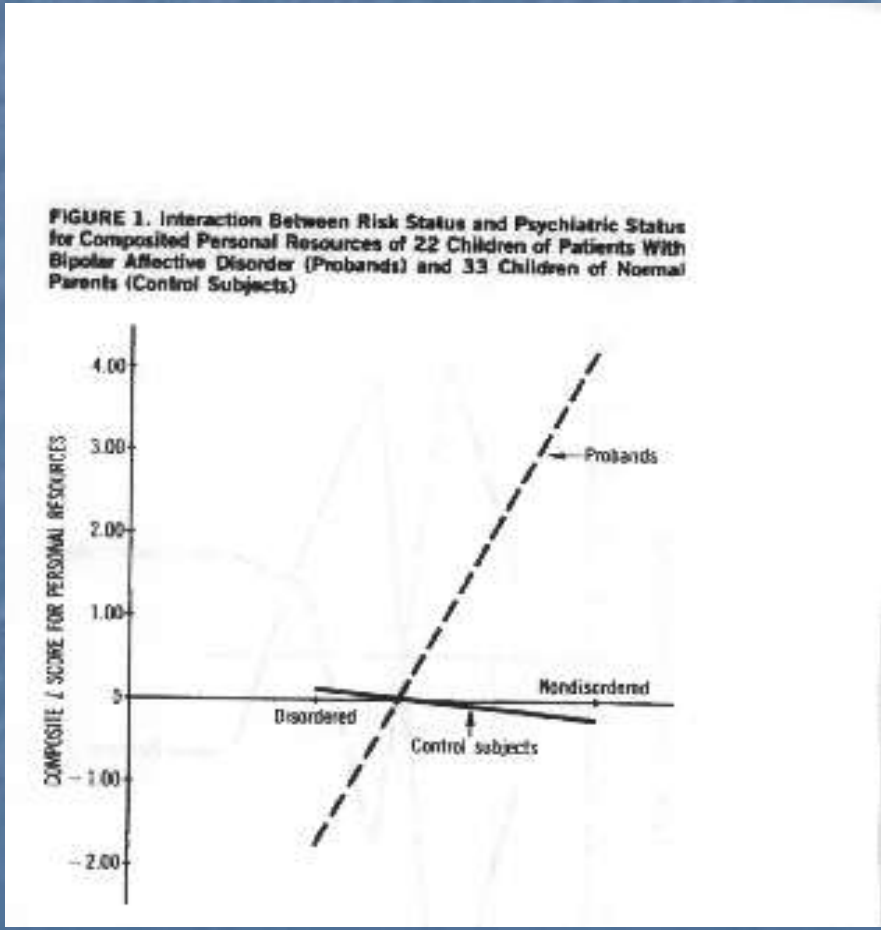
Personal & Social Resources in Children of Patients w/ Bipolar Affective Disorder & Children of Normal Control Subjects

Pelligrini et al (1986) Am J Psychiat 143(7):856-861

- 23 probands from 16 families in which 1 parent had BPD compared to 33 control subjects
  - ≥ 1 lifetime psychiatric d/o: 70%, probands; 45%, controls
  - Assessed ***personal resources*** (intellectual ability, social problem solving skills, locus of control, self-esteem and self-perceived competence) and ***perceived social support*** (social network structure and support)
- ↓ perceived social support associated w/ lifetime psychiatric d/o in both groups
  - No best friend: unique risk for mood d/o
  - Supportive family members: associated with general well being in both groups
  - Reliance on non-kin adults: associated with psychopathology in both groups, esp. probands

Personal & Social Resources in Children of Patients w/ Bipolar Affective Disorder & Children of Normal Control Subjects *Pelligrini et al (1986) Am J Psychiat 143(7):*

<u>Personal resources</u> significantly more frequent for nondisordered probands compared to all other groups—appears to serve as protective factor



Psychosocial Variables in Children and Teens of Extended Families Identified through Bipolar Affective Disorder Probands

Petti et al (2004), Bipolar Disorders, 6:106-114

- 50 offspring aged 6-17 yrs (aunt/uncle/GP +)
  - 9 mood+ children of mood+ parents, 18%
  - 3 mood+ children of mood- parents, 6%
  - 14 mood- children of mood+ parents, 28%
  - 24 mood- children of mood- parents, 48%
- Mood+ children vs mood- children
  - ↑ supportive classmates, teachers, parents (child report)
  - ↑ discipline, negative life events, dependent negative life events (parent report)

Environmental Contributions to Manic Symptoms in Youth

- Not much known– draw on literature from
  - Adults with BPD
  - Adolescents with MDD
  - At-risk populations
  - ***Youth with BPD***
- Impact on onset and course

Environmental Effects on Youth with BPD

- ***Parenting***
- Biological impact (pre/perinatal)
- Family climate (expressed emotion)
- Stressful life events (SLE)
  - measurement issues
- Social Support

Parent-Child Interactions

Schenkel, West, Harral, Patel & Pavuluri (2008) J Clin Psychol, 64(4): 422-437

- Compared Parent-Child Relationship Questionnaire
  - 30 youth w/ BPD
  - 30 healthy controls matched for age, sex, SES, race, family structure
- BPD group reported:
  - Less warmth, affection, intimacy
  - More quarreling and forceful punishment
- Problems more pronounced in BPD families with:
  - Elevated sxs of mania
  - Comorbid ADHD
  - Earlier illness onset
  - Single parent home
  - Parental mood disorder
  - After controlling for maternal mood, mothers' perceptions of their relationship with their children were more problematic if the father had a mood disorder
- Cross-sectional study– cannot comment on direction of findings

Psychosocial Risk Factors

Geller et al, 2000; 2002; 2004

- At baseline, families of youth with BPD, compared to healthy and ADHD control groups:
  - Less warmth
  - Greater tension and hostility
- At 2 and 4 year follow-up,
  - Lower maternal warmth predicted faster relapse after recovery from mania
  - Intact families associated with faster rate of recovery
  - Medication status was not predictive of illness course

Environmental Effects on Youth with BPD

- Parenting
- ***Biological impact (pre/perinatal)***
- Family climate (expressed emotion)
- Stressful life events (SLE)
  - measurement issues
- Social Support

Biological Risk Factors in Pediatric Bipolar Disorder

Pavuluri et al (2006) Biol Psychiatr, 60:936-941

- 98 children aged 5-18
  - 37 with BP-I
  - 33 with BP-I + ADHD
  - 28 healthy controls
- Tested (controlling for age and sex) BPD = 1st ° relative w/ BPD + head injury + serious physical illness + perinatal risk + developmental delay
- Family hx 15X higher in BPD group
- Each perinatal risk factor increased risk 6-fold

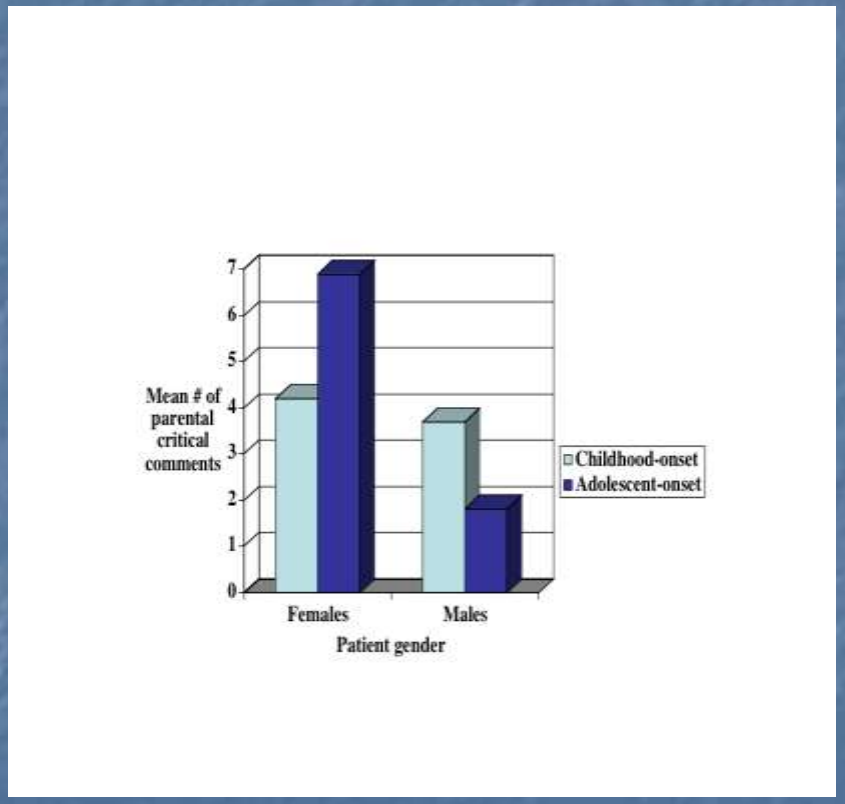
Environmental Effects on Youth with BPD

- Parenting
- Biological impact (pre/perinatal)
- ***Family climate (expressed emotion)***
- Stressful life events (SLE)
  - measurement issues
- Social Support

Expressed Emotion Attitudes in Parents of Adolescents w/ BPD

Coville, Miklowitz, Taylor & Low, 2008
J Clin Psychol, 64(4): 438-449

- N=44 adolescents with BPD
- Parents more critical of girls than boys
- Adolescent (vs child) onset associated w/
  - the *most* criticism for girls
  - the *least* criticism for boys



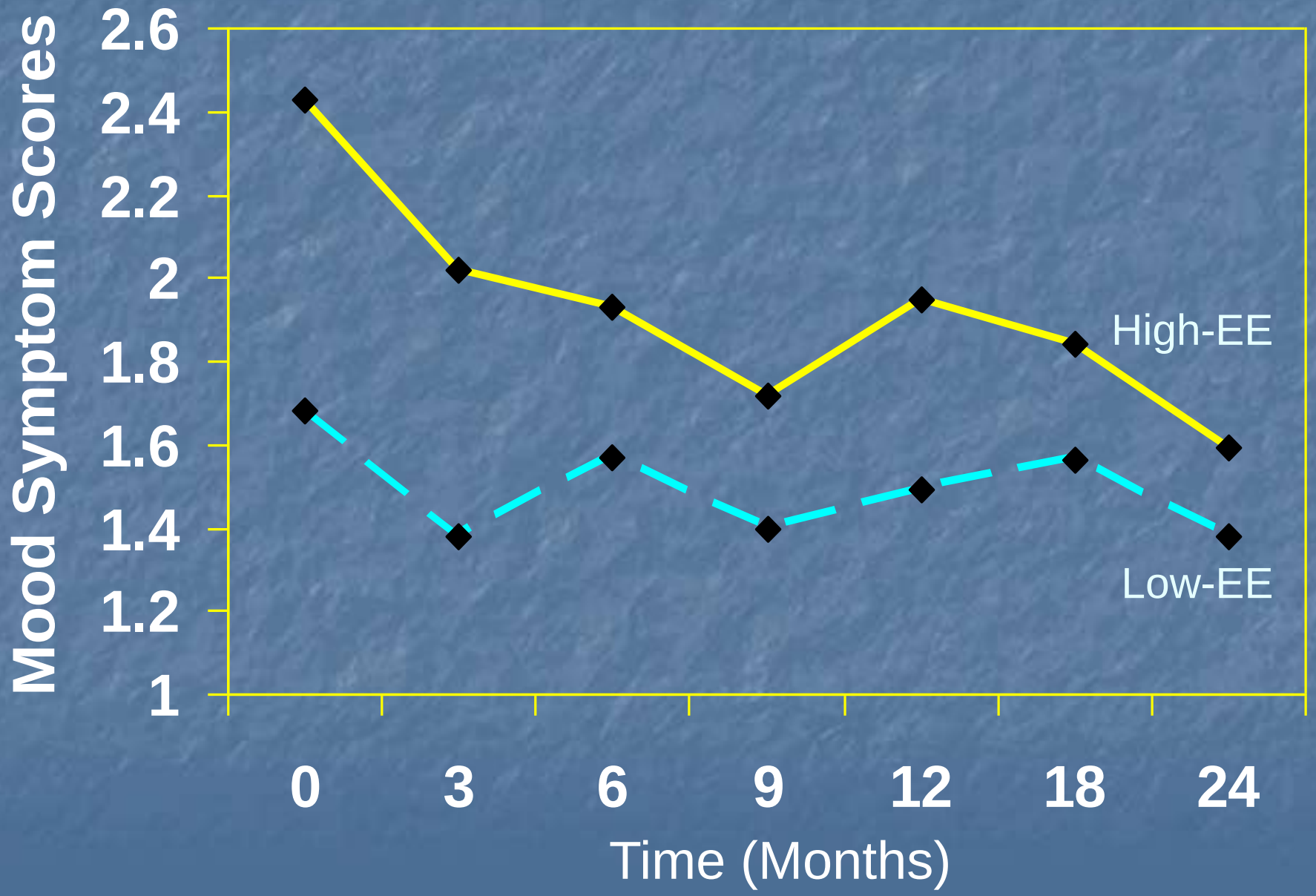
Expressed Emotion & Course of Illness in Adolescents w/ BPD

Miklowitz, Biukians & Richards, 2006
Development and Psychopathology, 18: 1247-1265

- Family-focused treatment (FFT) for 20 adolescents w/ BPD
- Camberwell Family Interview
  - *74% High EE; 26% Low EE*
- Adolescents in High EE families had
  - higher mood sxs throughout the 24 months
    - *Depression scores, p=.027*
    - *Mania scores, p=.08*
  - higher problem behaviors in the first year of treatment—the gap narrowed by the second year
    - *Internalizing t, p=.019*
    - *Externalizing t, p=.095*

Does Expressed Emotion Predict Mood Symptom Scores Over 2 Years Among Adolescent Bipolar Patients (N=20)?

