

Child and Adolescent Eating Disorders: an overview

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and

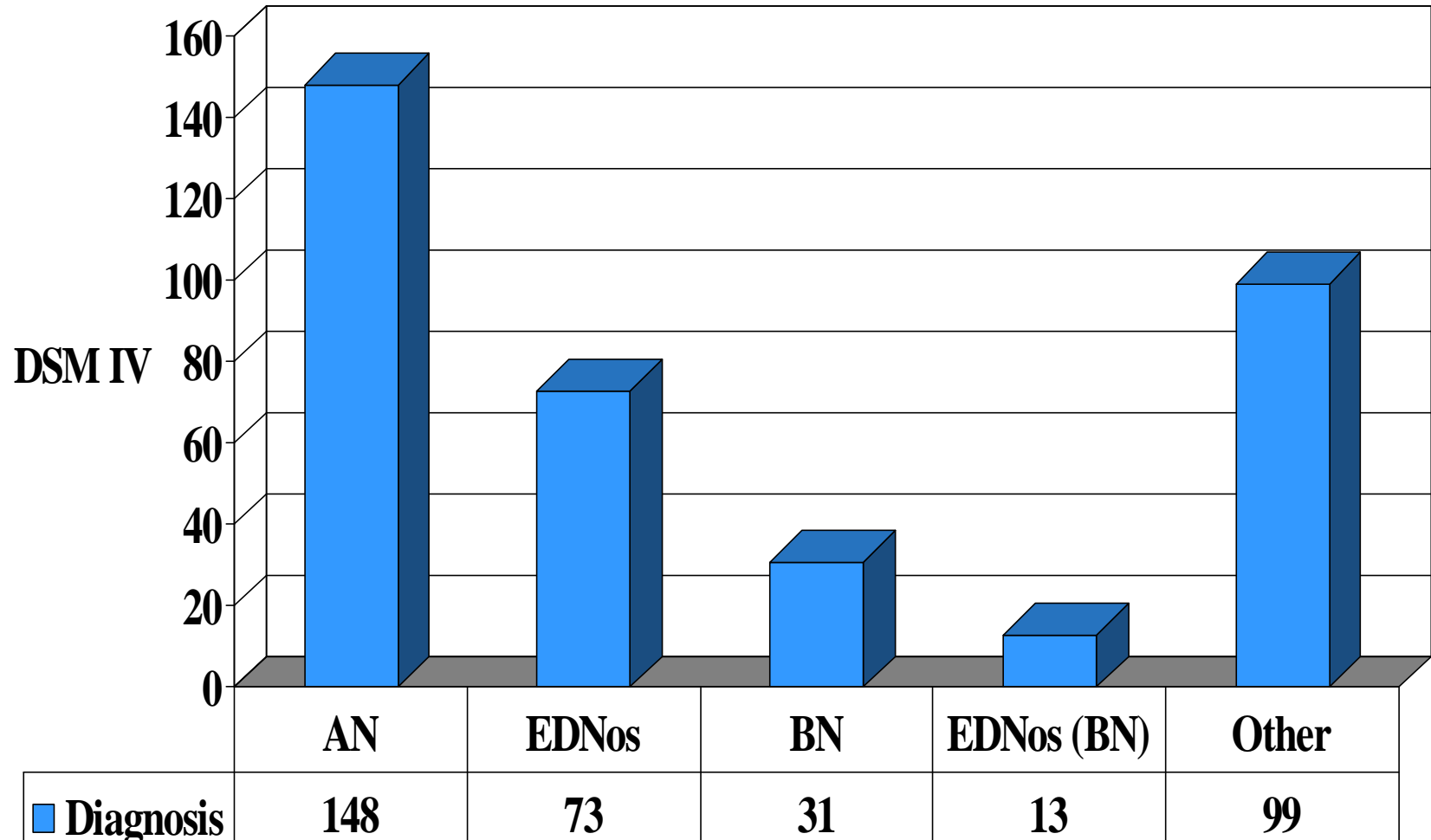
The University of
Queensland



Overview

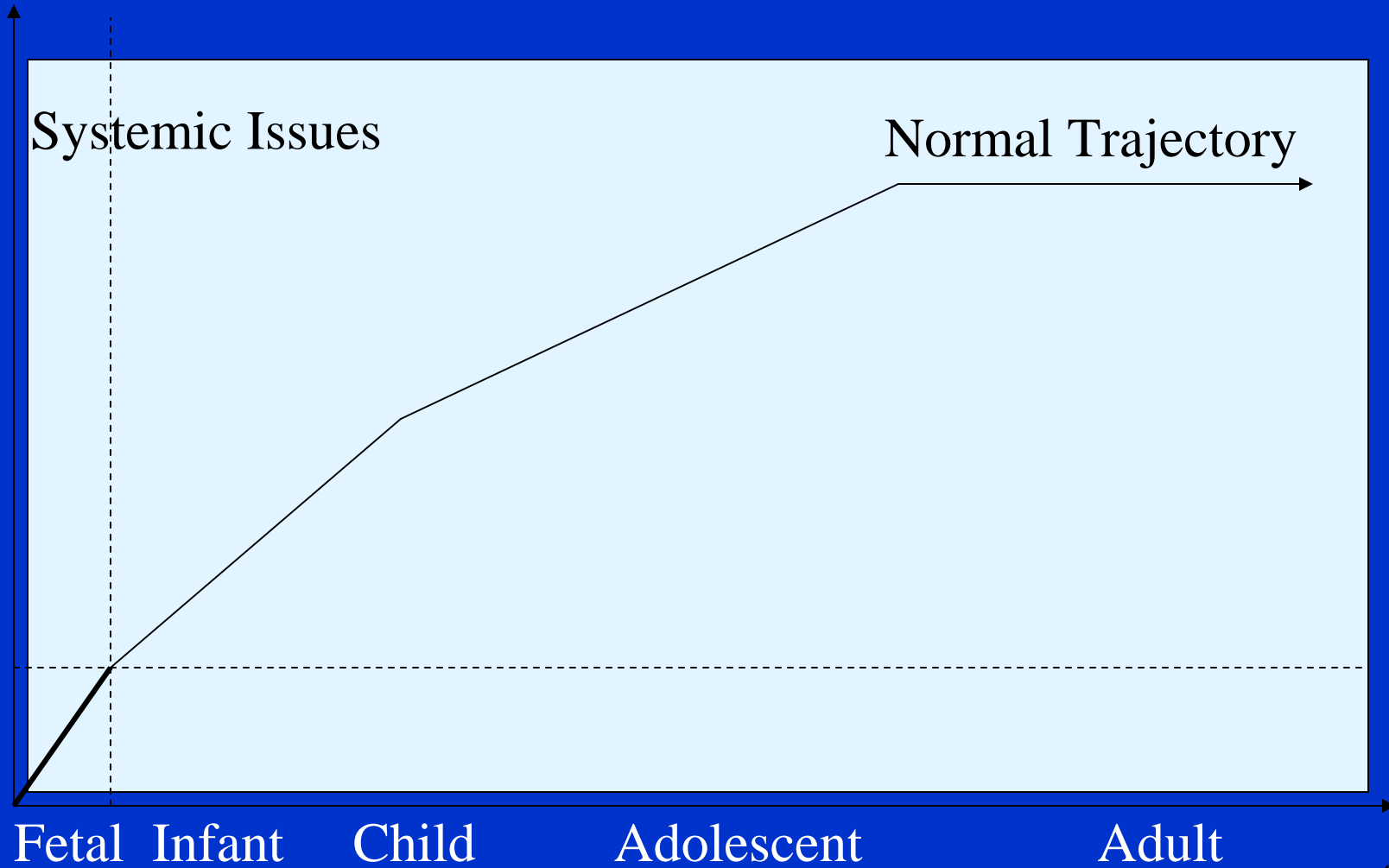
- Mental health symptoms
 - Causal model
 - ED & family psychopathology
- Physical symptoms & signs
 - BMI & Malnutrition
 - GIT & endocrine symptoms
 - Bones & electrolytes, Investigations (other)
- Indications for Hospital Admission
- “Typical case”
 - Evidence base
 - Therapy: what actually happens

