

**National Capitol Area Half-day Conference
on Family-Based Treatment
October 5, 2009**

**Family-based treatment for anorexia
and bulimia nervosa: The Maudsley
Approach**

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Outline of Presentation



- Empirical evidence of FBT for AN
- FBT in clinical practice
- Empirical evidence of FBT for BN
- Status of our current knowledge

Part 1



Empirical Evidence of FBT

Adolescent Anorexia Nervosa

Adolescent AN Treatment Studies

Uncontrolled Studies

- Minuchin et al (1978)
- Dare (1983)
- Martin (1984)
- Stierlin & Weber (1987; 1989)
- Mayer (1994)
- Herscovici & Bay (1996)
- Le Grange & Gelman (1998)
- Lock & Le Grange (2001)
- Wallin & Kronwall (2002)
- Le Grange et al (2005)
- Lock, Le Grange et al (2006)
- Loeb et al (2007)

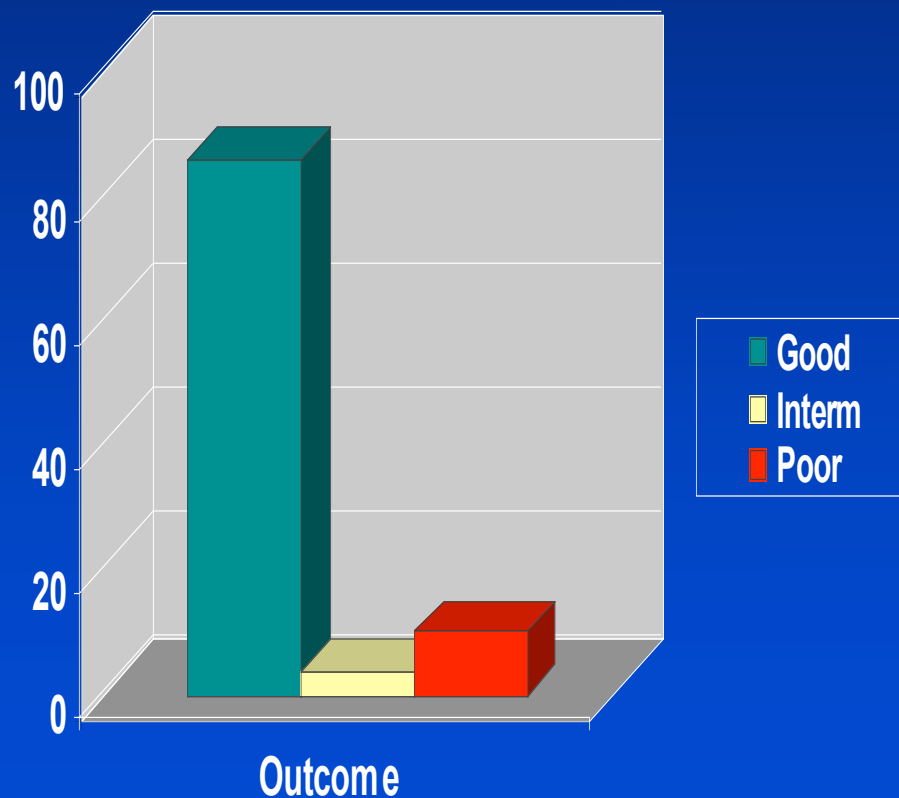
Controlled Studies

- Russell et al (1987)
- Eisler et al (1997)
- Le Grange et al (1992)
- Eisler et al (2000)
- Eisler et al (2007)
- Robin et al (1994)
- Robin et al (1999)
- Lock et al (2005)
- Lock et al (2006)
- Gowers et al (2007)*