(Miklowitz et al., 2006; *Dev and Psychopathology)*



F(1, 17) = 6.33, *p* = .02; Cohen's *d* = 0.98

Family Conflict Moderates Medication Response in Youth w/ BPD

Townsend, Demeter, Youngstrom, Drotar & Findling (2007),

J Child Adol Psychopharm (17(6): 843-851

- N=55 youth aged 5-17 on Li or DPX for 8 wks
- Family Assessment Device (FAD, *M* score=1-4)
  - General Functioning Scale (GF, 12 items)
  - Problem-Solving Scale (PS, 6 items)
  - Communication Scale (CM, 9 items)
- Tested what variables predict End-of-Week 8 scores
  - MRS: only baseline MRS was significant predictor
  - CDRS-R: after controlling for baseline CDRS-R, FAD-PS accounted for 10% of variance
  - Each ↑1 pt on the FAD-PS → ↑ 5 pts on the CDRS-R
  - Power to detect FAD-CM impact was .63 (r=.26, p=.053)

Environmental Effects on Youth with BPD

- Parenting
- Biological impact (pre/perinatal)
- Family climate (expressed emotion)
- ***Stressful life events (SLE)***
  - measurement issues
- Social Support

Stressful Life Events in Youth with BPD

Tillman, Geller et al (2003) J Child Adol Psychopharm 13(3):243-251

- Compared *total, dependent, independent and uncertain* life events in youth with prepubertal and early adolescent bipolar disorder (PEA-BD, n=93), ADHD (n=81) and normal controls (n=94)
- PEA-BD>ADHD>NC

Environmental Effects on Youth with BPD

- Parenting
- Biological impact (pre/perinatal)
- Family climate (expressed emotion)
- Stressful life events (SLE)
  - measurement issues
- ***Social Support***

Life Stress and Course of Early Onset BPD

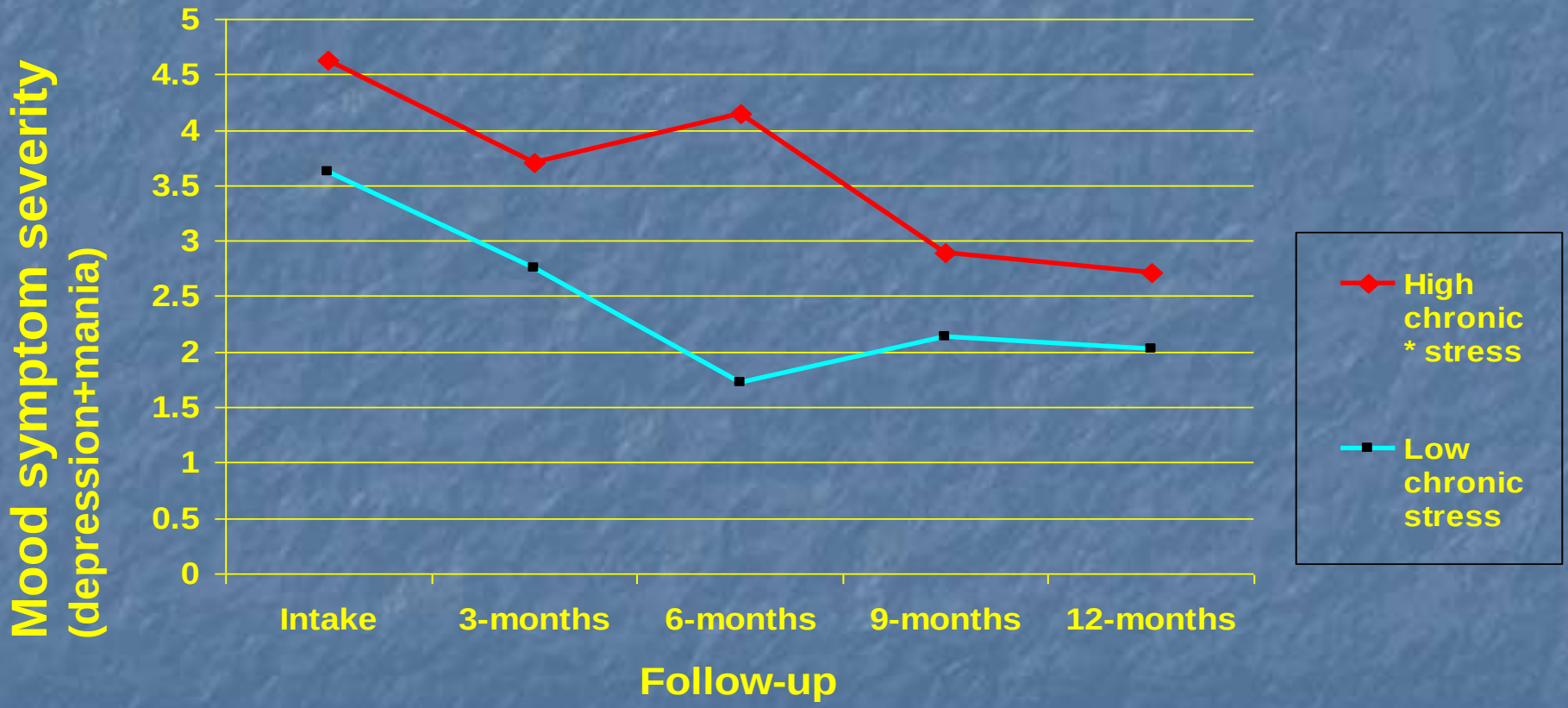
Kim, Miklowitz et al (2006) J Aff Dis 99:37-44

- 38 adolescents with BPD
- UCLA Life Stress Interview q 3 mos
  - 45 min structured interview
  - Assesses episodic and chronic stress
    - Chronic: romantic relationships, close friendships, social activities, family relationships, school performance, physical health, health of family members; *Level* rated from 1 (highly positive) to 5 (highly negative)
    - Episodic: *impact* rated from 1 (none) to 5 (extremely severe); *dependence* rated from 1 (completely independent) to 5 (completely dependent)
  - Distinguishes between subjective reactions and objective evaluations of stress

Chronic Stress in Relationships
Kim, Miklowitz, Biuckians & Mullen, 2007

- ↑ chronic stress
  - in family and romantic relationships-- linked with ↑ sustained depressive symptoms
  - in peer relationships-- linked with ↑ sustained manic symptoms
- Dependent events were more closely related to symptoms in younger vs older youth

Chronic stress in family relationships as a predictor of depression and mania symptoms.



Kim, Miklowitz, Biuckians, & Mullen, 2007

Summary

- Genetics are #1--etiology
- Environmental effects are #2—onset & course
  - Bidirectional
  - Problems beget problems
  - Critical periods of vulnerability
- Broad support for the impact of:
  - Family environment
  - Parenting
  - Stressful life events, esp. abuse
  - Social support
  - Biological parameters
- Suggests need for comprehensive, biopsychosocial treatment

Proposed Solutions and Future Research Directions

Carlson et al, 2009, J Ch Adol Psychopharm

- Increase awareness of the public, mental health providers, and funding agencies that, despite the high heritability of BPD, psychosocial variables also affect illness onset and course.
- Studies of BPD should collect high quality psychosocial data.
- Multiple types of measures should be used to assess a wide variety of psychosocial variables, including perinatal factors.

Keynote Goals

- Participants will learn:
  - Rationale for biopsychosocial treatment
  - ***Summary of evidence-based psychotherapy***
  - Resources for families of children with BPSD

Empirically Supported Psychosocial Adjunctive Treatments for Childhood Bipolar Disorder

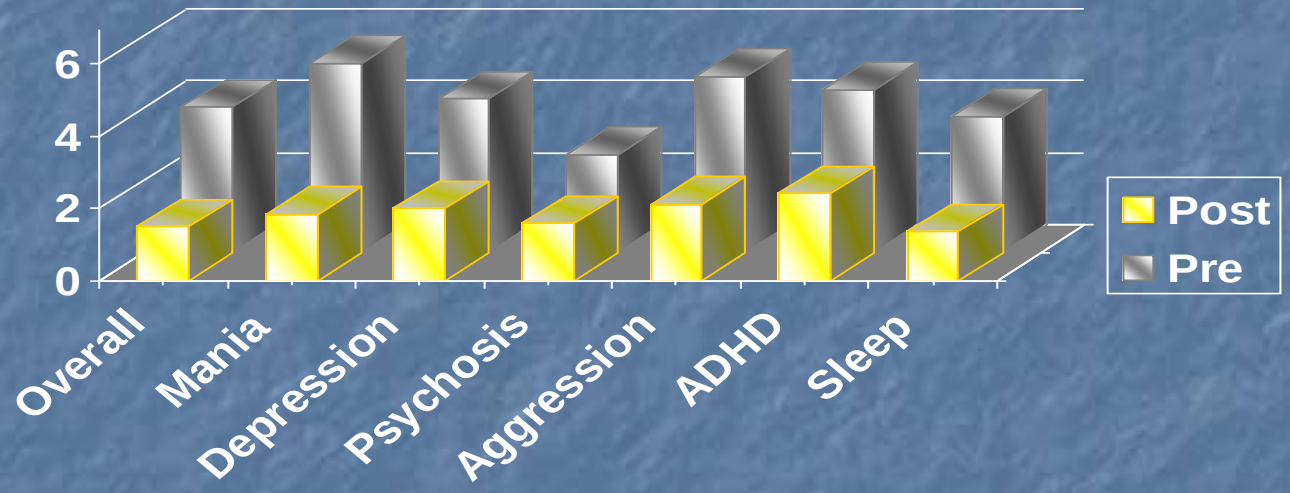
- Fristad, Goldberg-Arnold & Gavazzi, 1999
  Bipolar Disorders
  -None

Current Psychotherapies for Youth with Bipolar Disorder

- CBT/Family Systems Based
  - Pavuluri/West—RAINBOW program
  - Miklowitz-FFT-A
  - PEP (MF-PEP, IF-PEP)
- DBT—T. Goldstein
- IP-SRT--Hlastala