The ED Service



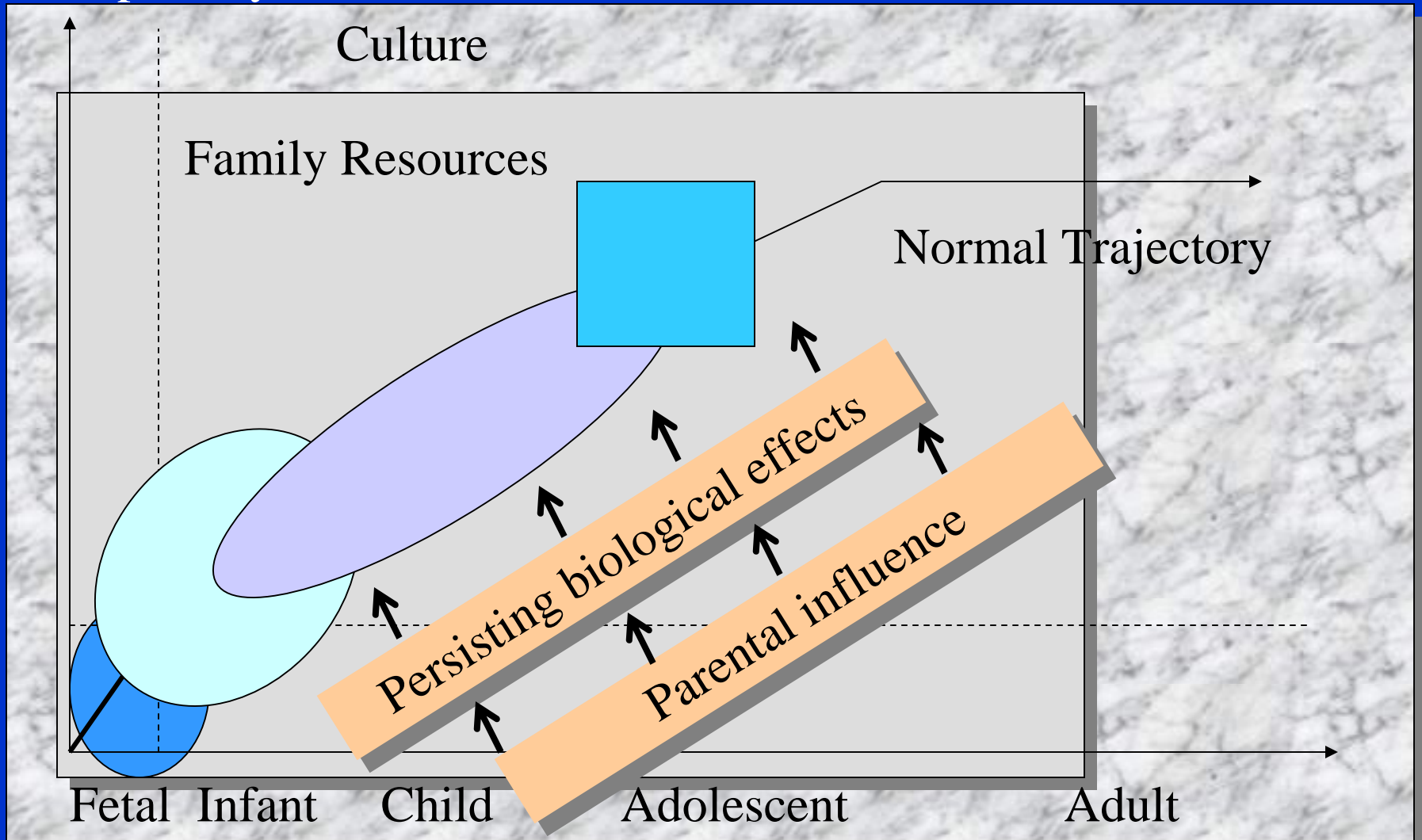
Time, Competence and Trajectory

Competency