Morgan-Russell Outcome Categories

	Good	Interm.	Poor
Weight Restoration	+	+	-
Menstrual Status	+	-	-

First Uncontrolled Study: Structural Family Therapy



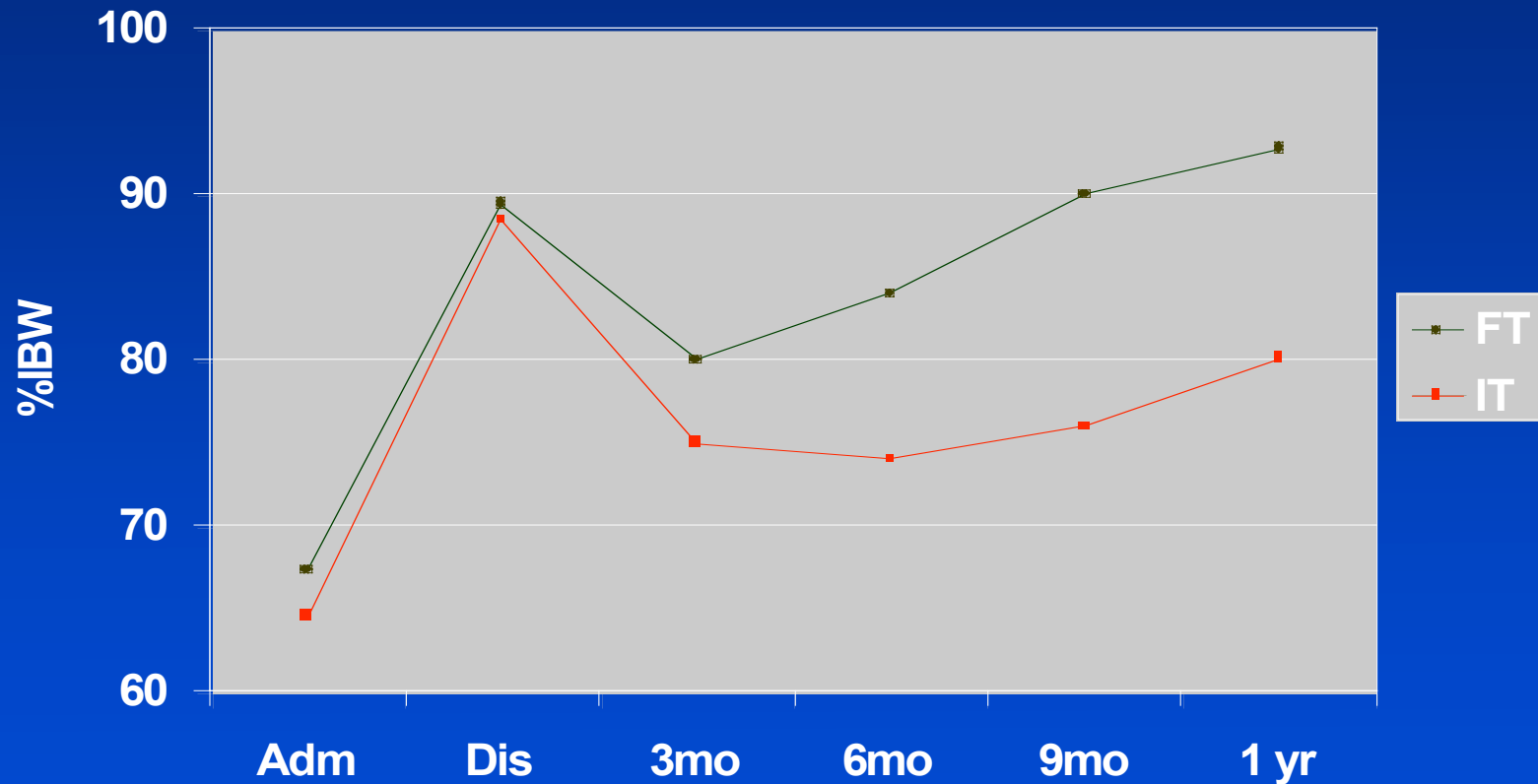
Characteristics

- 53 patients
- Ages 9-21 years
- 16 therapists

Problems

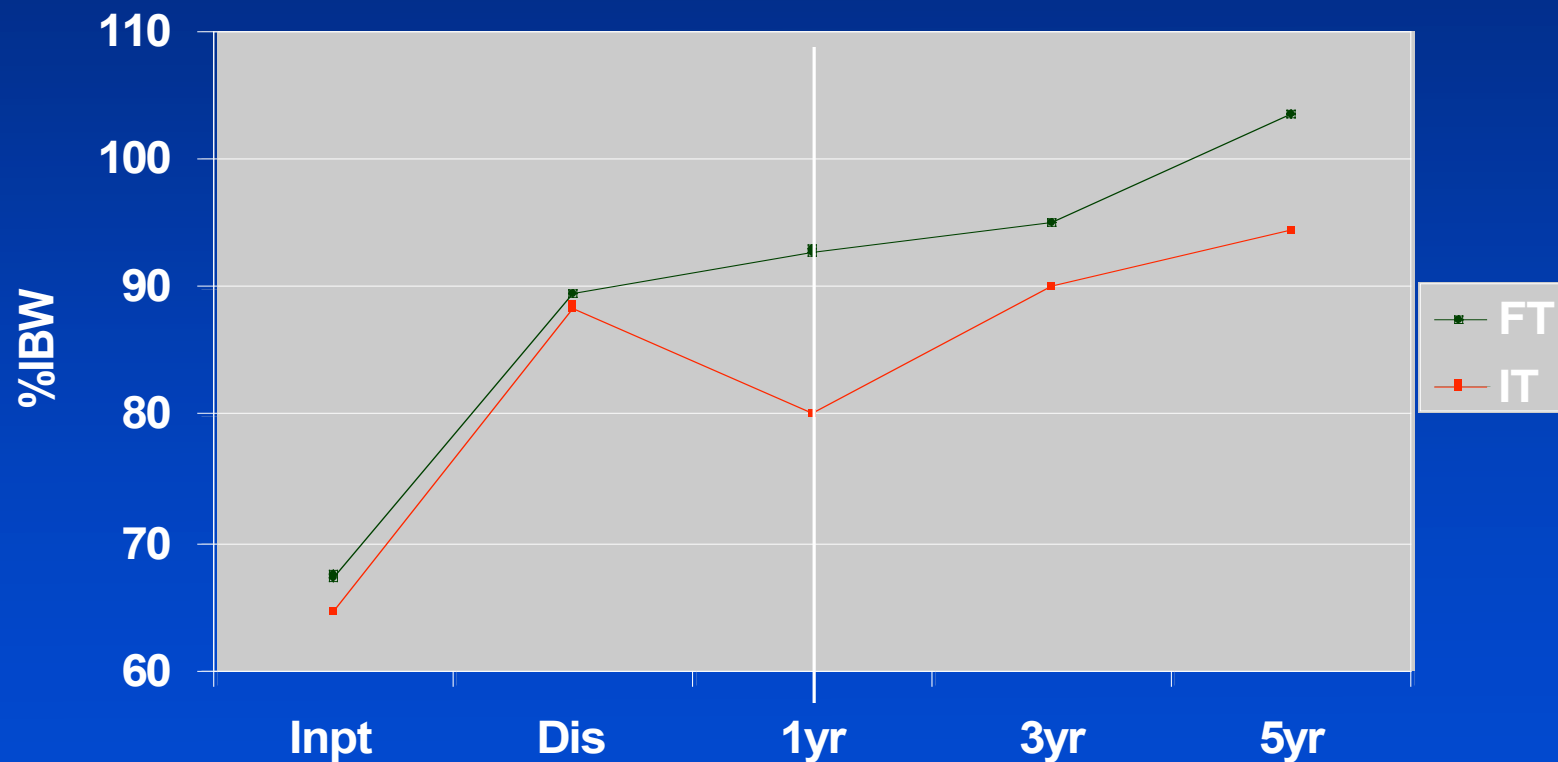
- No outcome measures
- No control group

Weight Chart for Patients in Subgroup 1 (End of Tx)



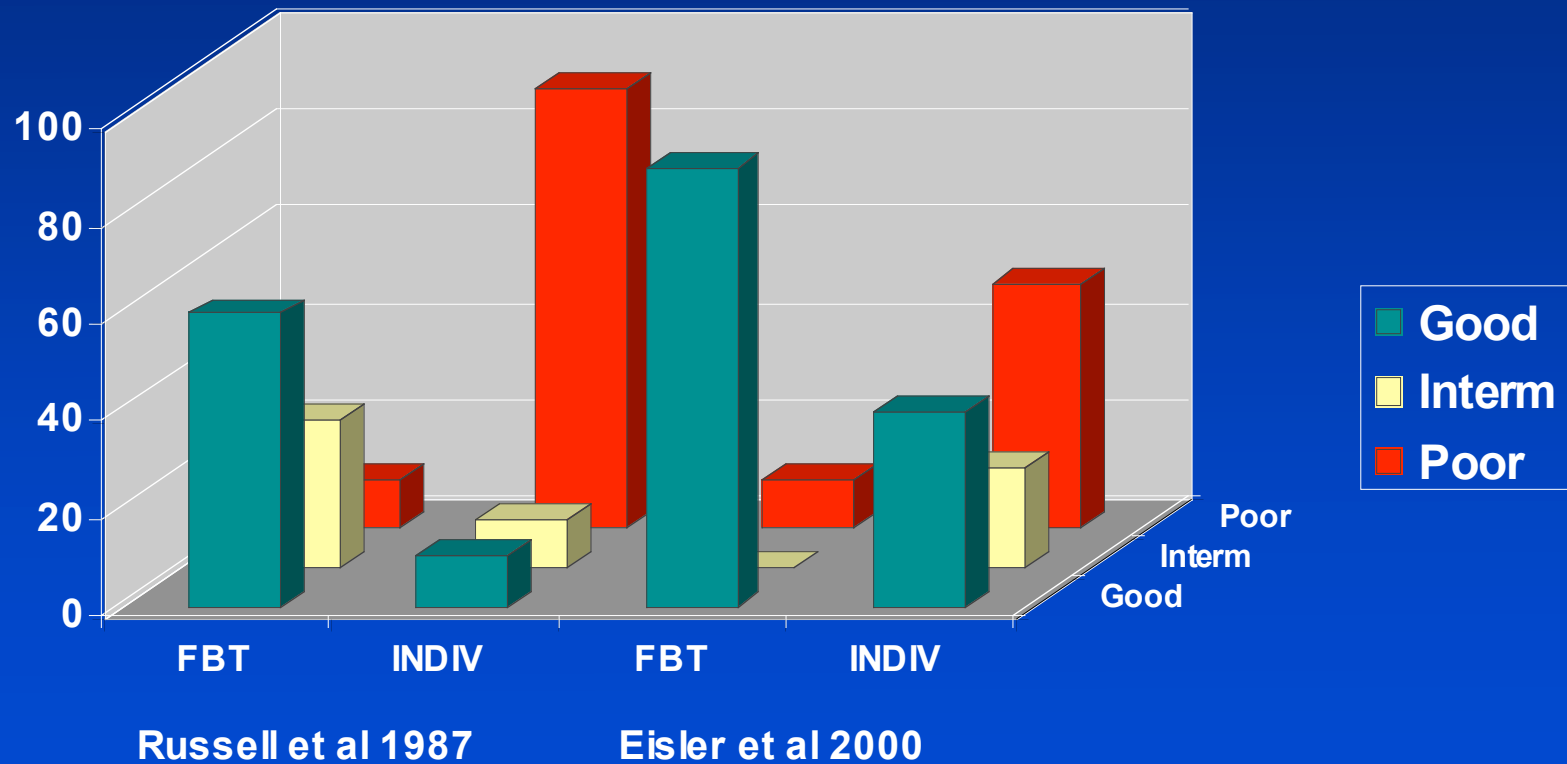
Russell, Sz mukler, Dare and Eisler (1987)

Weight Chart for Patients in Subgroup 1 (Five Year Follow-up)

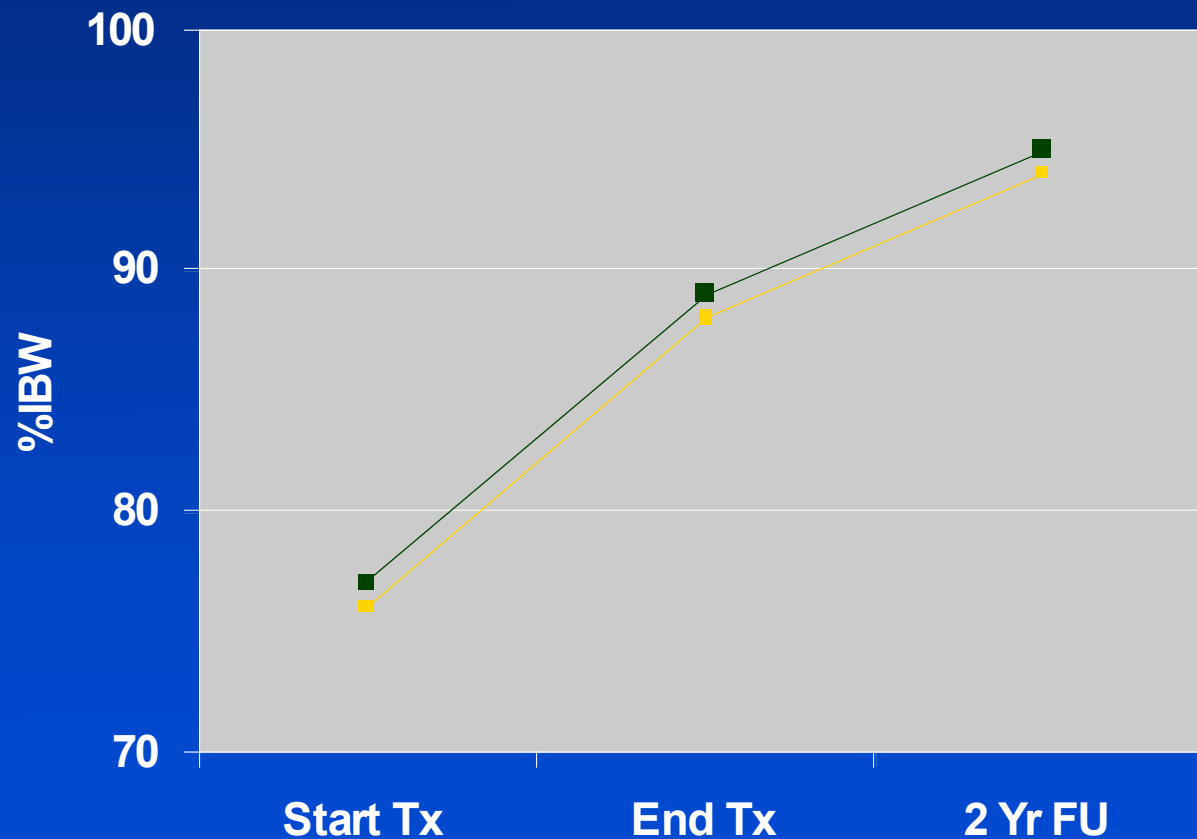


Eisler I, Dare C, Russell G, Szumukler G, Le Grange D, & Dodge E. (1997)