Youth w/ BD *Pavuluri et al, 2004, JAACAP*

Pre-Post CGI-BP Severity Scale

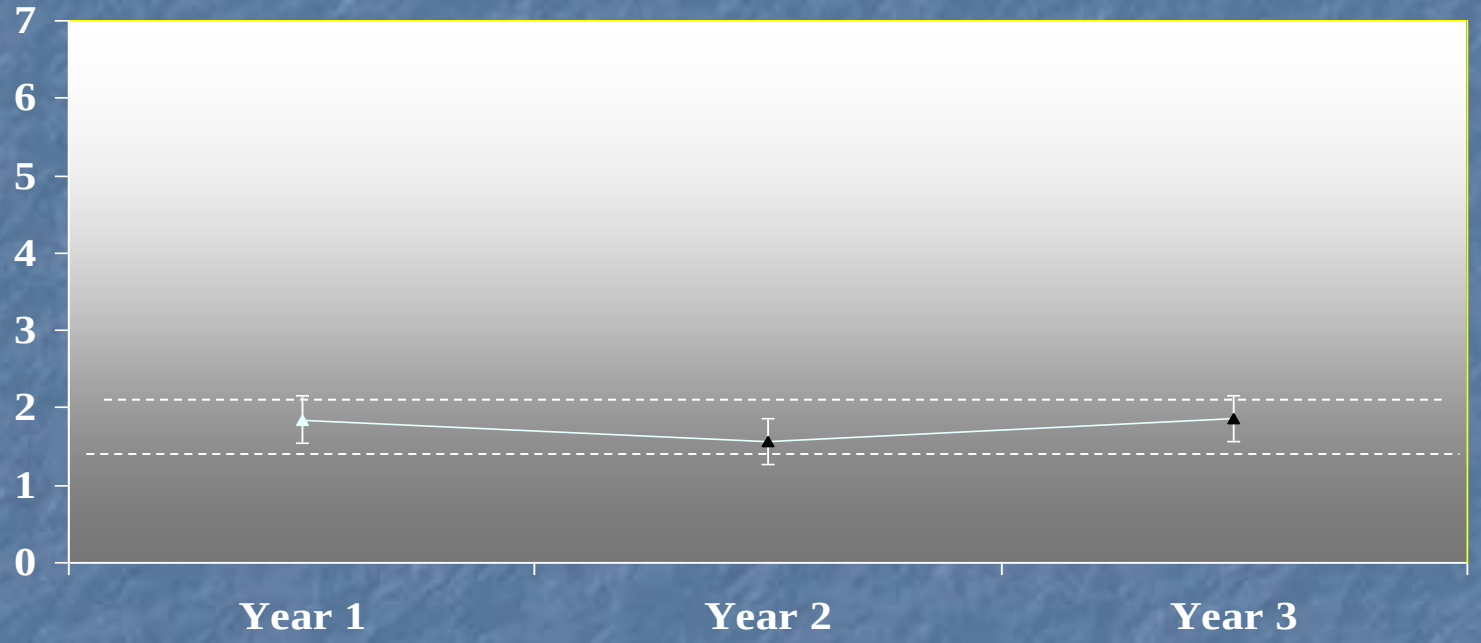


p values<0.0001 except psychosis p <0.01

N=34, aged 5-18, nonrandomized trial, RAINBOW + med algorithm vs TAU

Translation to Practice…Psychosocial treatment may help to alleviate symptoms and improve functioning. It is likely an important ingredient of treatment model.

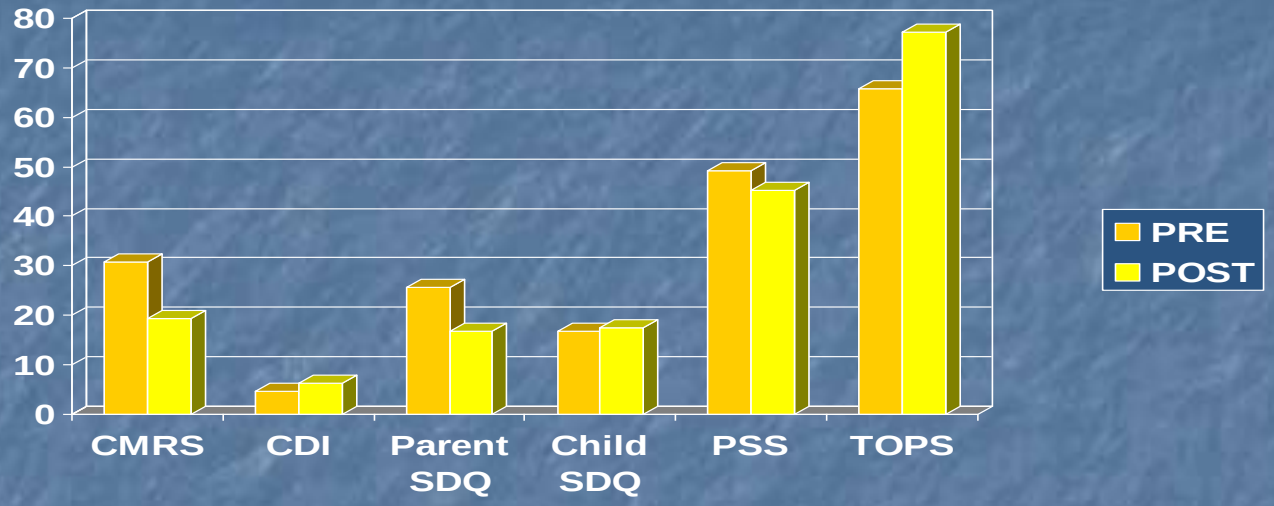
Maintenance: CGI-BP Overall Scores at Year 1,2 and 3 in Reference to Post-treatment, *West, Henry & Pavuluri, 2007, JAACAP*



Translation to Clinical Practice….Maintenance therapy may help patients remain engaged in treatment and sustain initial treatment effects

RAINBOW Group

West et al, 2009, J Canadian Acad Child Adol Psychiatr



CMRS = Child Mania Rating Scale; CDI = Children's Depression Inventory; SDQ = Strengths and Difficulties Questionaire; PSS = Parenting Stress Scale; TOPS = Therapy Outcomes Parent Scale

Translation to Clinical Practice….Group psychotherapy may help alleviate symptoms, improve children's psychosocial functioning, and increase parent's knowledge and efficacy around disorder.

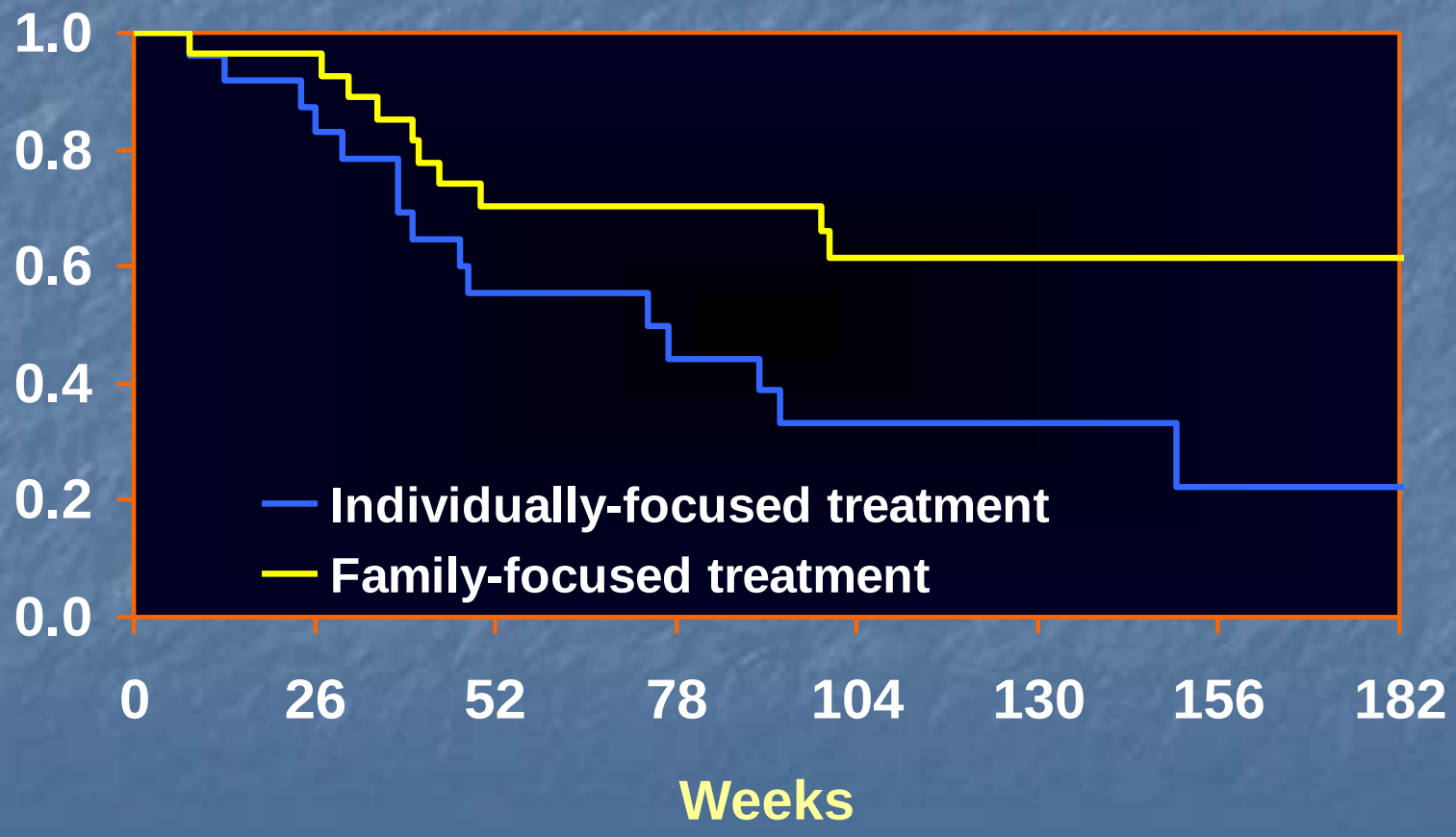
Psychoeducation: Adults w/ BPD

Miklowitz et al, Arch Gen Psychiat 2003

- Colorado study, *N*=101
  - Delays relapse: 74 vs 53 weeks
  - Reduces mood symptoms: gain begins at 6 mos, continue through 24 mos

Adults—BPD *Rea et al, JCCP, 2003*

- UCLA study, *N*=53: delays rehospitalization



Adolescents w/ BPD

Miklowitz et al, J Aff Disorders, 2004

- *N*=20, open trial
- Improved mood and behavior following treatment—ratings every 3 mos (0-12)
  - K-SADS Depression, 2.1→1.7
  - K-SADS Mania, 2.4→1.8
  - CBCL Behavior Problems, 86 →46
- Randomized trial underway

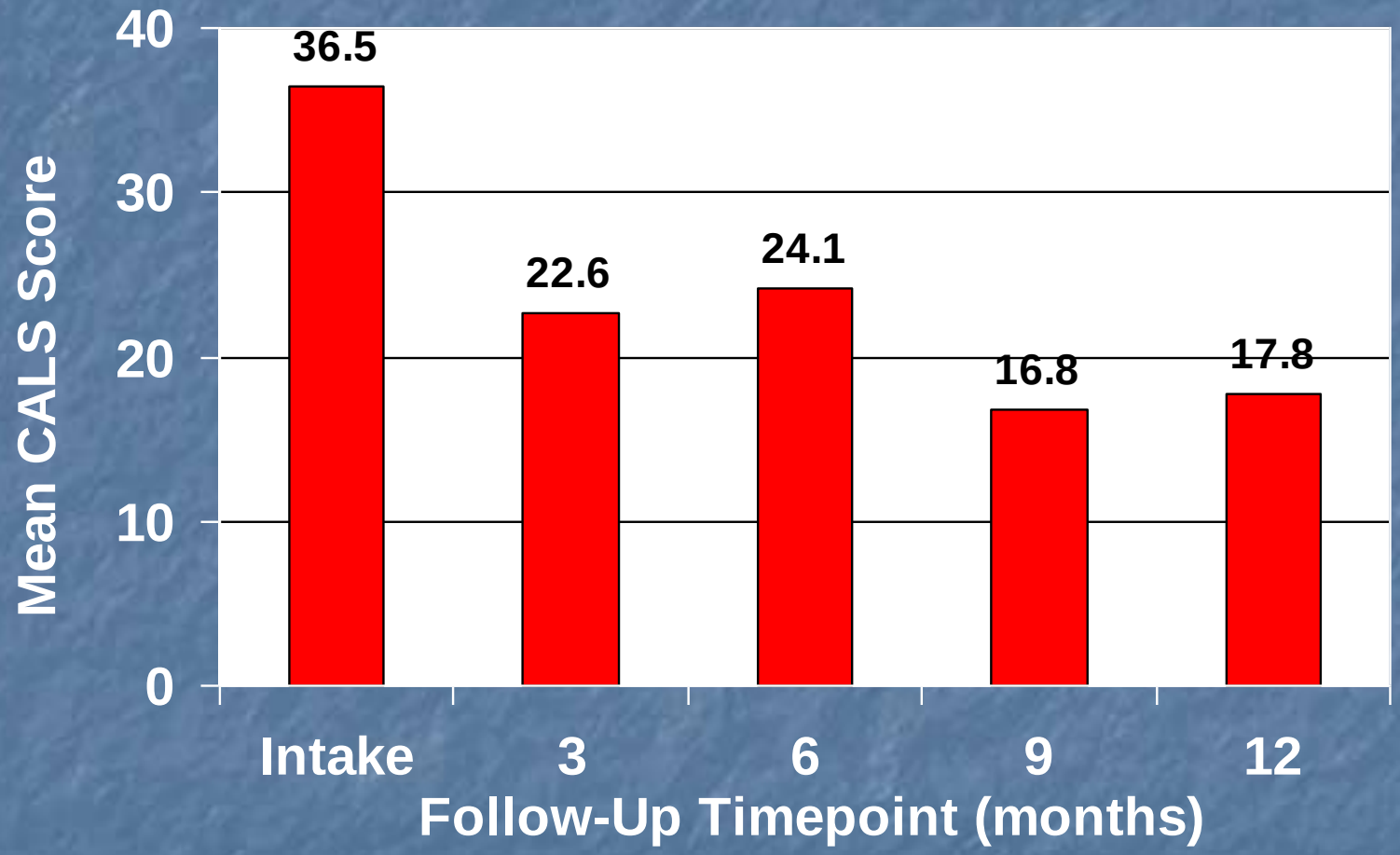
DBT for Adolescents with Bipolar Disorder: Open Pilot Study Demographics