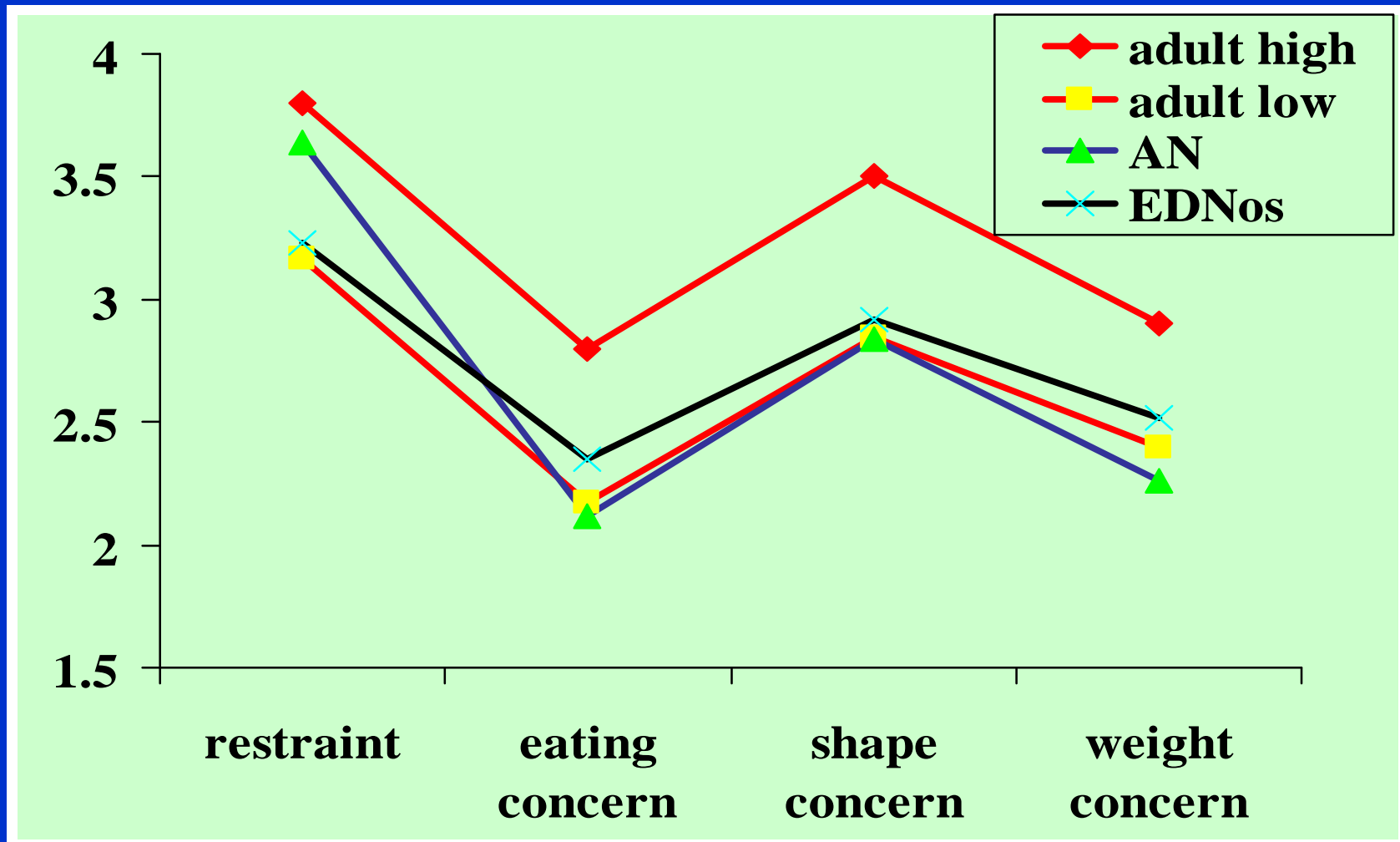


The big picture

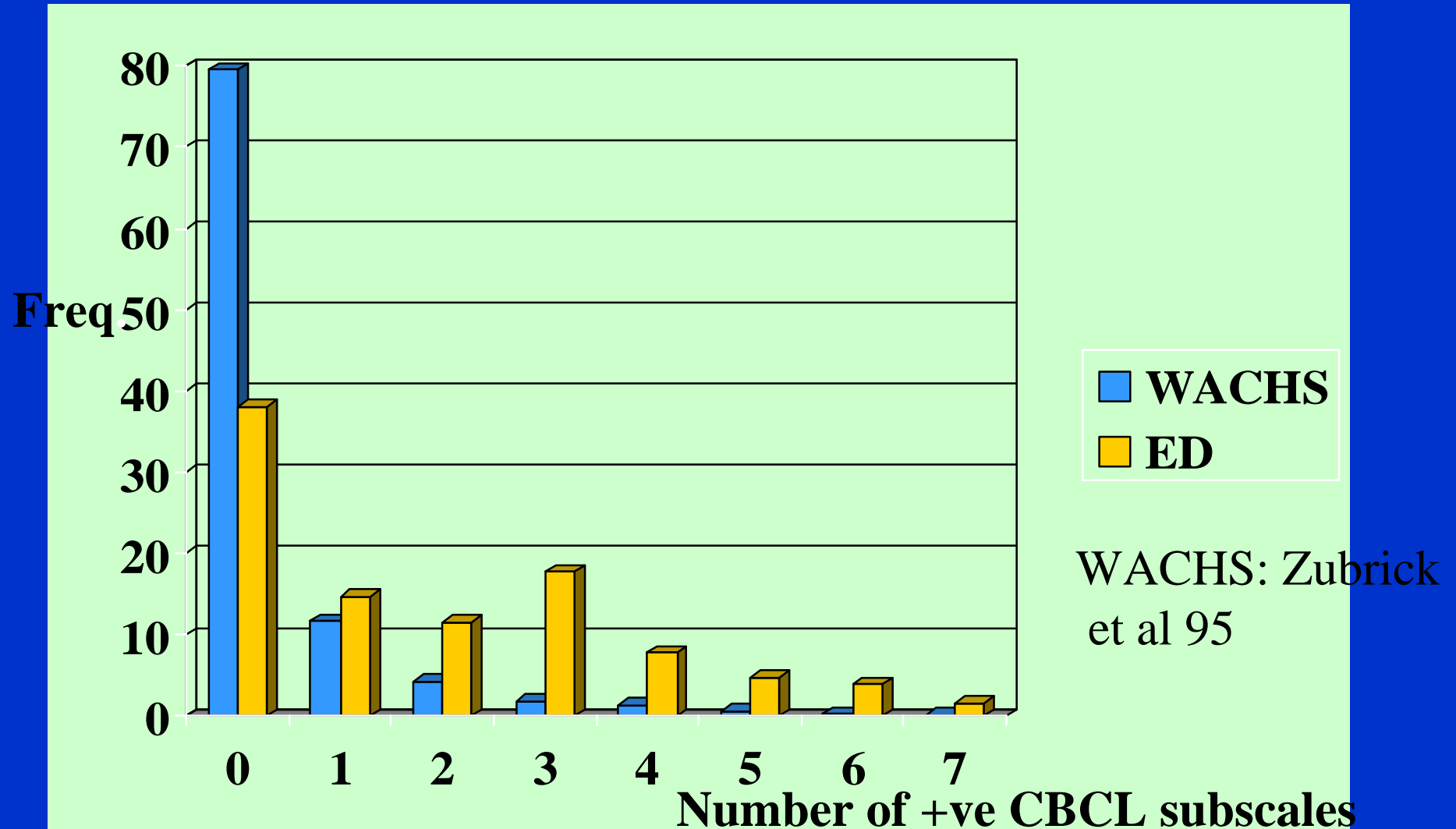