First Maudsley Study: End-of-Tx and Five-Yr FU

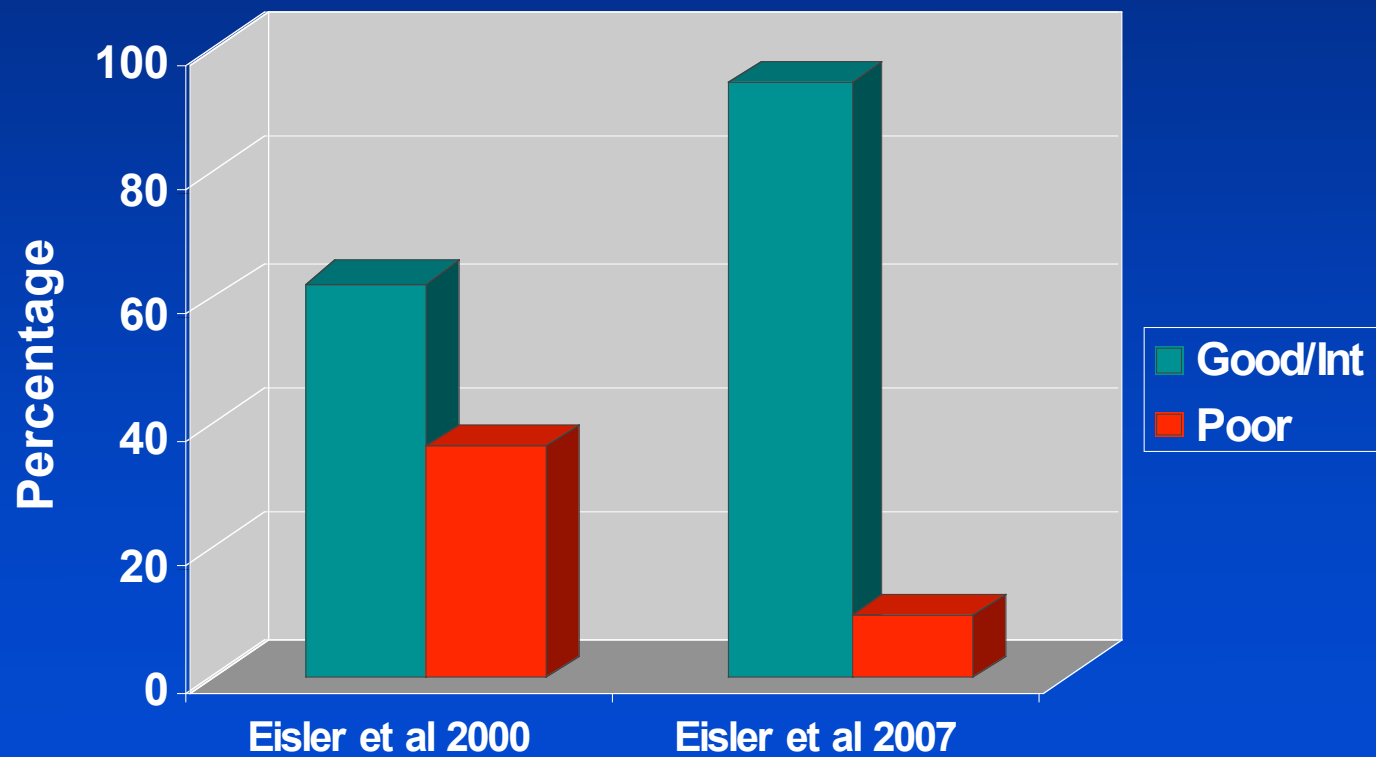


Maudsley Outpt Weight Gain: End-of-Tx and Two-Yr FU



Le Grange, Eisler, Dare and Russell, 1992; Squire-Dehouck, 1993

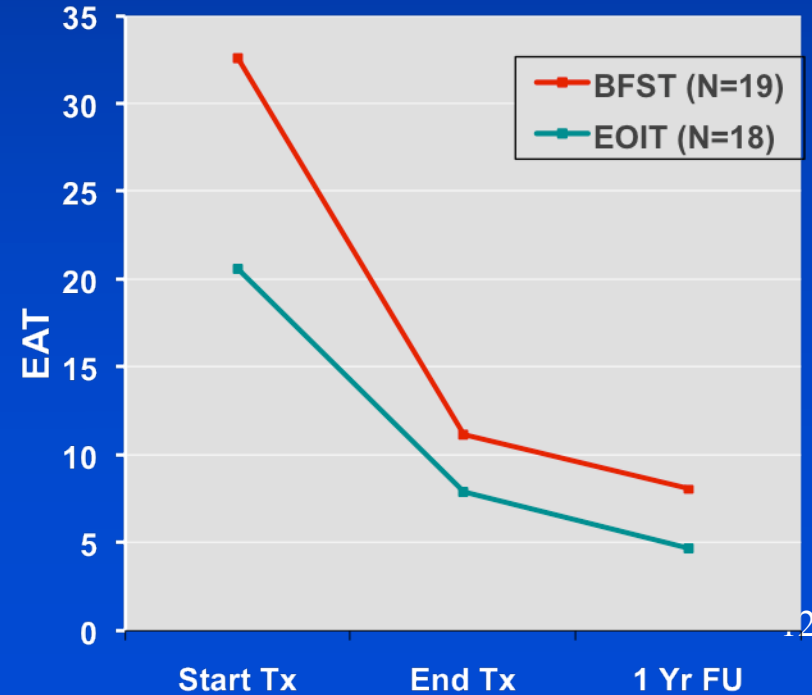
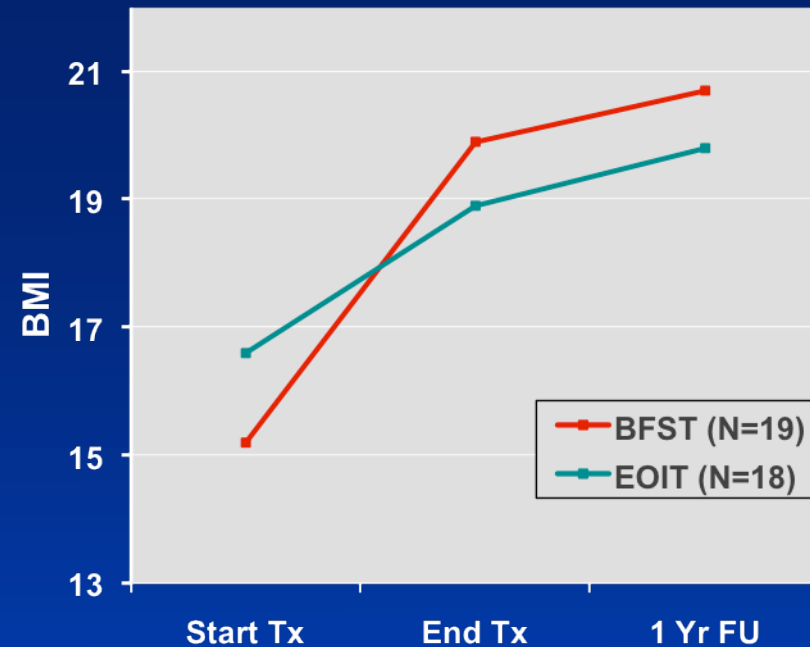
Maudsley End-of-Outpt Tx and Five-Yr-FU