Tina Goldstein et al, 2007, JAACAP

	DBT (n=10)
Age (SD) Range 14-18	15. 8 (1.5)
Female Male	8 (80%) 2 (20%)
Bipolar I Bipolar II Bipolar NOS	7 (70%) 2 (20%) 1 (10%)
# Past Hospitalizations (SD)	2.2 (2.2)
# Past Suicide Attempts (SD)	1.4 (1.3)
Age of Illness Onset (SD)	13.2 (1.7)

DBT Open Pilot Study

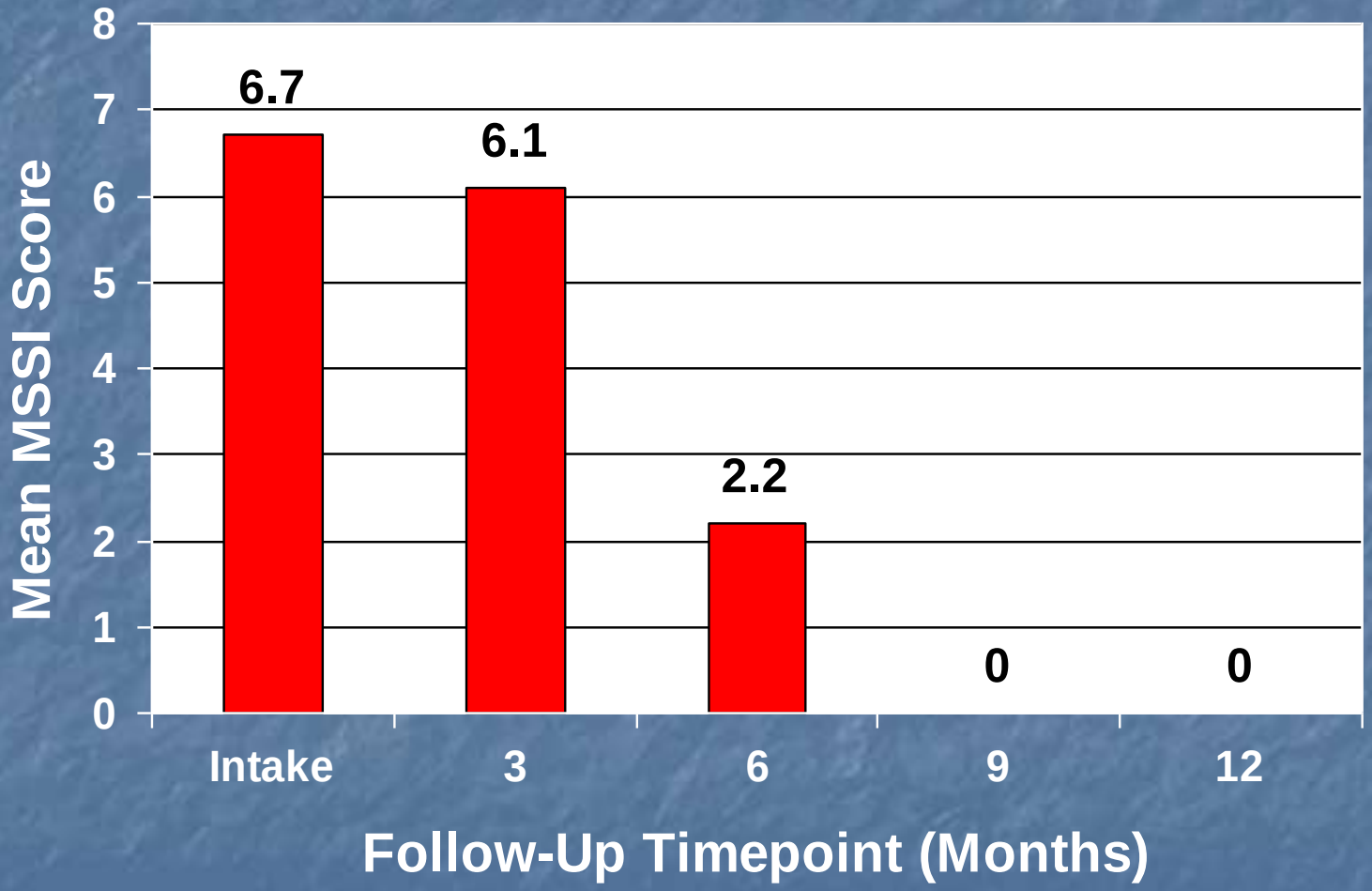
Emotional Dysregulation Improves Over 1 Year of DBT Treatment



Pre/post paired $t = 3.0$, $p = .02$
Childhood Affective Lability Scale (CALS)
Goldstein et al., 2007

DBT Open Pilot Study

Suicidality Decreases Over 1 Year of DBT Treatment



Pre/post paired $t = 2.5$, $p = .04$, Cohen's $d = 1.2$
Modified Scale for Suicidal Ideation (MSSI)
Goldstein et al., 2007

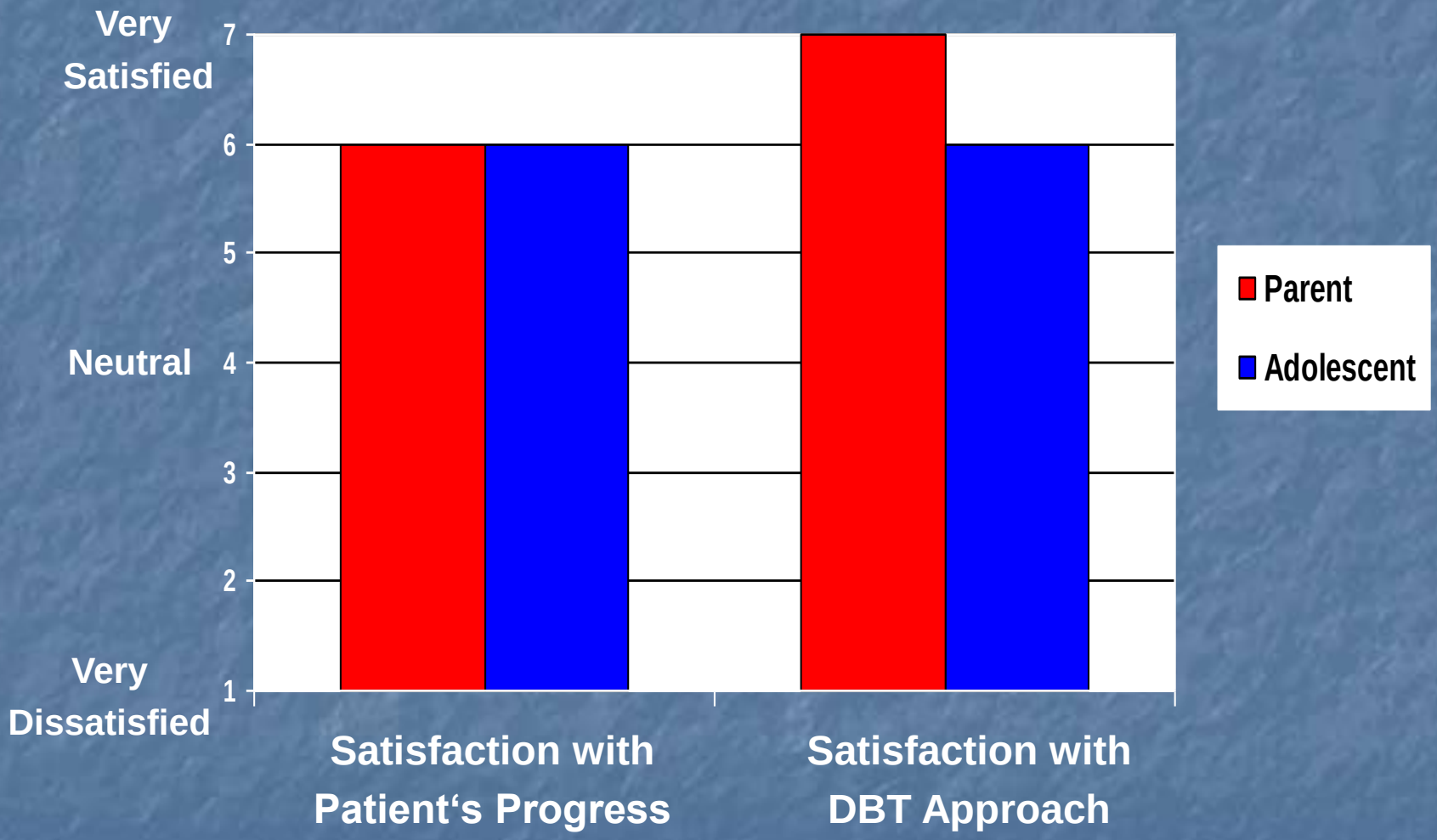
DBT Open Pilot Study

Additional Domains of Improvement with 1 year of DBT Treatment

- Hospitalizations
- Depressive symptoms
- Non-suicidal self-injurious behavior
- Over 90% of scheduled sessions attended