Competency



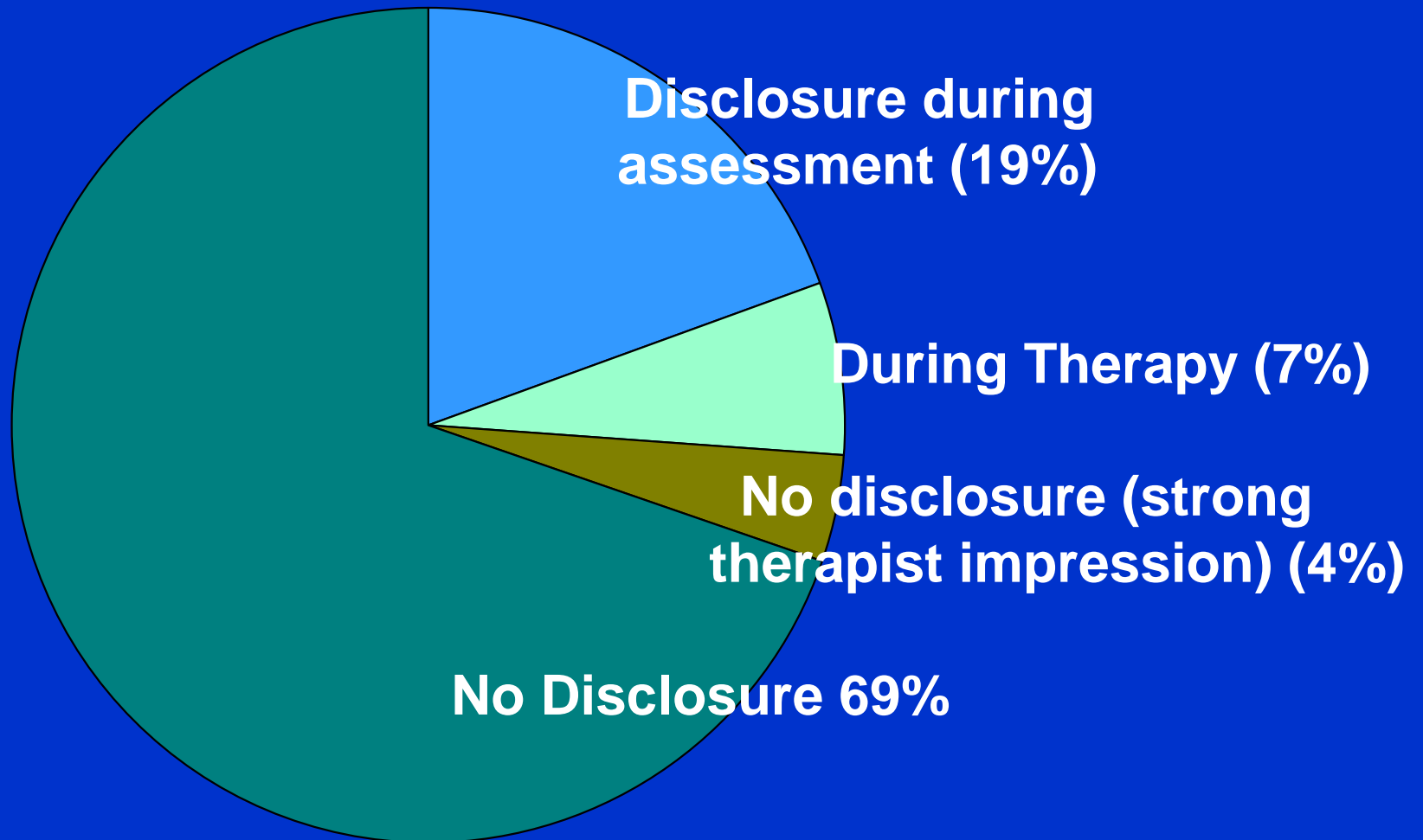
'Typical' ED Psychopathology is reported by children