Behavioral Family Systems Therapy vs Ego-Oriented Individual Therapy

- N=37 adol AN outpts
- 12-18 months of therapy
- 1 year follow-up

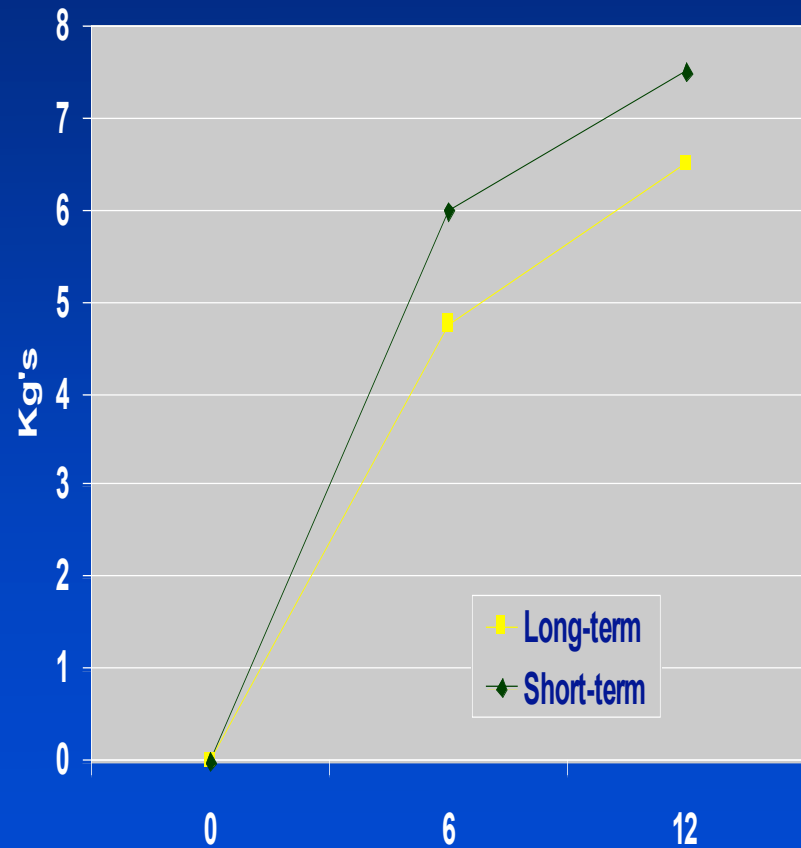
Robin et al. (1999)



Stanford Dosage Study

- 86 adolescents with AN
- Long-term FBT
- Short-term FBT

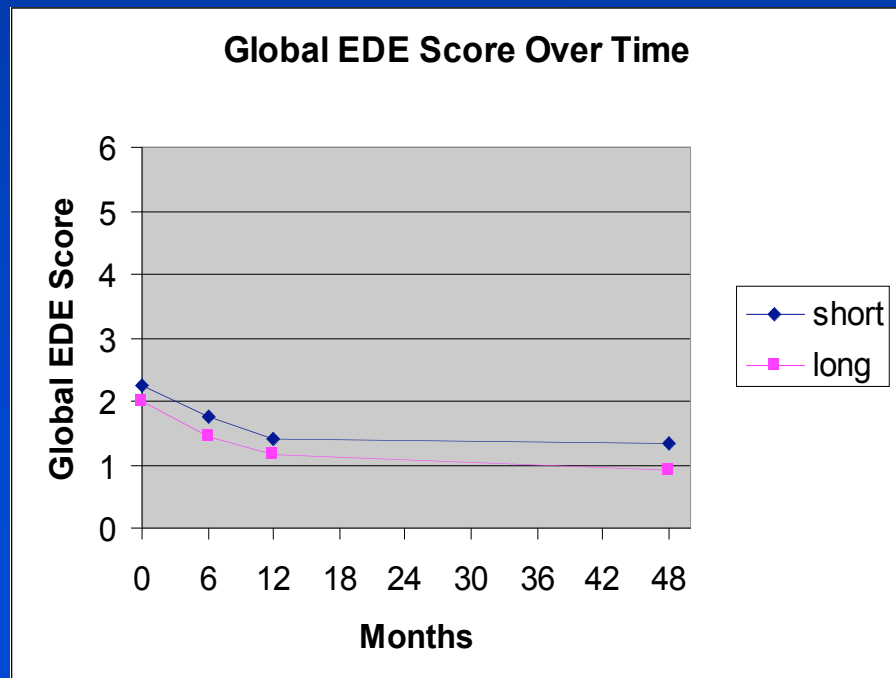
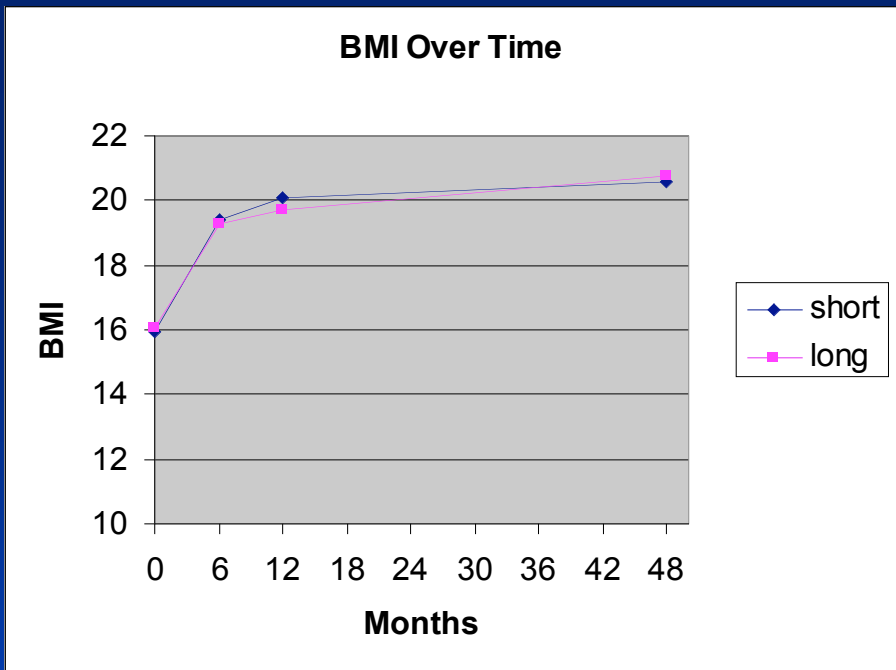
Lock et al. (2005)



Stanford Dosage Study

48 Month Follow-up

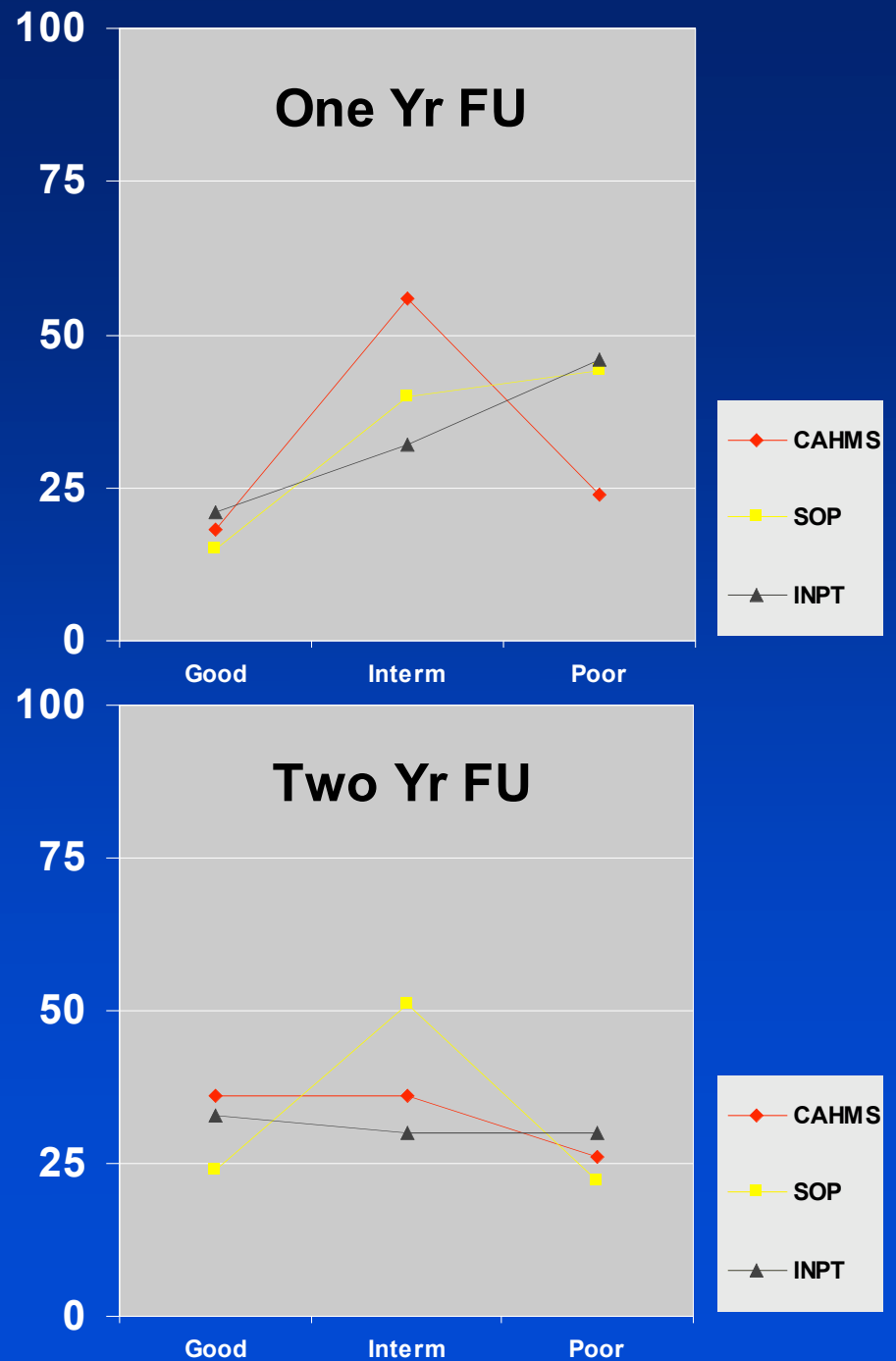
Lock et al. (2006)