Goldstein et al., 2007

DBT Open Pilot Study
High Post-DBT Treatment Satisfaction Ratings



Goldstein et al., 2007

DBT for Adolescents with BP: Open Pilot Study II

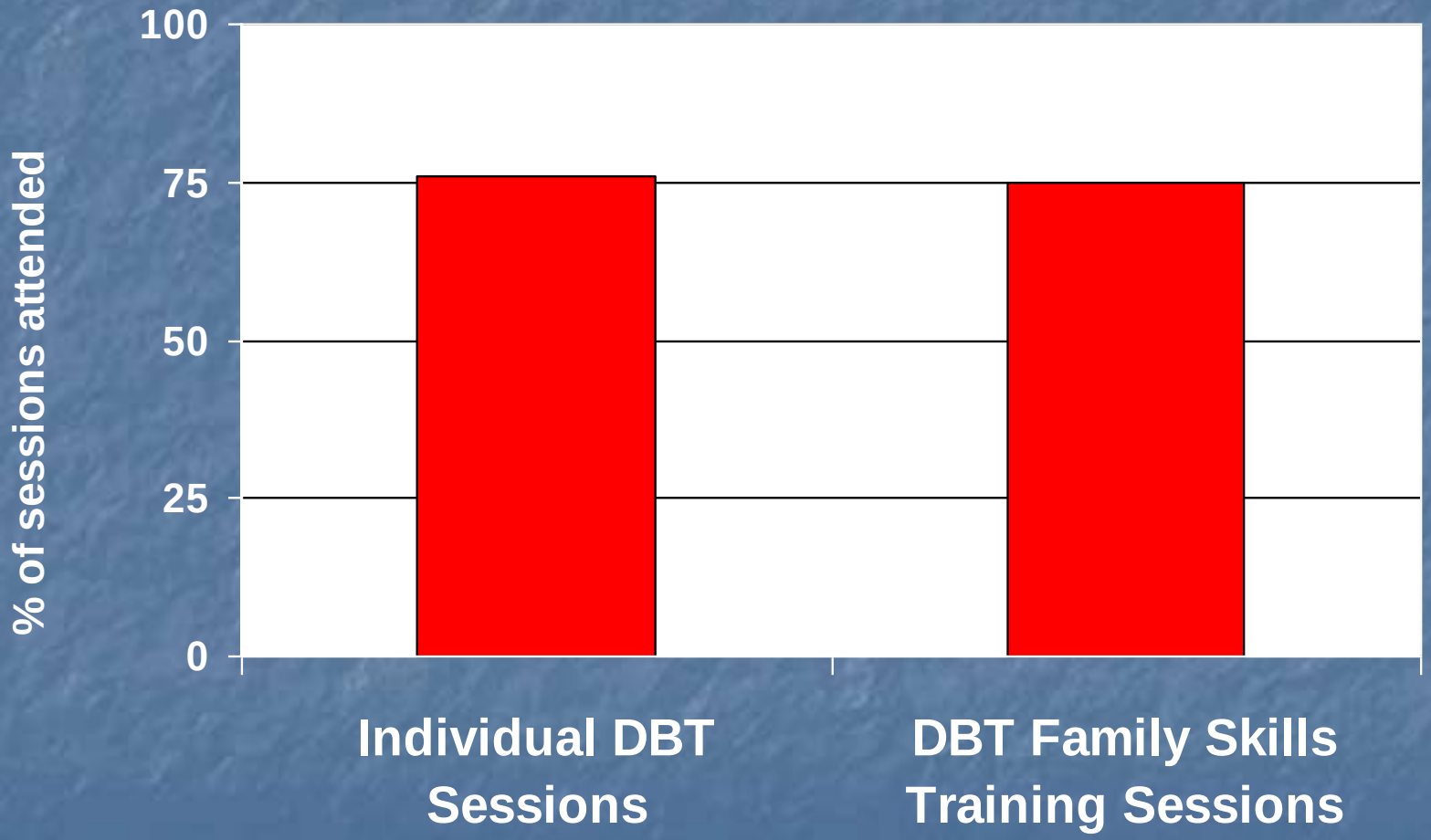
T Goldstein et al, in preparation

- **Manualized treatment**
- **DBT Consultation Team**
- **Assessment of Axis II pathology**
- **Behavioral and psychophysiological assessment of emotional dysregulation**

DBT for Adolescents with Bipolar Disorder: Open Pilot Study II *Goldstein et al, in preparation*

	DBT (n=10)
Age (SD) Range 13-18	16.1 (2.1)
Female Male	8 (80%) 2 (20%)
Bipolar I Bipolar II Bipolar NOS	4 (40%) 2 (20%) 4 (40%)
# Past Hospitalizations (SD)	1.6 (3.0)
# Past Suicide Attempts (SD)	1.1 (1.0)
Age of Illness Onset (SD)	12.3 (3.9)

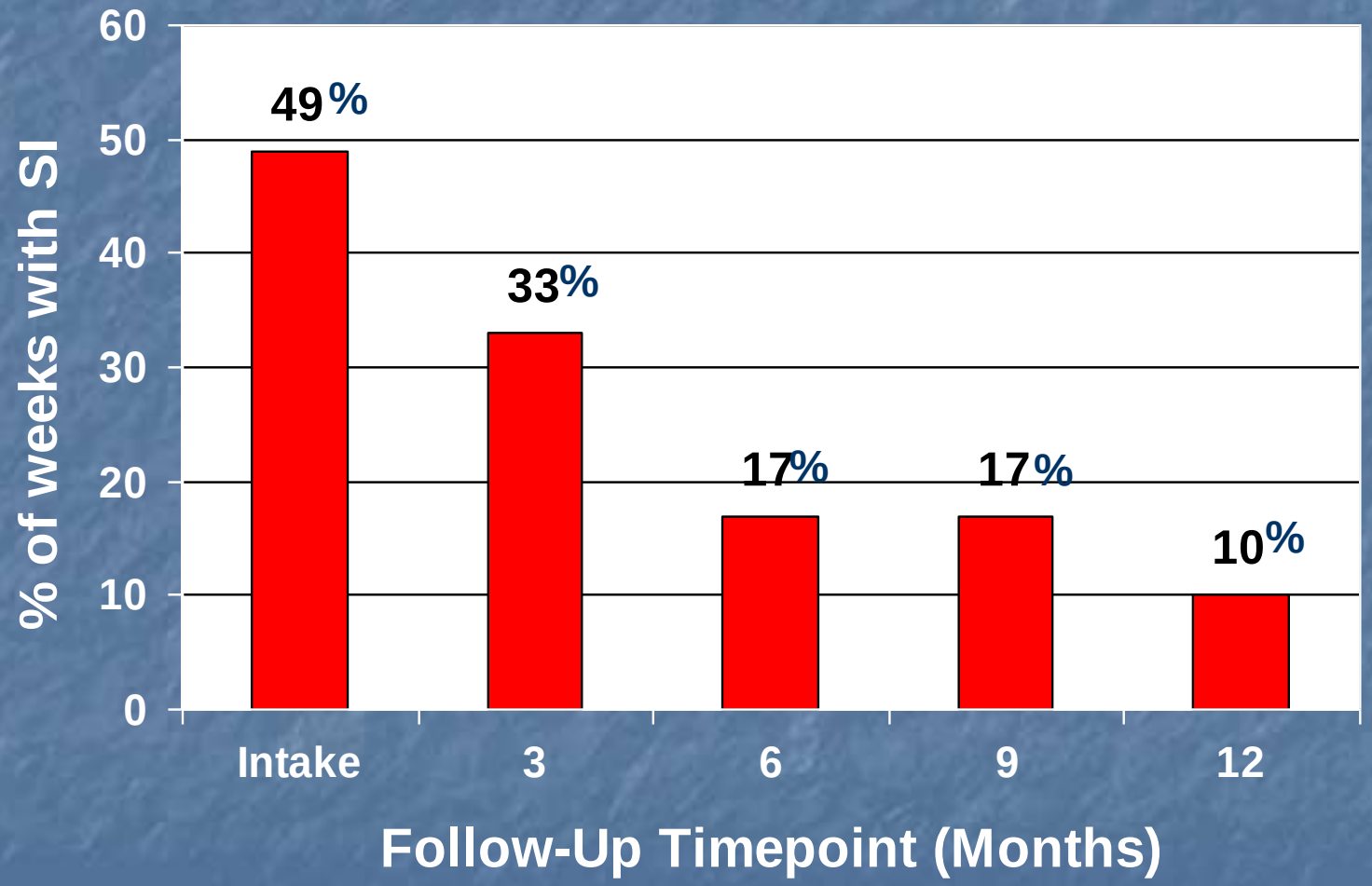
DBT Open Pilot Study II
Treatment Attendance (n=10)



Goldstein et al., in preparation

DBT Open Pilot Study II

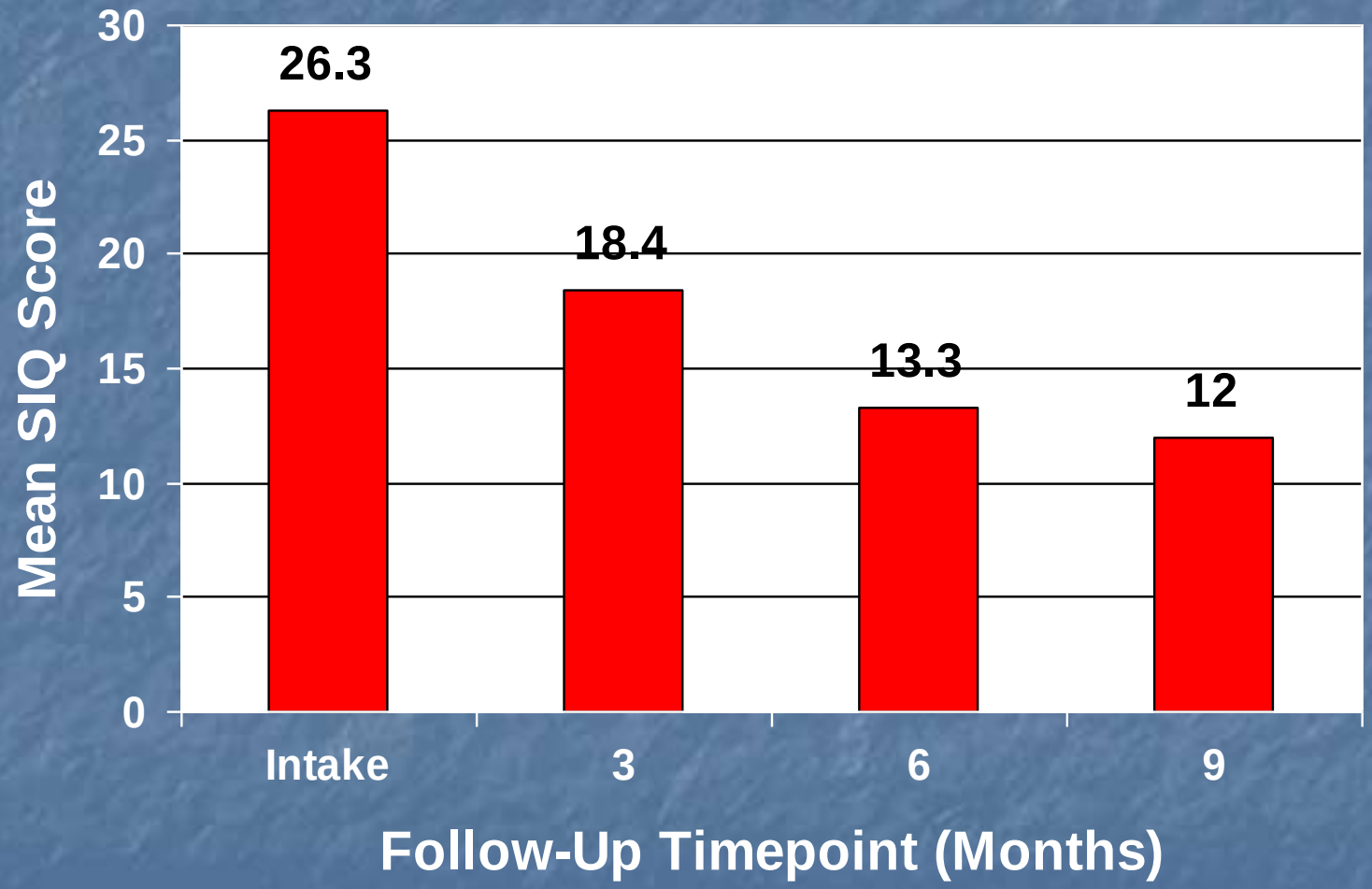
Suicidal Ideation Decreases Over 1 Year of DBT Treatment



Adolescent Longitudinal Interval Follow-Up Examination
Weekly Suicidal Ideation Ratings (A-LIFE; Keller et al.,1987)
Goldstein et al., in preparation