Mental health symptoms: ED compared to community norms

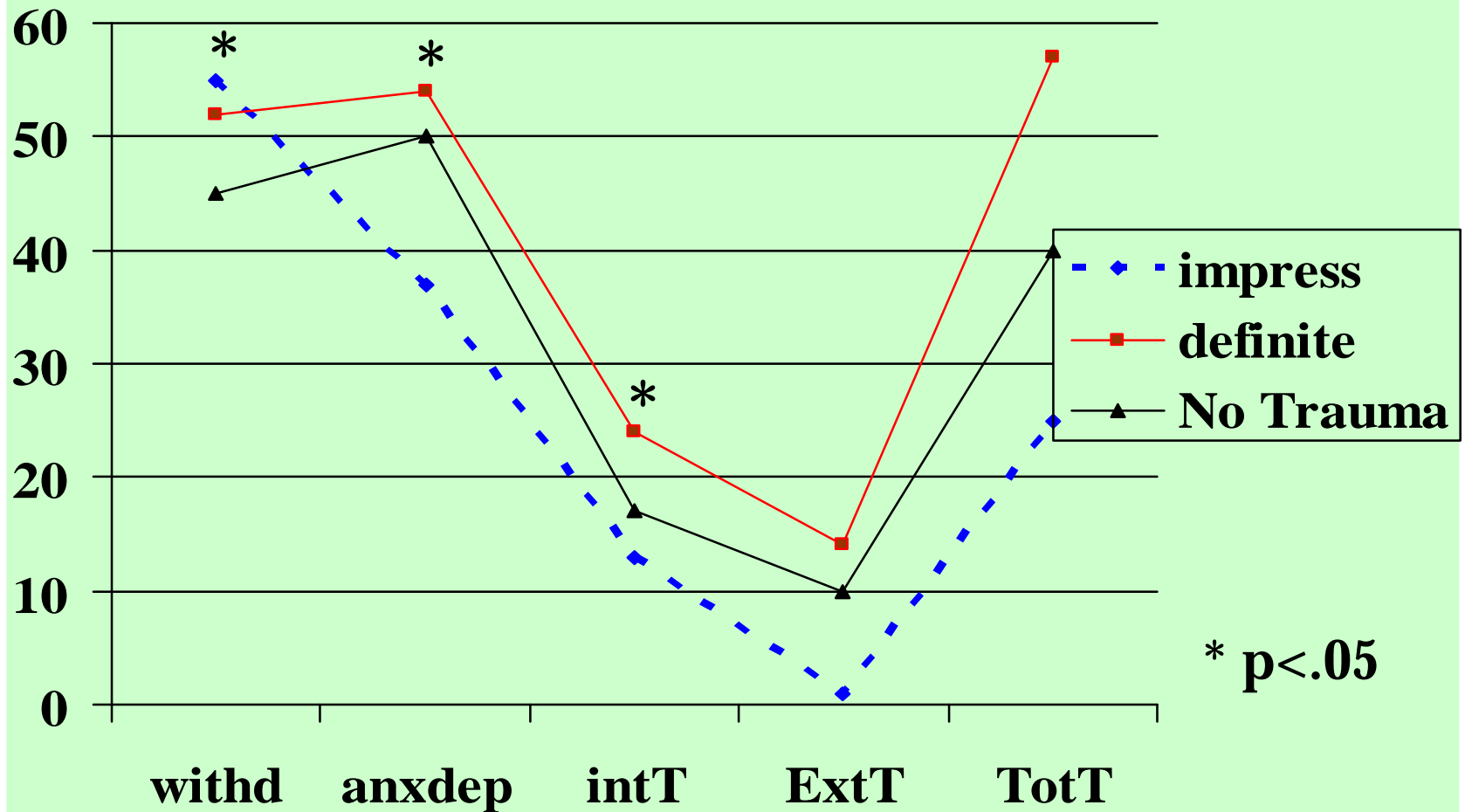


Emotional trauma histories

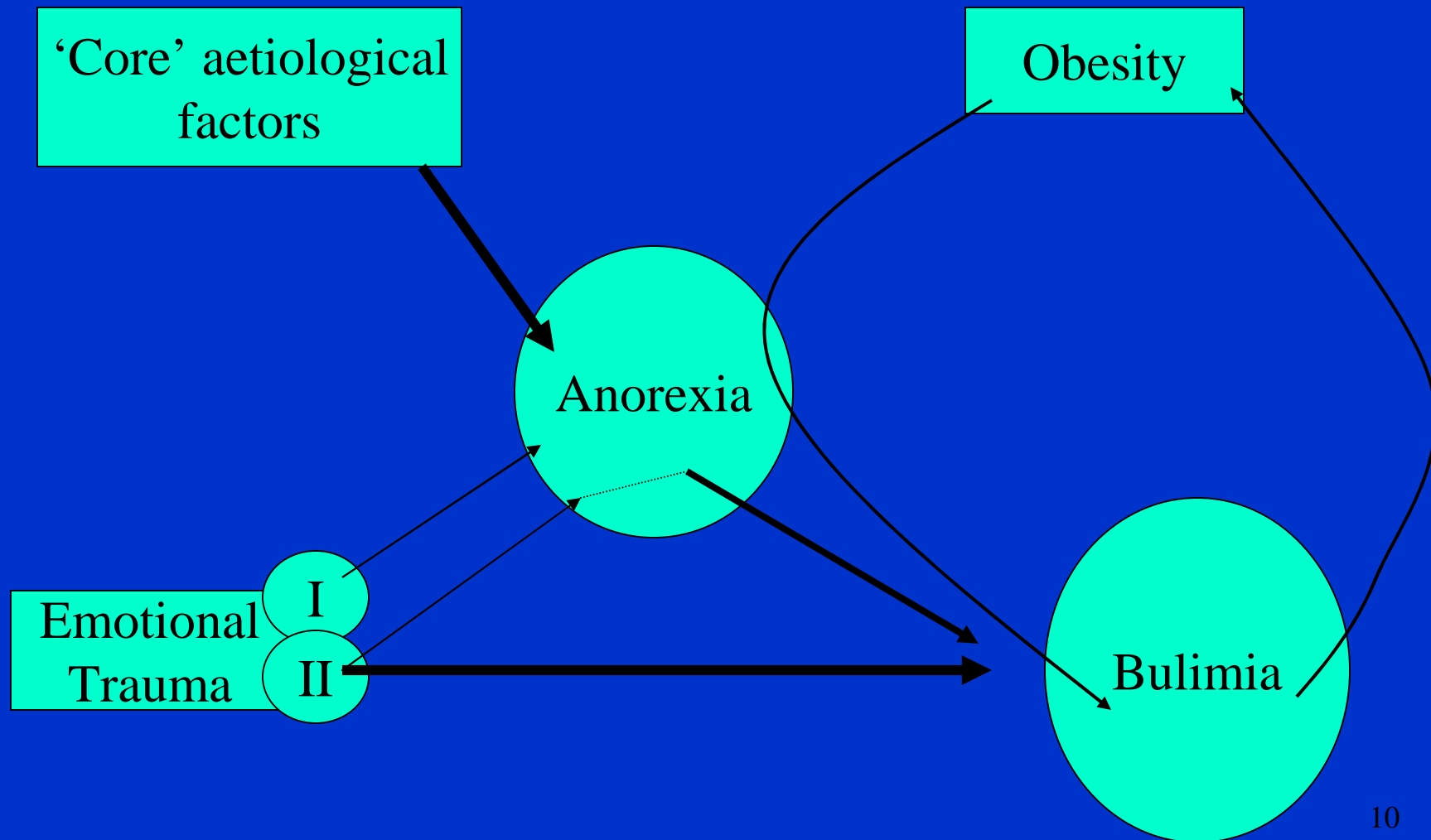