Gowers RCT CAHMS, Specialist OP, Inpatient

- N=167 adolescents with AN
- CAHMS n=55
- Specialized Outpatient n=55
- Inpatient treatment n=57
- One and two year FU

Gowers et al (2007)



Part 2



FBT in Clinical Practice

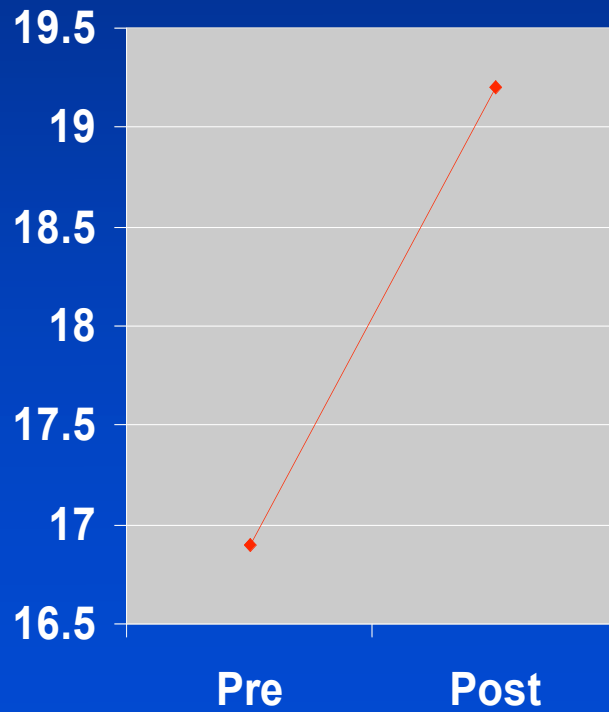
Adolescent Anorexia Nervosa

Chicago/Columbia Case Series

- **First open clinical trials to utilize FBT manual (Lock, Le Grange et al., 2001)**
- **Recruited adolescents/families at The University of Chicago and Columbia University**

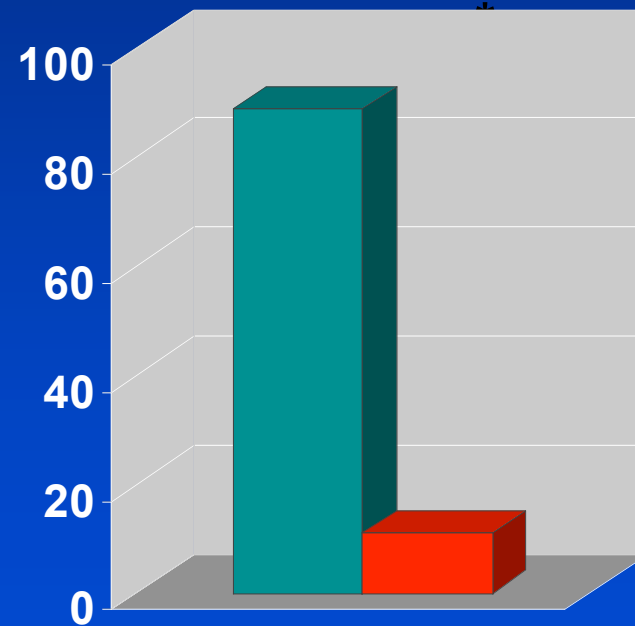
Chicago Case Series

BMI



* $t(44) = -8.153, p < .001$

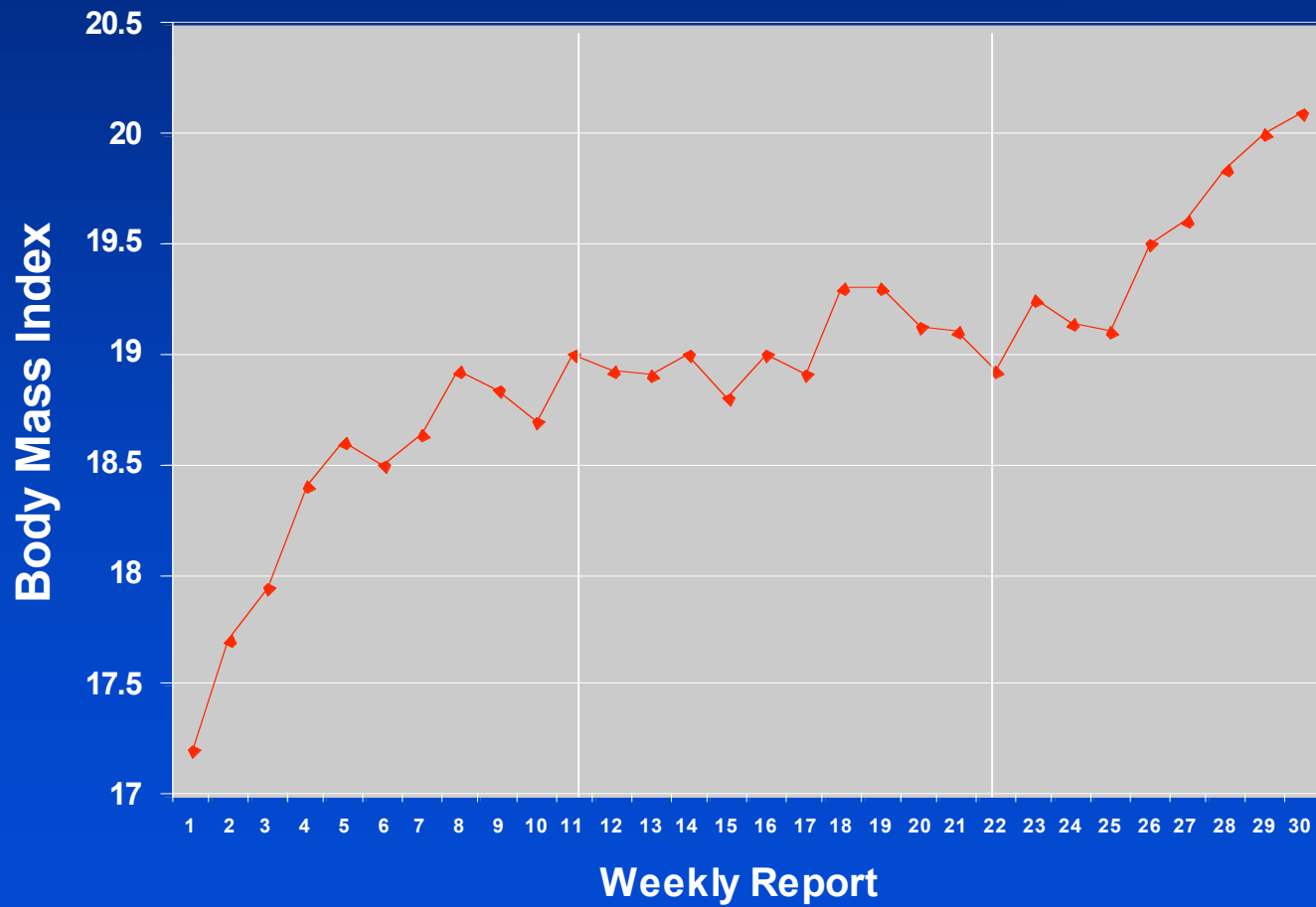
Outcome



Le Grange et al. (2005)

Time to Recovery

(Mean BMI)

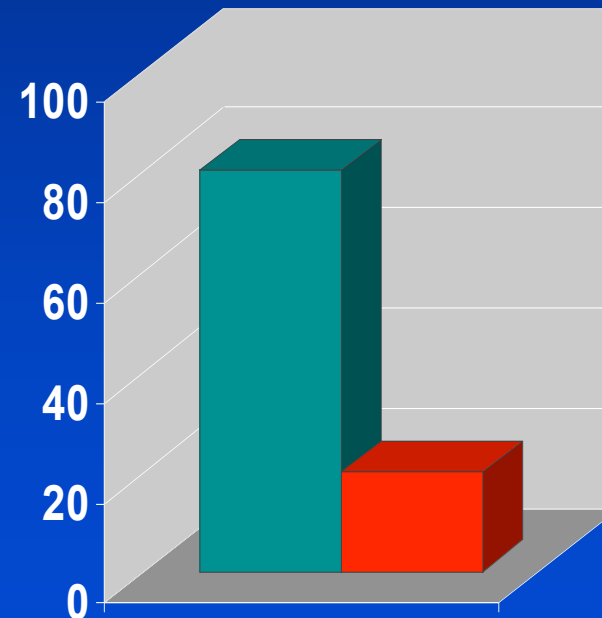


Columbia Open Trial

Tx Response

- 75% completed full course of treatment
- 67% menstruating by end of treatment
- %IBW changed from 81.9 to 94.1 (p=.000)
- Sign changes in EDE Res, EC, binge/purge, and BDI

Outcome



Loeb et al. (2007)

Receiver Operating Characteristic Analysis (N=65)

Weight gain >3 pounds at week 4 correctly characterized:

- 79% of responders [AUC = .814 ($p < .001$)]
- 71% of non-responders [AUC = .811 ($p < .001$)]