DBT Open Pilot Study II

Suicidality Decreases Over 1 Year of DBT Treatment



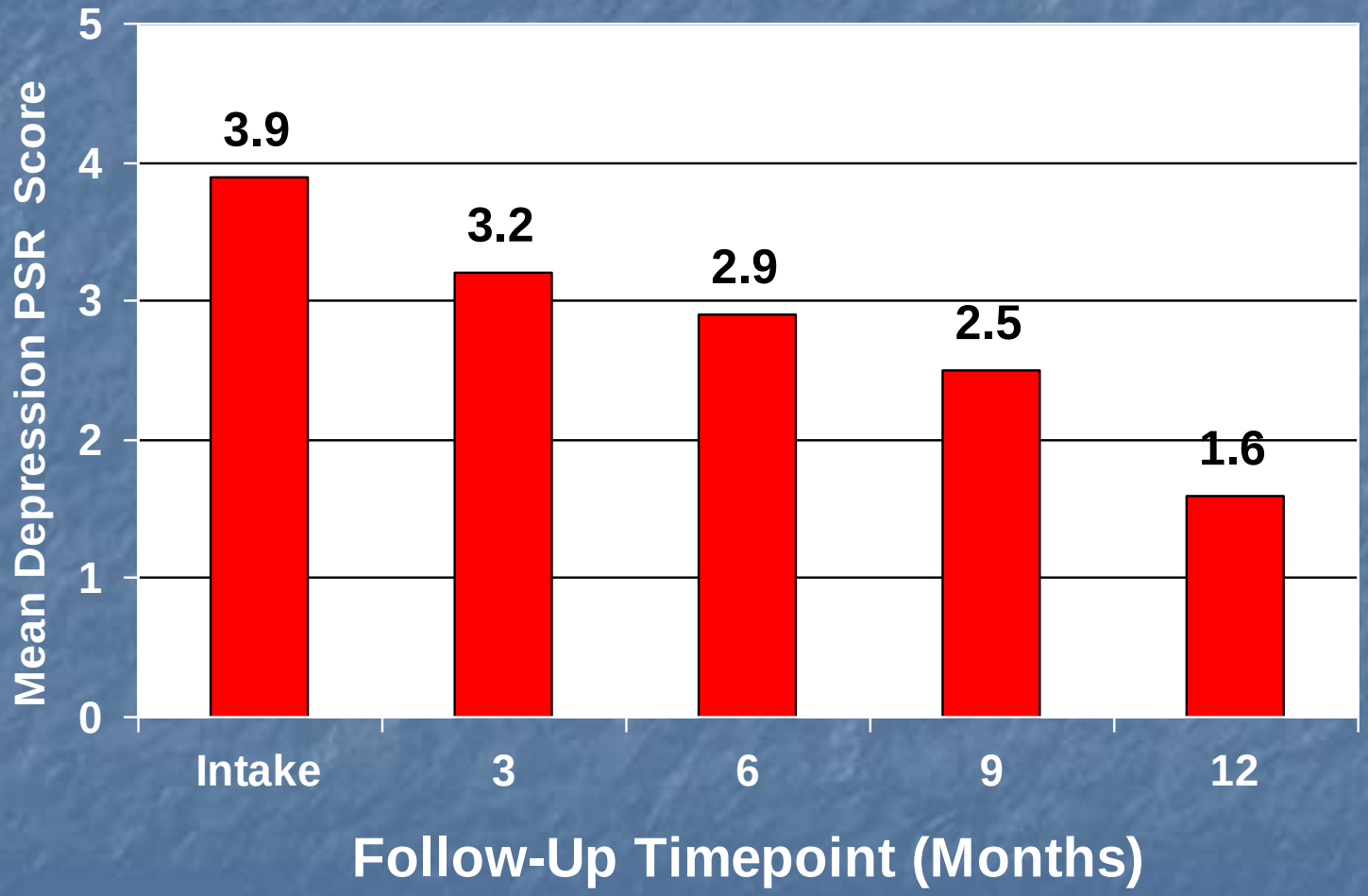
Pre/post paired $t = 3.9$, $p < .05$

Suicidal Ideation Questionnaire-Jr (SIQ-Jr)

Goldstein et al., in preparation

DBT Open Pilot Study II

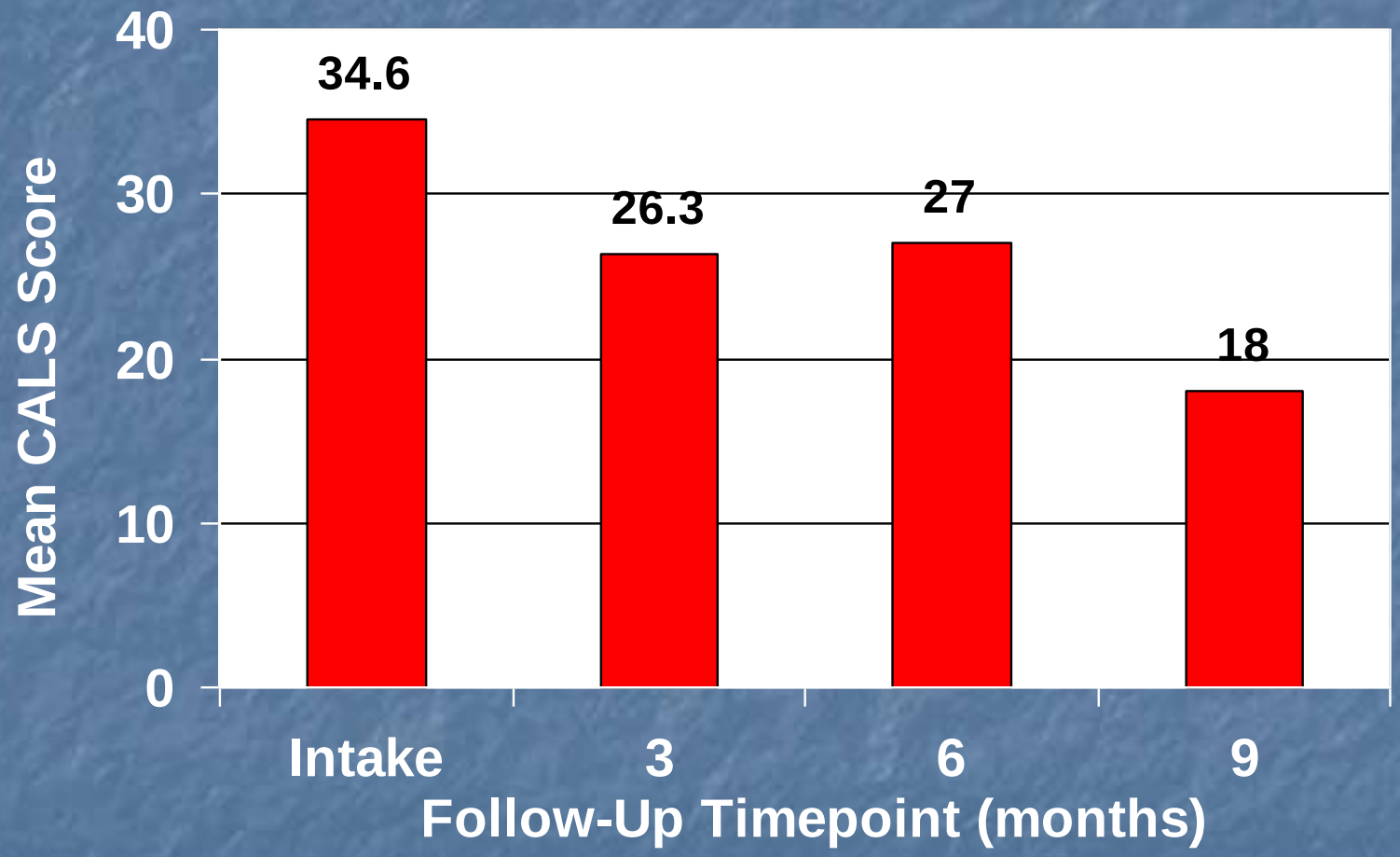
Depression Improves Over 1 Year of DBT Treatment



A-LIFE Psychiatric Status Ratings (PSR)
Goldstein et al., in preparation

DBT Open Pilot Study II

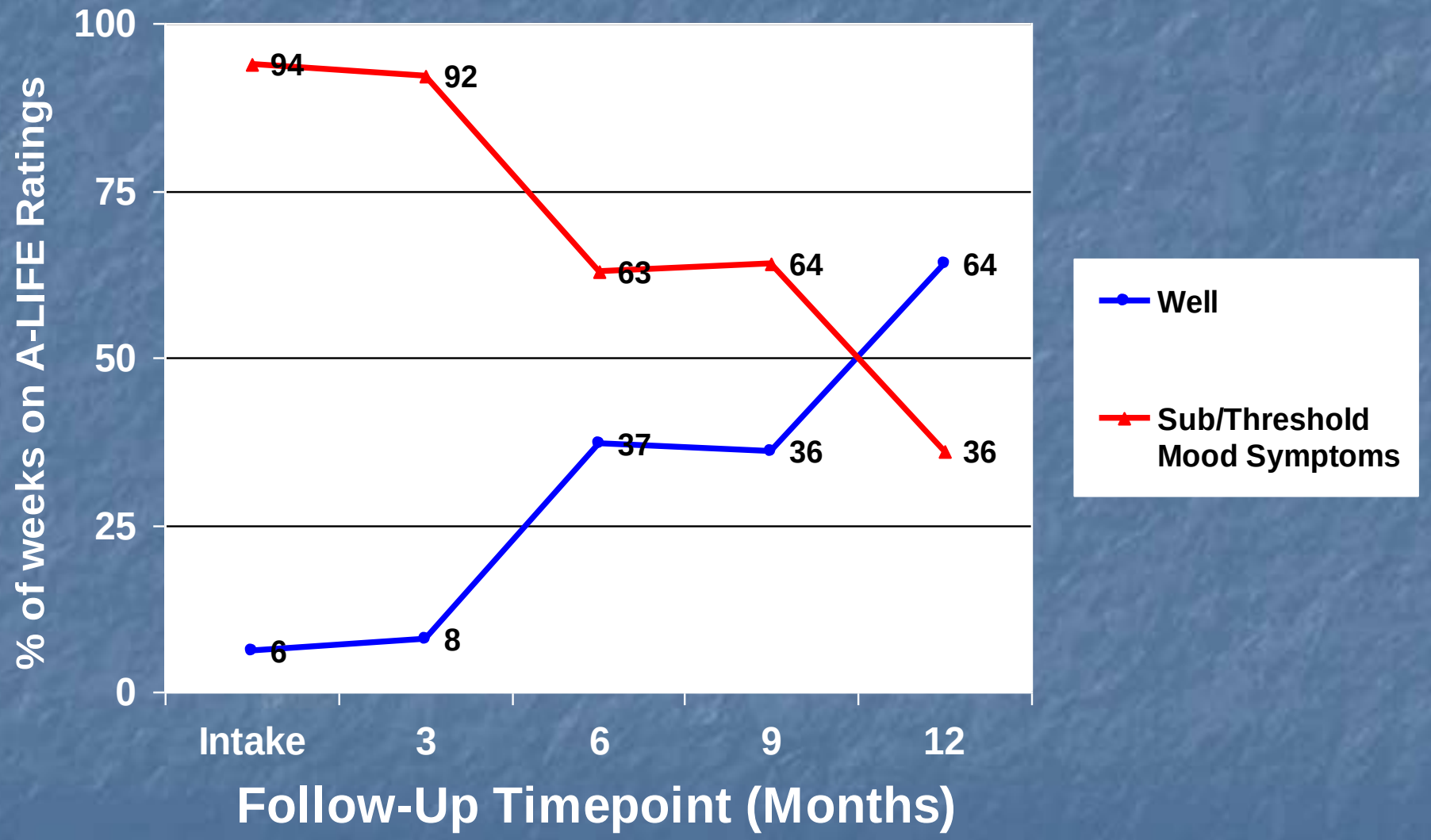
Emotional Dysregulation Improves Over 1 Year of DBT Treatment



Pre/post paired $t = 4.3$; $p = .02$
Childhood Affective Lability Scale (CALS)
Goldstein et al., in preparation

DBT Open Pilot Study II

% Time Well Increases Over 1 Year of DBT Treatment



A-LIFE Psychiatric Status Ratings (PSR)
Goldstein et al., in preparation

Interpersonal & Social Rhythm Therapy-Adolescents (IPSRT-A)

Hlastala et al, 2010, Depression & Anxiety

- N=12, adolescents, BPSD
- 16-18 session adjunctive tx over 20 wks
- 11/12 completed tx, 97% sessions attended
- Significant ↓ in manic, depressive and general psychiatric symptoms; ↑ in global functioning
- Effect sizes: medium-large to large

The OSU Psychoeducation Program

- Orientation
  - Nonblaming/growth-oriented
  - Biopsychosocial—uses systems and cognitive-behavioral techniques
- Education + Support + Skill Building➔ Better Understanding ➔ Better Treatment + Less Family Conflict ➔ Better Outcome
- Three formats
  - Multi-family psychoeducational psychotherapy (MF-PEP)
  - Individual family psychoeducational psychotherapy (PEP)
  - workshops

ODMH Study

Fristad, Goldberg-Arnold & Gavazzi, JMFT, 2003

- 35 children and their parents
  - 54% depressive; 46% bipolar disorders
  - M=3.6 comorbid diagnoses/child (range, 1-7)
  - C-GAS=51 at baseline
  - 29/35 (83%) on meds
  - 8-11 years old (average, 10.1 yrs)
  - 77% boys
- 6 month wait-list design
- 6 sessions, 75 minutes/session, manual-driven treatment

ODMH Findings

Fristad, Goldberg-Arnold & Gavazzi, JMFT, 2003

- Parents
  - *Increased* knowledge of mood disorders
  - *Increased* positive family interactions
  - *Increased* efficacy in seeking treatment
  - *Improved* coping skills
  - *Increased* social support
  - *Improved* attitude toward child/treatment
- Children
  - *Increased* social support from parents
  - *Increased* social support from peers (trend)

Multi-Family Psychoeducational Psychotherapy (MF-PEP)

Fristad, Verducci, Walters & Young (2009) Arch Gen Psych, 66(9): 1013-1021

- Children aged 8-11 (any mood disorder)
- 8 sessions, 90 minutes each
  - Begin/end with parents/children together
  - Middle (largest) portion-separate groups
    - Children receive *in vivo* social skills training (in gym) after formal "lesson" is completed
  - Therapists: 1-parents; 2-children
  - Families receive projects to do between sessions

8 Session Outline--Parents

1. Welcome, symptoms & disorders
2. Medications
3. "Systems": school/treatment team
4. Negative family cycle, WRAP-UP 1st ½
5. Problem solving
6. Communication
7. Symptom management
8. WRAP-UP 2nd ½ of program & graduate

8 Session Outline--Children

1. Welcome, symptoms & disorders
2. Medications
3. "Tool kit" to manage emotions
4. Connection between thoughts, feelings and actions (responsibility/choices)
5. Problem solving
6. Nonverbal communication
7. Verbal communication
8. Review & GRADUATE!