McDermott, McCormack, Gibbon⁸, 2001

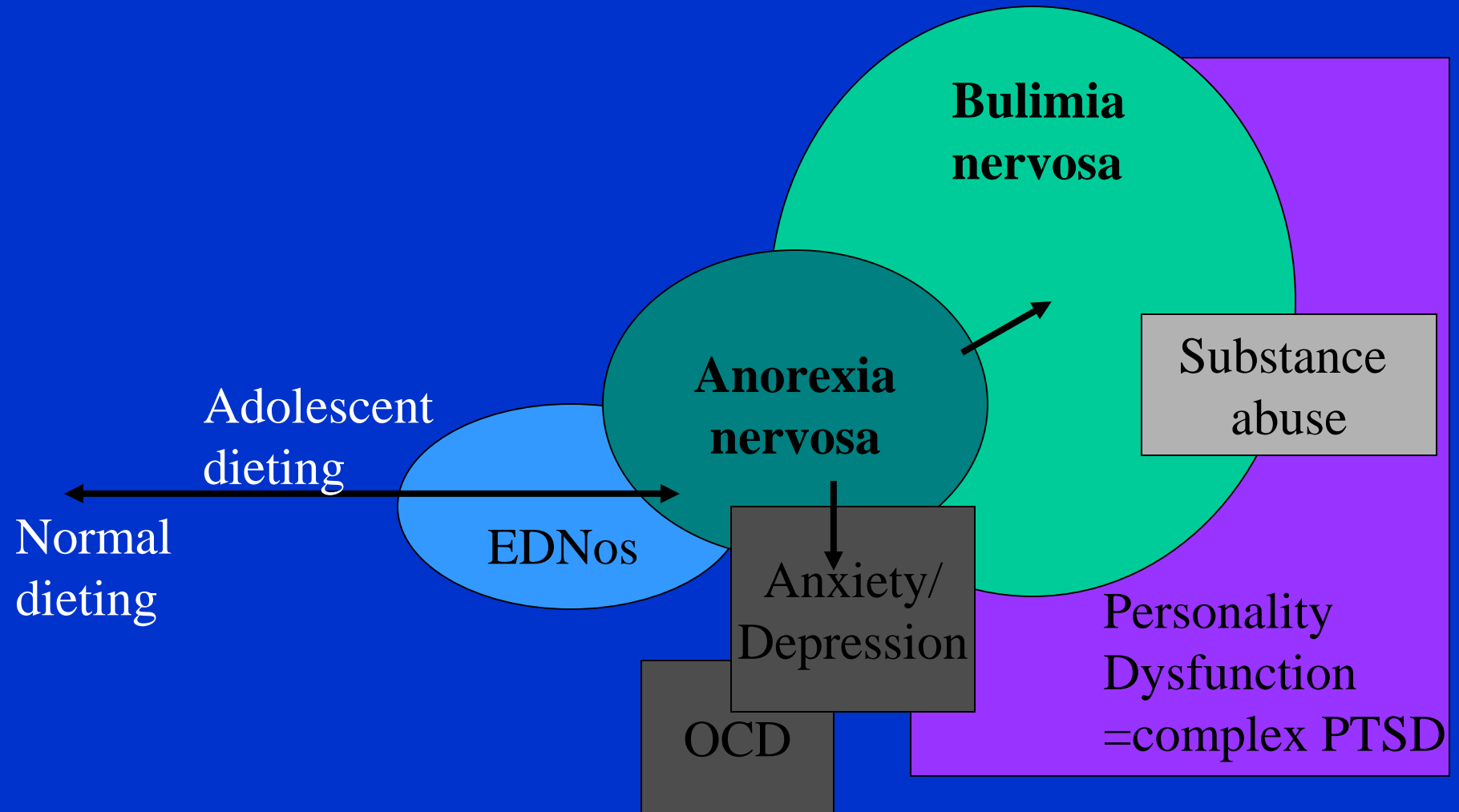
General psychopathology in the ED-trauma group