Part 4



Empirical Evidence

Adolescent Bulimia Nervosa

Chicago RCT for Adolescent BN

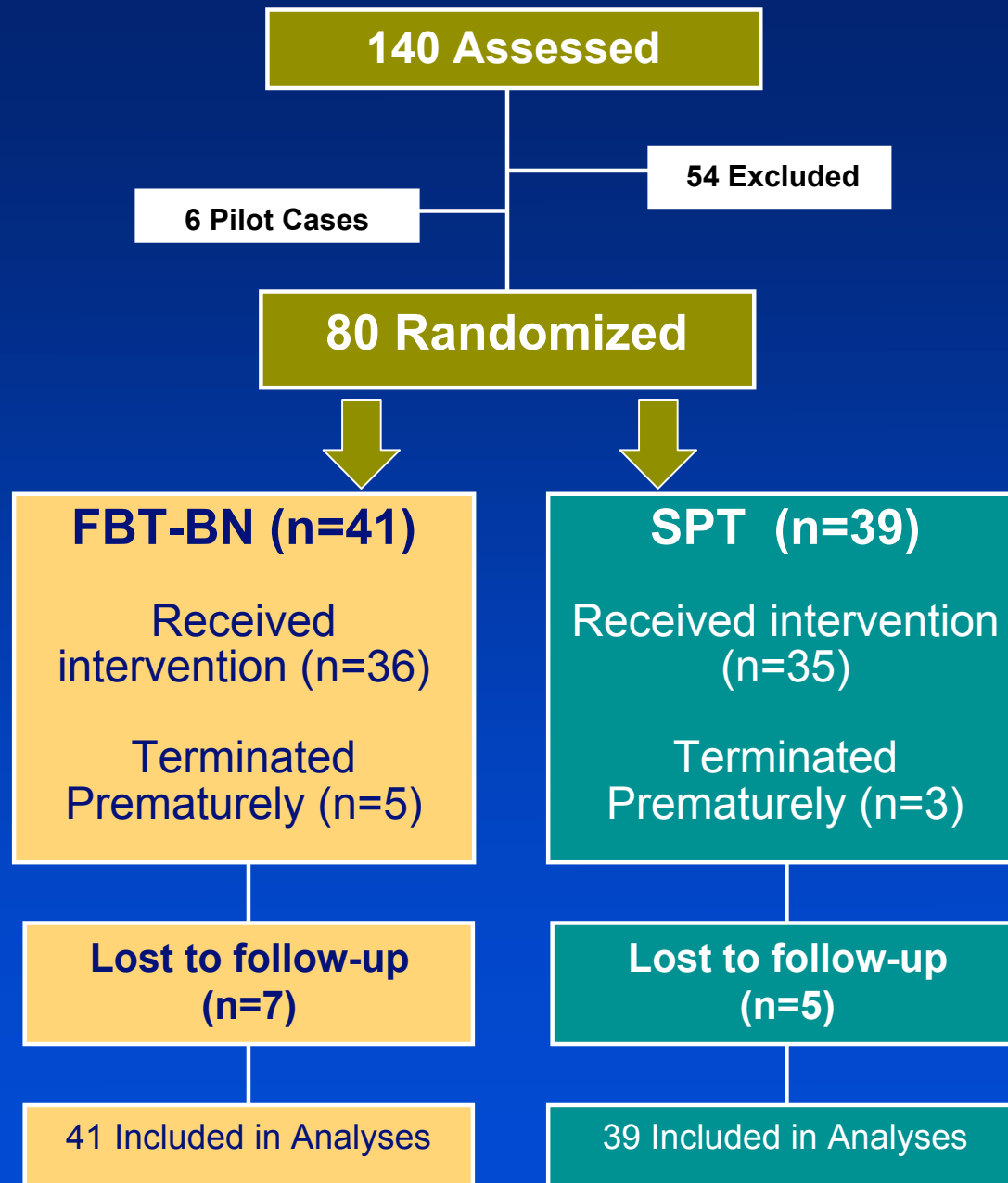
(Le Grange et al., *Arch Gen Psychiatry*, 2007)

-
- Random allocation to one of two manualized treatments, FBT-BN (active) vs. SPT (control)
 - Primary outcome criteria are binge and purge abstinence (EDE)
 - Assessments at Baseline, Mid-treatment, Post-treatment and 6-month FU

Family-Based Treatment

(Le Grange & Lock, Guilford Press, 2007)

- **Adapted from AN treatment manual**
(Lock, Le Grange et al, 2001)
- **Twenty sessions over six months (three individual sessions allowed)**
- **Concomitant management of medical and co-morbidity needs**



Patient Demographics (N=80)

Age (years)	16.1 (1.6)
Gender (female/male)	78/2
BMI (kg/ht ²)	22.1 (2.9)
Duration illness (months)	21.2 (22.3)
Prior treatment (%)	12 (15)
Menses (%) <i>Irregular</i>	29 (36)
<i>Regular</i>	41 (51)
<i>Birth control/male</i>	10 (13)
Ethnicity (%) <i>White (non-Hispanic)</i>	51 (64)
<i>Minority</i>	29 (36)
Family Status (%) <i>Intact</i>	46 (58)
<i>Not intact</i>	34 (42)

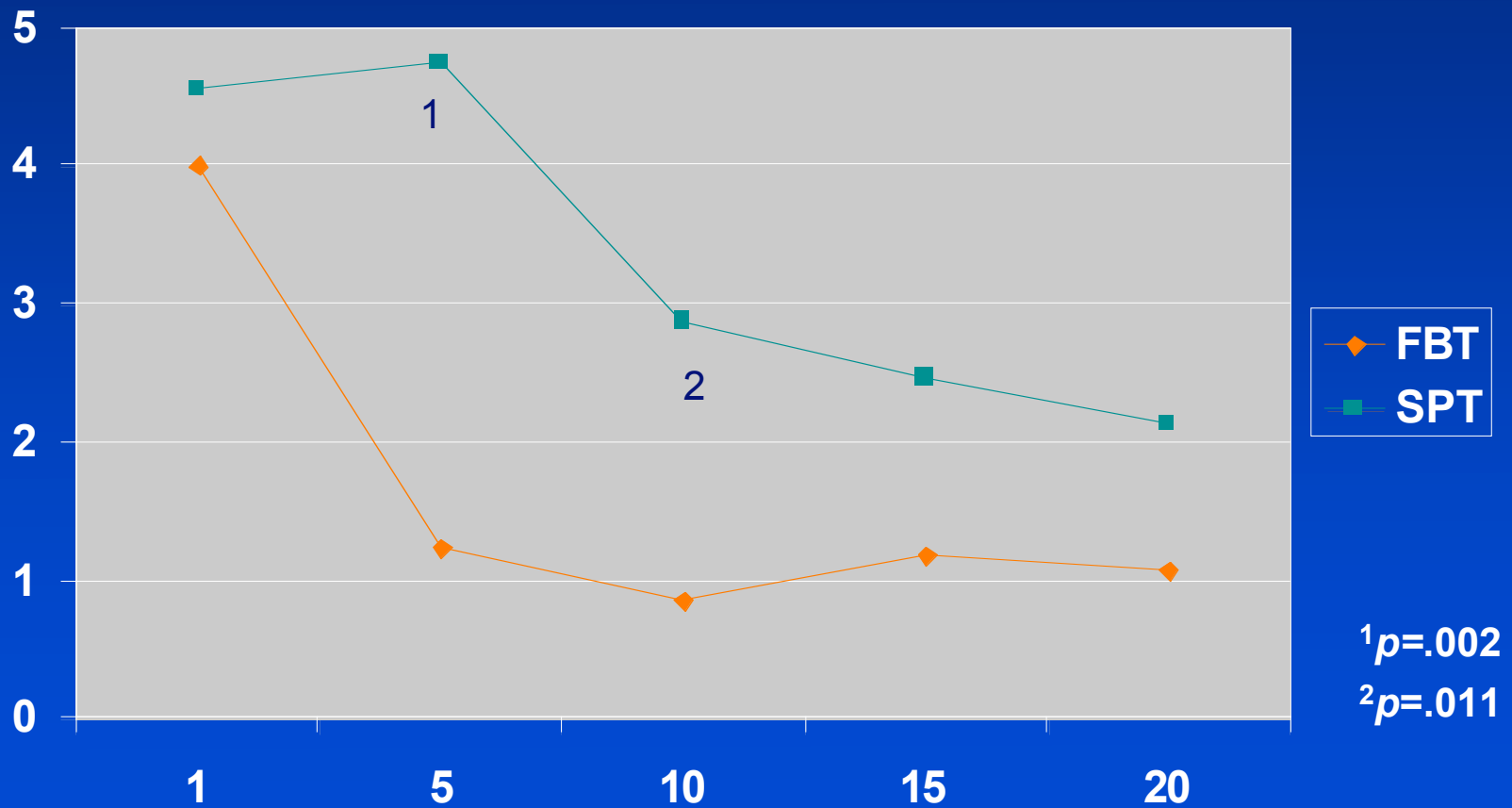
Baseline Eating Pathology (EDE)