Many Contributors…

- ***Parent Group Therapists***
  - Jill S. Goldberg-Arnold, PhD*
  - Catherine Malkin, PhD
  - Kitty W. Soldano, PhD, LISW
- ***Child Group Therapists***
  - Barb Mackinaw-Koons, PhD
  - Nicholas Lofthouse, PhD
  - Colleen Quinn, MS
  - Jarrod Leffler, PhD
- ***Graduate Student Interviewers/ Co-Therapists/Lab Members***
  - Kate Davies Smith, PhD
  - Kristen Holderle Davidson, PhD
  - Dory Phillips Sisson, PhD
  - Nicole Klaus, MA
  - Jenny Nielsen, MA
  - Matthew Young, BA
  - Ben Fields, MEd
  - Colleen Cummings, BA
  - Radha Nadkarni-DeAngelis, BA
- ***Data Analysis/Management***
  - Joseph S. Verducci, PhD
  - Cheryl Dingus, MS
  - Kimberly Walters, MS
  - Elizabeth Scheer, BS
  - Hillary Stewart, BA
  - Christina Theodore-Oklata, BA
  - 693 Students
- ***Graduate Student Interviewers/ Co-Therapists***
  - Kristy Harai, PhD
  - Anya Ho, PhD
  - Rita Kahng, MA
  - Becky Hazen, PhD
  - Kari Jibotian, MA
  - Lauren Ayr, MA
- ***165 Families***

*Consensus Conference Reviewer

MF-PEP Recruitment—N=165

- 225 families screened
- 203 (90%) passed the screen
- 171 (84%) arrived at baseline assessment
- 165 (96%) met study criteria
- Referral sources:
  - 62% health care providers
  - 19% media
  - 19% other
- Rural/geographically remote, 22% (round trip, 56±64 mi; range=2-344 mi)

Study Sample - Family Characteristics

Variable	MF-PEP	
	MF-PEP+TAU (*n*=78)	WLC+TAU (*n*=87)
Family Structure		
Married bio par	46%	40%
Step-family	17%	23%
Married adop par	5%	7%
Single bio par	21%	17%
Single adop par	1%	1%
Other	10%	12%
Income	<20K to >100K M=40-59K	<20K to >100K M=40-59K

Demographics: MF-PEP Total Sample & BPD Sub-Sample

Variable	TOTAL *N*=165	BPD *N*=115
Comorbid D/O		
Anxiety	67%	70%
Behavior	97%	95%
ADHD	87%	80%
Two-parent families (includes step-families)	74%	65%
Average round trip	56 mi (range: 2-344)	70 mi (range: 14-344)

Demographics—Various Samples

Variable	BPD-ITT n=115	Treated BPD n=89
Age	9.8	9.7
% Male	72	69
% White	91	94
% Fam Hx-Mania	53	55
% Fam Hx-Depression	73	72
% Fam Hx-Either	84	83

NIMH Study Design, N=165

Group[a]	Time 1 Month 0	Time 2 Month 6	Time 3 Month 12	Time 4 Month 18
MF-PEP + TAU[b]	Baseline: Pre-treatment	Follow-up	Follow-up	Follow-up
WLC + TAU[c]	Baseline	Follow-up	Pre-treatment	Follow-up

[a]Families were enrolled in 11 sets of 15 (7-MFPG/8-WLC) = 165 families

[b]Multi-Family Psychoeducational Psychotherapy + Treatment As Usual

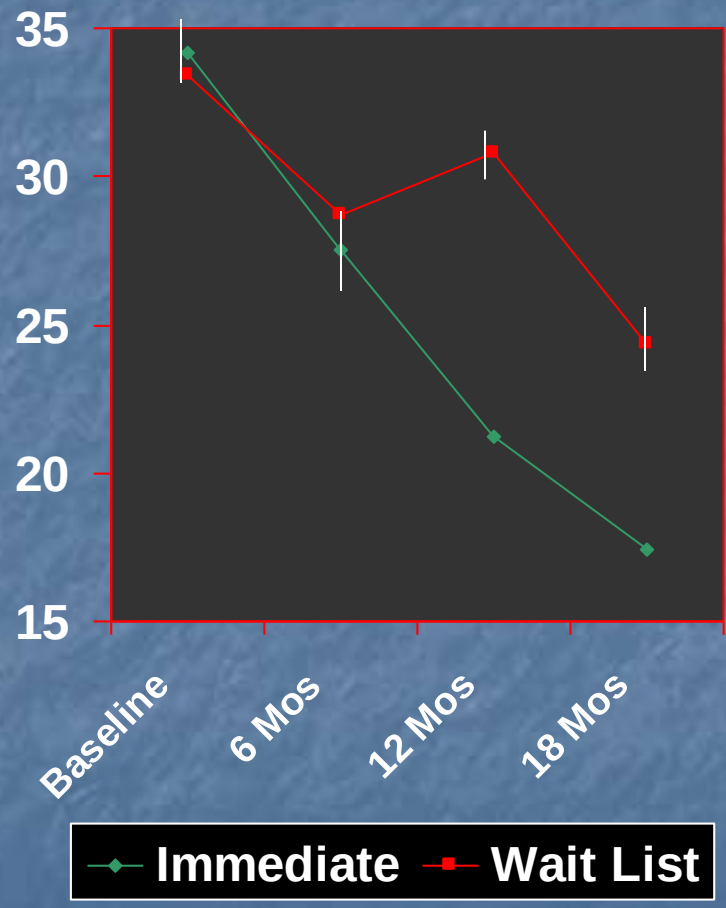
[c]Wait-List Control + Treatment As Usual

Outcome Measure

- MSI=Mood Severity Index
  - CDRS-R + MRS (equal contributions)
  - <10: minimal symptoms
  - 11-20: mild symptoms
  - 21-35: moderate symptoms
  - >35: severe symptoms

Mood Severity Index (Parent, Current) MF-PEP BPD Sample

- N=115, all BPD
  - n=55 Immediate
  - n=60 Wait List
- Linear Mixed Effects Modeling
  - X^2=6.19, p<.02
  - Slope difference= -7.76/12 mos
- Pre-post Imm=WLC



Mood Severity Index (Parent, Current) MF-PEP Treated BPD Sample

- N=89
  - n=54 Immediate
  - n=35 Wait List
- Linear Mixed Effects Modeling
  - X^2=5.91, p<.02
  - Slope difference= -7.96/12 mos
- Pre-Post Imm=WLC

Impact of MFPG on Service Utilization & Mood Severity

Mendenhall, Fristad & Early, 2009, J Cons Clin Psychol

- Parental attitudes toward treatment changes with MF-PEP; impacts quality of services sought
- Improved quality of services leads to better mental health outcomes
- MF-PEP appears to improve quality of services utilized & child's mood severity over time as designed to do. It helps parents become better consumers.

Anecdotal Evaluations--Parents

- *No matter how bad the situation is…there is hope and treatment. Don't give up. This program was an eye opener for me. I also was encouraged and relieved to find out that I was not alone.*
- *Listen to what they are saying. They can really help you. Learn what is going on with your child. Stay focused on what is going with your child and do not give up on your child.*

Anecdotal Evaluations--Children

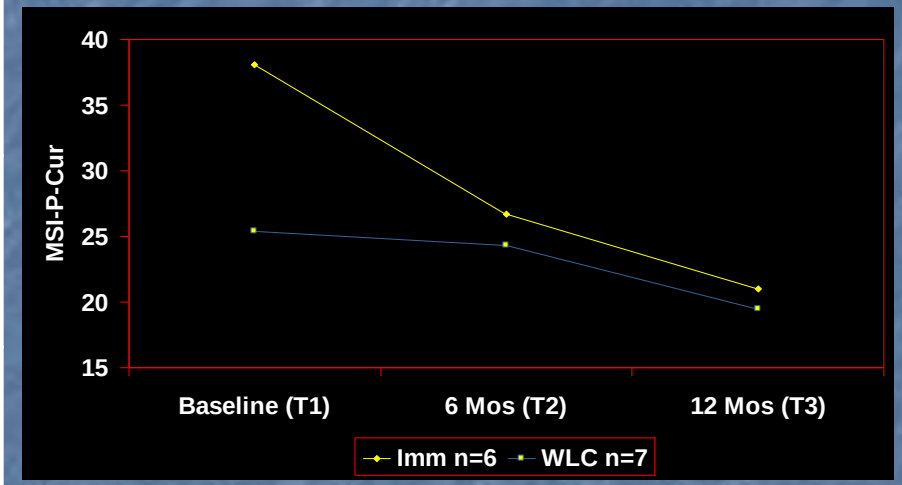
- *You get to meet new people you never knew before. They help you with your symptoms.*
- *They're nice and they're helpful. And you guys support us and give us snacks. You've been nice to us and treated us with respect.*
- *It really helps out if you let it.*

Individual-Family Psychoeducation (IF-PEP) *OH Dept Mental Health, 2002-2004*

- N=20
- 16 sessions
  - Alternate child and parent with parent
  - Same content + Healthy Habits
    - diet, exercise, sleep
- Comparable design to MFPG

IF-PEP Primary Outcome: MSI-Parent-Cur—Power Analyses

Variable	N per Condition	Effect Size
MSI-Parent-CUR T1-T2	64	.45
MSI-Parent-CUR T1-T3	36	.60



IF-PEP: Parent Evaluations

- Anonymous evaluations completed after treatment
- Parents report (1-5 rating, overall 1.6)
  - ↑ knowledge re: symptoms, medication, accessing treatment
  - ↑ skills re: working with schools and treatment team, managing symptoms at home
  - Feeling supported/not blamed

IF-PEP: Children's Evaluations

- 1-5 Rating Scale
  - Overall rating, 1.7
  - Item Range: 1.3 (therapist) to 2.2 (learned about medications)
- ↑ knowledge re: mood symptoms, medication
- ↑ ability to get along with family, friends and at school
- ↑ skill re: symptom management
- ↑ support/ ↓ isolated, "not the only one"
- parents' behavior toward them better

IF-PEP 24: Two Case Studies

Leffler, Fristad & Klaus, 2010, J Fam Psychotherapy

- Expanded from 16 to 24 sessions
  - 1 sibling session
  - 1 additional systems-of-care (school, mental health) session
  - 1 school professionals session (face-to-face or conference call attendance)
  - 2 Healthy Habits sessions
  - 3 additional "in-the-bank" sessions