	<i>FBT (n=41)</i>	<i>SPT (n=39)</i>	<i>Total (N=80)</i>
<i>OBE</i>	18.4 (28.0)	18.9 (22.3)	18.7 (25.2)
<i>SBE</i>	9.9 (16.6)	7.6 (10.1)	8.8 (13.8)
<i>Self-induced vomiting</i>	34.5 (31.0)	33.2 (33.5)	33.9 (32.1)
<i>All purging</i>	49.5 (36.9)	50.2 (42.3)	49.9 (39.4)
<i>EDE Global Score</i>	3.59 (1.1)	3.72 (1.1)	3.66 (1.1)

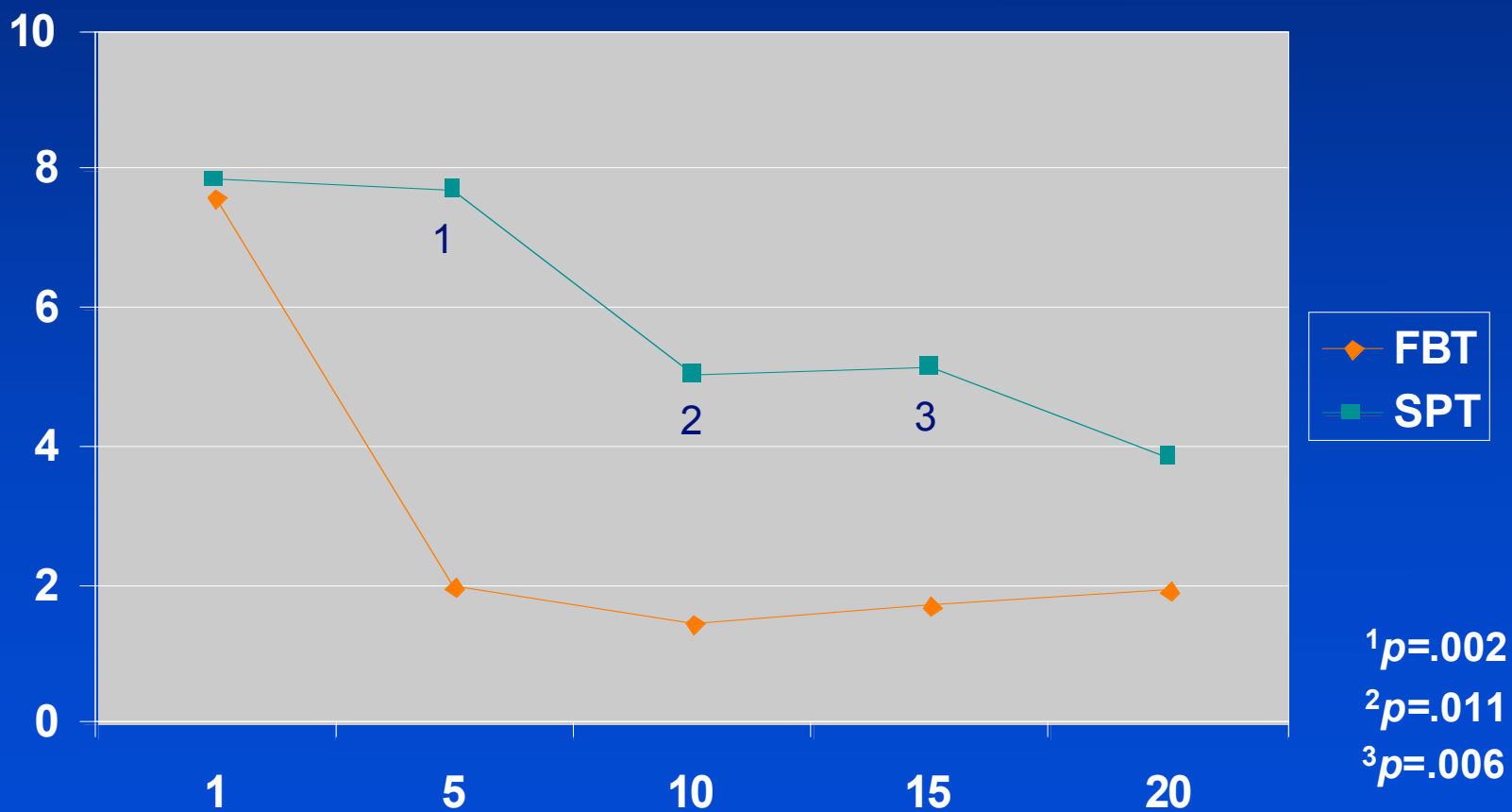
Baseline General Psychopathology

	<i>FBT</i> (n=41)	<i>SPT</i> (n=39)	<i>Total</i> (N=80)
<i>K-SADS (%)</i>			
<i>No diagnosis</i>	13 (32)	17 (43.5)	30 (37)
<i>Current depression</i>	21 (51)	17 (43.5)	38 (47)
<i>Current anxiety</i>	2 (5)	1 (3)	3 (4)
<i>Subthreshold dx</i>	4 (10)	2 (5)	6 (8)
<i>Other diagnosis</i>	1 (2)	2 (5)	6 (8)
<i>Rosenberg Self-esteem</i>	27.6 (6.8)	27.2 (5.1)	27.4 (5.9)
<i>Beck Depression Invent.</i>	25.8 (12.2)	24.6 (11.8)	25.2 (11.9)