IF-PEP 24: Case Studies

Leffler, Fristad & Klaus, 2010, J Fam Psychotherapy

- 11 yr old girl "Jane"
- Long treatment history
  - sertraline, 3 mos: akathesia, elevated mood, dangerous behaviors
  - divalproex sodium, clonidine, quetiapine, ages 9-11: no significant improvement
  - fluvoxamine and clonazapam: for compulsive behavior and agitation
  - School and private therapeutic support

IF-PEP 24: Case Studies

Leffler, Fristad & Klaus, 2010

- 10 yr old boy "John"
- Extensive treatment history
  - 2 yrs, divalproex sodium (trial of methylphenidate)
  - 4 yrs, risperidone
  - 6 yrs, atomoxetine
  - 8 yrs, trials of methylphenidate, amphetamine/dextroamphetamine, clonidine, lithium, and aripiprazole
  - 9 yrs, trials of quetiapine and escitalopram
  - 10 yrs, oxcarbazepine
  - very significant weight gain
  - Extensive psychotherapy history

Jane's Diagnoses

Leffler, Fristad & Klaus, 2010

- BP-1: Most Recent Episode Mixed: current moderate to severe symptoms: dysphoric mood, irritability, psychomotor agitation, increased appetite, strong craving for sweets, weight gain, rejection sensitivity, irritability, motor hyperactivity, derailment, mood lability
- ADHD-Combined
- ODD
- GAD
- OCD

John's Diagnoses

Leffler, Fristad & Klaus, 2010

- BP-1 Most Recent Episode Hypomanic:
  - current mild symptoms: irritability, negative self-image, elevated mood, uninhibited people seeking, hypersexuality
- ADHD-combined
- ODD
- Specific Phobia-dark & heights
- SAD

Jane's Treatment Response

Measure	Pre	Post	Change
C-GAS: Current	36	48	Improved
C-GAS: Worst	31	41	Improved
KMRS	45	28	Improved
KDRS	67	55	Improved
TBQ-P	3.9	4.2	Improved

John's Treatment Response

Measure	Pre	Post	Change
C-GAS: Current	35	40	Improved
C-GAS: Worst	15	38	Improved
KMRS	48	28	Improved
KDRS	43	55	Worsened
TBQ-P	3.3	4.2	Improved

Keynote Goals

- Participants will learn:
  - Rationale for biopsychosocial treatment
  - Summary of evidence-based psychotherapy
  - ***Resources for families of children with BPSD***

OATS-Depression, 2011-2014, NIMH R34

- OATS=Omega3 and Therapy Study
- Kayden Healy, ***614-293-4908***
- N=60
- 12 week trial
- 8-14 years
- MDD, dysthymic d/o, D-NOS
- No meds/psychotherapy in previous month except stable stimulants, sleeping aids

	Omega3	Placebo	TOTAL
IF-PEP	15	15	30
Active Monitoring	15	15	30
TOTAL	30	30	60

OATS-Bipolar, 2011-2014, NIMH R34

- OATS=Omega3 and Therapy Study
- Kayden Healy, ***614-293-4908***
- N=60
- 12 week trial
- 8-14 years
- BP-NOS, cyclothymic disorder
- No meds/psychotherapy in previous month except stable stimulants, sleeping aids

	Omega3	Placebo	TOTAL
IF-PEP	15	15	30
Active Monitoring	15	15	30
TOTAL	30	30	60

Books for Children

- Brandon & the Bipolar Bear -- *T. Anglada*
- My Bipolar, Roller Coaster, Feelings Book & Workbook—*B. Hebert*
- The Storm in My Brain -- Child & Adolescent Bipolar Foundation (CABF): 1-847-256-8525, www.bpkids.org
- Kid Power Tactics for Dealing with Depression -- *N. & S. Dubuque*
- Matt, The Moody Hermit Crab -- *C. McGee*
- Anger Mountain—*B. Hebert*

Books for Adolescents

- When Nothing Matters Anymore: A Survival Guide for Depressed Teens -- *B. Cobain*
- Recovering from Depression: A Workbook for Teens -- *M. E. Copeland & S. Copans*
- Conquering the Beast Within: How I Fought Depression & Won…& How You Can, Too -- *C. Irwin*
- Mind Race: A Firsthand Account of One Teenager's Experience with Bipolar Disorder — *P.E. Jamieson & M.A. Rynn*

Children's Literature

- ***The Phoenix Dance***
  - Dia Calhoun, award winning author
  - Farrar, Straus & Giroux, NY, 2005

  - Based on the Grimms' Twelve Dancing Princesses
  - Explores the experience of bipolar disorder in an adolescent girl

Books for Parents

- Raising a Moody Child: How to Cope with Depression and Bipolar Disorder -- *M.A. Fristad & J.S. Goldberg-Arnold*
- New Hope for Children & Teens with Bipolar Disorder—*B. Birmaher*
- The Childhood Bipolar Disorder Answer Book– *T. Anglada & S.M. Hakala*
- The Bipolar Child --*D. & J. Papalos*
- A Parent's Survival Guide to Childhood Depression -- *S. Dubuque*

Books for Adults

- Out of the Darkened Room: Protecting the Children and Strengthening the Family When a Parent is Depressed -- *W. Beardslee*
- Living Without Depression & Manic Depression --*M. E. Copeland*
- An Unquiet Mind -- *K. Redfield Jamison*
- Thoughts & Feelings: Taking Control of Your Moods & Your Life --*M. McKay, M. Davis & P. Fannin*
- The Bipolar Survival Guide: What You and Your Family Need to Know --*D.J. Miklowitz*
- Winter Blues: Seasonal Affective Disorder- What it is and How to Overcome it -- *N.E. Rosenthal*

More Books to Read

- **General Parenting**
  - How to Talk So Kids Will Listen & Listen So Kids Will Talk -- *Faber & Mazlish*
  - The Explosive Child -- *R. Greene*
  - The Optimistic Child -- *M. Seligman*
- **Sibling Issues**
  - Siblings Without Rivalry -- *A. Faber & E. Mazlish*
  - Turbo Max: A Story For Siblings of Bipolar Children -- *T. Anglada*
- **Understanding Psychiatric Disorders**
  - It's Nobody's Fault --*H. Koplewicz*
- **Understanding Psychiatric Medications**
  - Straight Talk About Psychiatric Medications for Kids ---*T. Wilens*
- **Miscellaneous**
  - I Am Not Sick, I Don't Need a Help! -- *X. Amador & A.L Johanson*
  - The Thyroid Sourcebook -- *M.S. Rosenthal*

Educational Websites

- **Information re: BPD for Parents, Children and Educators**
  - *www.bpchildren.com*
  - *www.schoolbehavior.com*
  - *www.bpkids.org*
  - *www.josselyn.org/Store.htm*
- **Special Education Advocacy** -- *www.wrightslaw.com*
- **National Association of Therapeutic Schools and Programs**—*www.natsap.org*
- **Internet Special Education Resources (ISER)**
  - *www.iser.com/index.shtml*

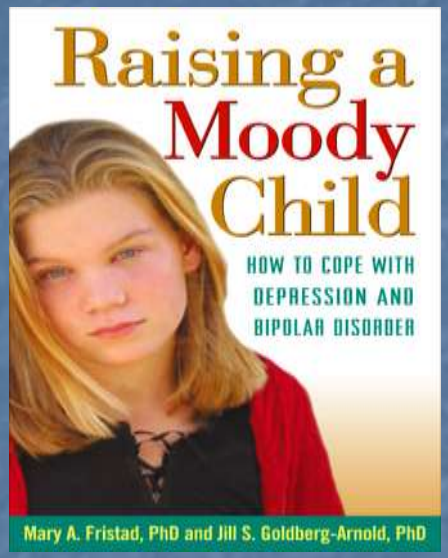
Groups/Websites – Adults, Families & Children

- National Alliance on Mental Illness (NAMI)
  - 1-800-950-6264 www.nami.org
- Mental Health America (NMHA)
  - 1-703-684-7722 www.nmha.org
- Depressive & Bipolar Support Alliance (DBSA)
  - 1-800-826-3632 www.dbsalliance.org
- Families for Depression Awareness (FFDA)
  - 1-718-890-0220 www.familyaware.org
- Child & Adolescent Bipolar Foundation (CABF)
  - 1-847-492-8519, www.bpkids.org
- Juvenile Bipolar Research Foundation (JBRF)
  - 1-866-333-5273, www.bpchildresearch.org
- BP Children
  - 1-732-909-9050 (fax) www.bpchildren.com

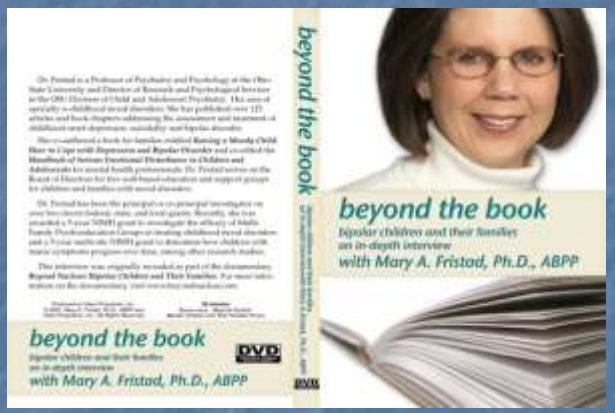
Additional Resources

- **Light Therapy:**
  - Center for Environmental Therapeutics www.cet.org
- **Nutritional Intervention:**
  - EMpower Plus
    - 1-888-878-3467 www.truehope.com
  - Omega-Brite
    - 1-800 383 2030 www.omegabrite.com
- **Evidence-Based Treatments:**
  - **www.effectivechildtherapy.com**
- **PEP Workbooks**
  - **www.moodychildtherapy.com**

PEP & MF-PEP Resources



Books & DVD for parents or therapists—order from www.amazon.com



Treatment Manual—2011, Guilford Press

****

Home Study Course— *for professionals*

Taped 2 day seminar by Dr. Fristad
6 or 12 hours Continuing Education credit
$95 for CD or cassette
$65 for test scoring/reporting
www.jkseminars.com

www.moodychildtherapy.com

Child, Parent & Child Therapist MF-PEP Workbooks

Child & Parent PEP Workbooks

For more information, please go to the main website and browse for workshops on this topic or check out our additional resources.

Additional Resources

Online resources:

1. Society of Clinical Child and Adolescent Psychology website: http://effective childtherapy.com
2.Psychoeducational Psychotherapy: www.moodychildtherapy.com

Books:

1. Kowatch, R.A., Fristad, M.A., & Findling, R. (2009). *Clinical Manual for the Management of Bipolar Disorder in Children and Adolescents*. Washington DC : American Psychiatric Publishing, Inc.

Selected Peer-reviewed Journal Articles:

1. Fristad, M.A., Verducci, J.S., Walters, K., & Young, M.E. (2009). Impact of multifamily psychoeducational psychotherapy in treating children aged 8 to 12 years with mood disorders. *Archives of General Psychiatry, 66*(9), 1013-1021.
2. Goldstein, T.R., Axelson, D.A., Birmaher, B., & Brent, D.A. (2007). Dialectical behavior therapy for adolescents with bipolar disorder: A 1-year open trial. *Journal of the American Academy of Child & Adolescent Psychiatry, 46* (7), 820-830.
3. Hlastala, S. A., Kotler, J. S., McClellan, J. M. and McCauley, E. A. (2010), Interpersonal and social rhythm therapy for adolescents with bipolar disorder: treatment development and results from an open trial. *Depression and Anxiety*, *27,* 457–464.
4. Pavuluri, M.N., Graczyk , P.A., Henry, D.B., Carbray, J.A., Heidenreich, J., & Miklowitz, D.J. (2004). Child- and Family-Focused Cognitive-Behavioral Therapy for Pediatric Bipolar Disorder: Development and Preliminary Results. *Journal of the American Academy of Child & Adolescent Psychiatry, 43* (5), 528-537.
5. West, A.E., Jacobs, R.H., Westerholm, R., Lee, A., Carbray, J., Heidenreich, J., & Pavuluri, M.N. (2009). Child and family-focused cognitive-behavioral therapy for pediatric bipolar disorder: Pilot study of group treatment format. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 18* (3), 239–246.

The Children's Trust

practice into science into practice
DIVISION 53
SOCIETY OF CLINICAL CHILD & ADOLESCENT PSYCHOLOGY

FIU Center for Children and Families