Binge Self-Report: Baseline - EOT



Purge Self-Report: Baseline - EOT

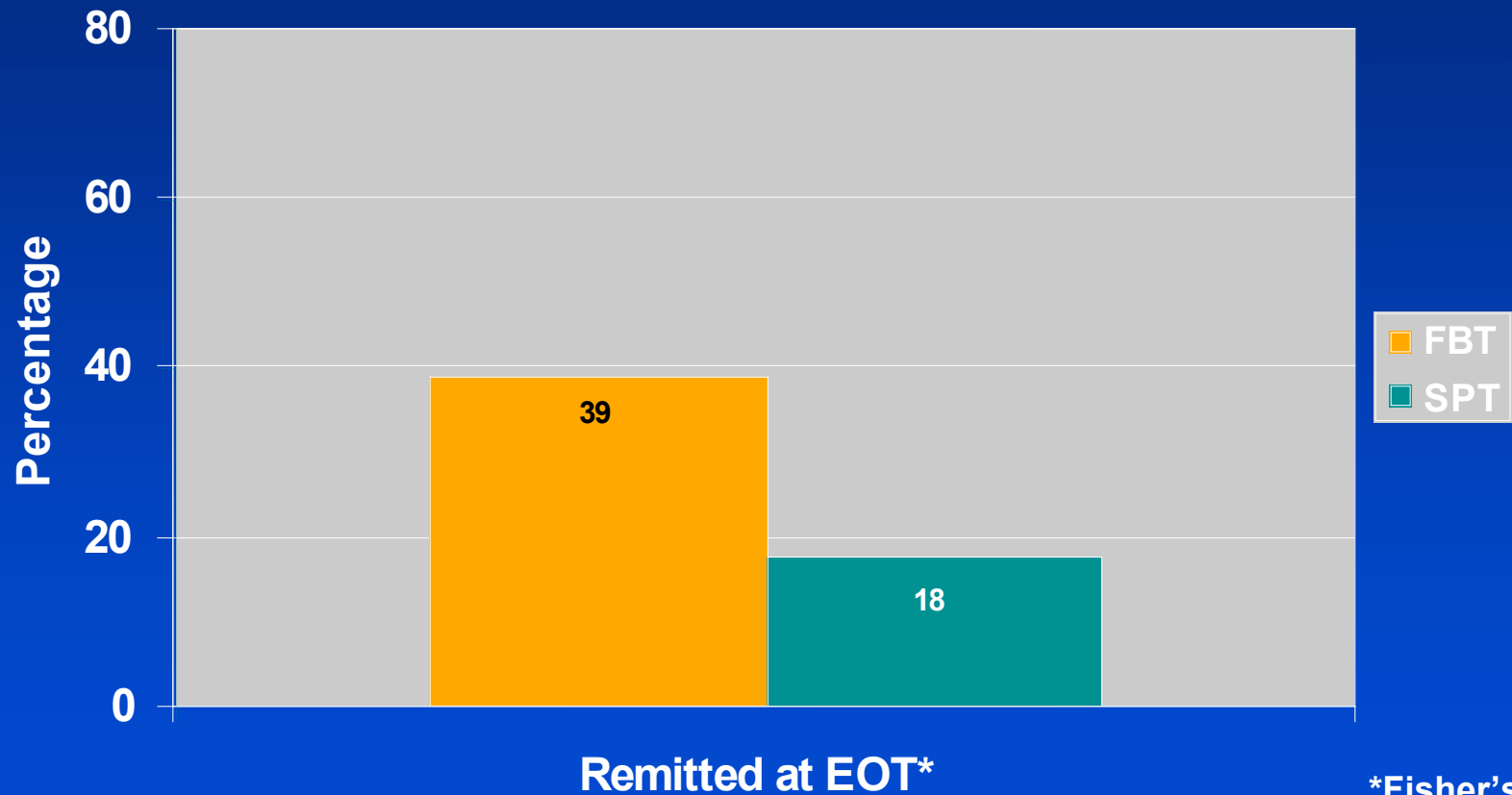


Eating Pathology at Mid-Treatment

	<i>Pre-Treatment</i>		Mid-Treatment[‡]		<i>Post-treatment</i>	
	<i>FBT-BN</i>	<i>SPT</i>	FBT-BN	SPT	<i>FBT-BN</i>	<i>SPT</i>
OBE	18.4 (28.1)	18.9 (22.3)	4.5 (16.5)	8.8 (12.7)	4.1 (14.8)	3.2 (5.1)
SBE	9.9 (16.6)	7.6 (10.1)	3.7 (7.0)	11.1 (18.8)	4.5 (13.3)	4.6 (8.6)
Vomit	34.5 (31.0)	33.2 (33.5)	6.1 (9.0)	21.4 (26.6)	4.8 (9.4) [‡]	17.4 (26.0)
All purging	49.5 (36.9)	50.2 (42.3)	8.9 (10.8)	27.9 (30.2)	6.9 (10.2) [‡]	22.3 (28.6)
Restraint	3.8 (1.3)	3.7 (1.7)	1.9 (1.6)	3.2 (1.9)	1.3 (1.5) [‡]	2.1 (1.6)
Weight Concern	3.7 (1.4)	4.1 (1.3)	2.1 (1.7)	3.6 (1.8)	1.8 (1.6)	2.6 (1.7)
Shape Concern	4.0 (1.4)	4.2 (1.1)	2.6 (1.6)	3.9 (1.7)	1.8 (1.6)	2.7 (1.7)
Eating Concern	2.9 (1.4)	2.9 (1.2)	1.5 (1.5)	3.0 (1.5)	1.0 (1.5)	1.5 (1.4)
Global	3.6 (1.1)	3.7 (1.1)	2.0 (1.5)	3.4 (1.5)	1.5 (1.4)	2.2 (1.4)

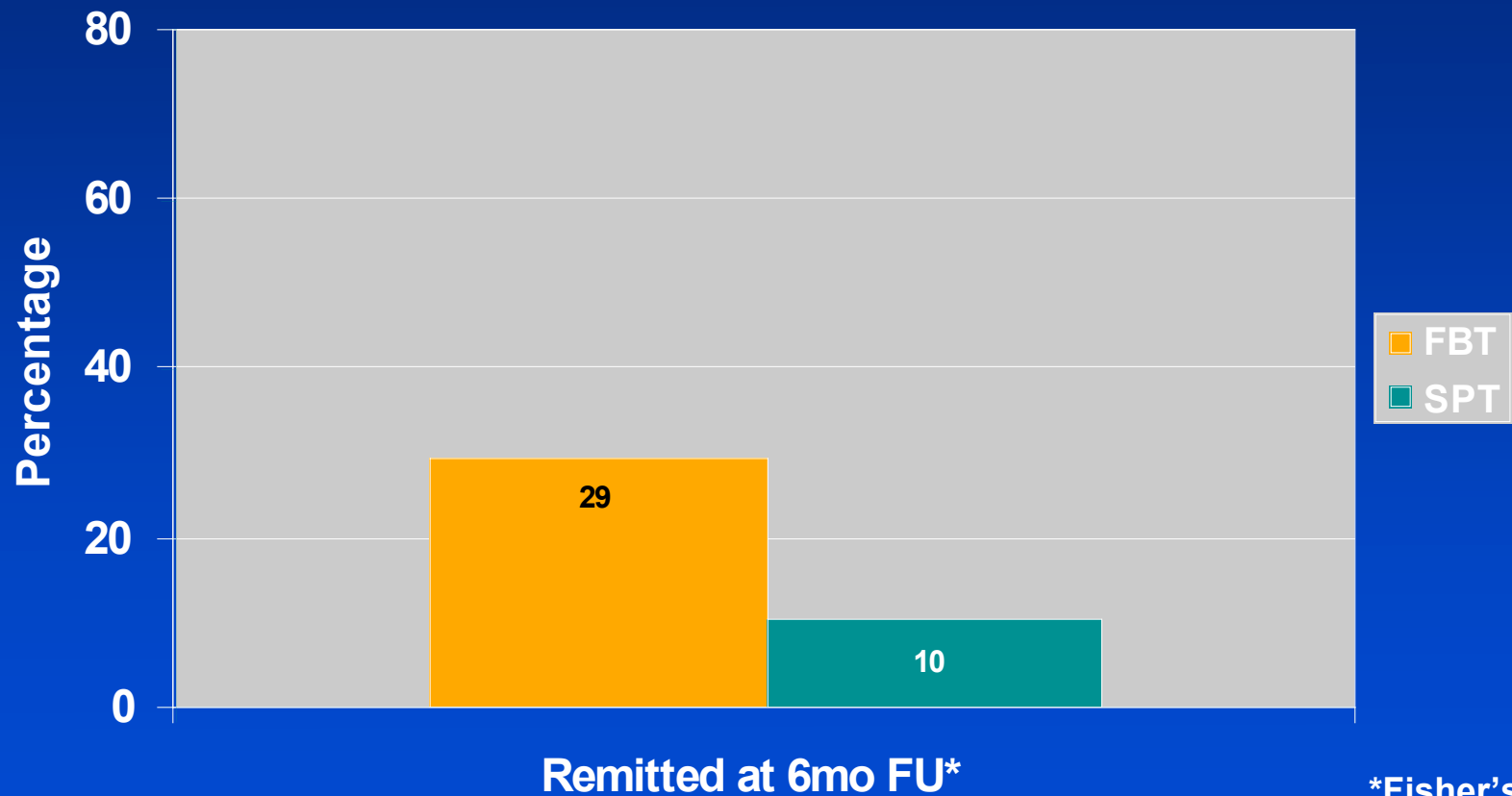
[‡] $p < .017$ FBT-BN < SPT

Remitted at EOT (no b/p)



*Fisher's Exact
 $p=.049$

Remitted at 6mo FU (no b/p)



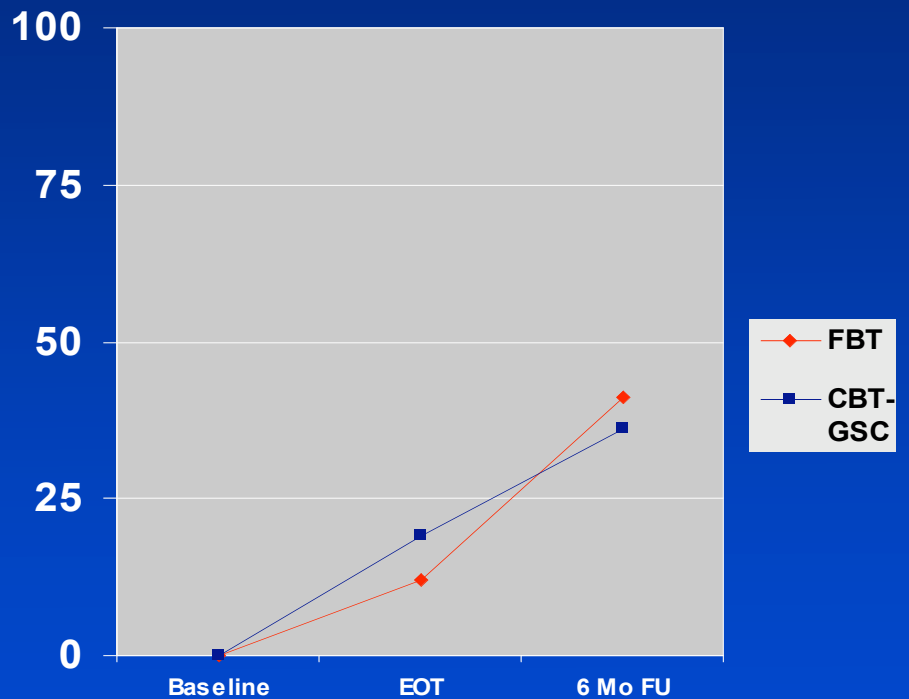
*Fisher's Exact
 $p=.050$

Maudsley RCT FBT vs CBT-GSC

- N=85 adolescents with BN
- 6 months of therapy
- 6 month follow-up

Schmidt et al (2007)

Remission





Findings

- **Significantly greater early reductions in symptomatic behavior for patients in FBT-BN than in SPT**
- **Significantly more patients in FBT-BN than in SPT remitted at EOT and FU**
- **Schmidt et al (2007) found no differences between family treatment and CBT**



Findings

- **FBT-BN is more efficient than SPT in terms of early symptomatic relief**
- **40% in FBT-BN remitted at EOT is still just a “foot in the door”**
- **Efficacy of FBT-BN relative to other active treatments still unknown**



Status of our current knowledge

- **FBT is the most promising intervention for children and adolescents with AN who are medically fit for outpatient treatment**
- **Most of these patients respond favorably after relatively few treatment sessions**
- **FBT is as effective in brief form as in longer form; in conjoint form as in separated form**
- **The beneficial effects of FBT are sustained at 4-5 year follow-up**
- **FBT for adolescents with BN is promising, but considerable work is required.**