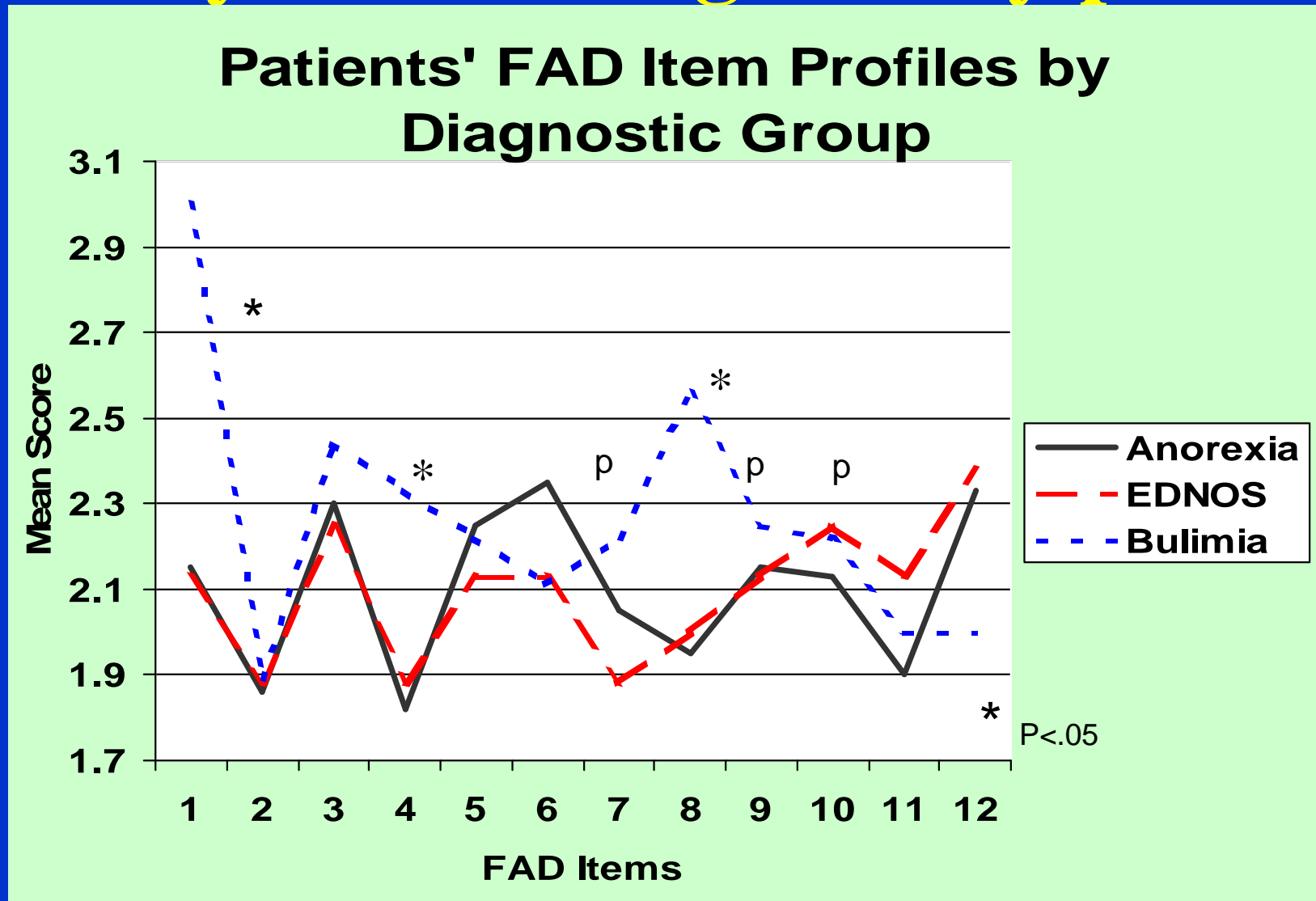
Different causal pathways?



Multiple comorbidities



Family functioning usually poor



McDermott et al., ANZJP 36: 509-514, 2002 Parent and child report of family functioning in a clinical child and adolescent Eating Disorders sample.

BMI is useful in child & adolescent Eating disorders

	AN	ANS	BN	Controls
n	80	43	24	30
Age (years)	15.1 (1.6)	14.6 (1.9)	15.5 (1.4)	15.0 (1.2)
Weight for Height	71.2 (8.7)	85.5 (12.7)	100.0 (13.1)	95.3 (12.3)
BMI (kg/m ²)	15.1 (1.5)	17.5 (2.3)	22.0 (2.1)	20.5 (1.8)
BMI z-score	-2.27 (0.64)	-1.17 (0.91)	0.17 (0.55)	-0.12 (0.5)
%BMI *	74.6 (7.2)	87.4 (11.2)	107.6 (11.6)	101.2 (9.4)
% body fat *	16.5 (3.6)	18.9 (4.2)	27.5 (3.9)	NA

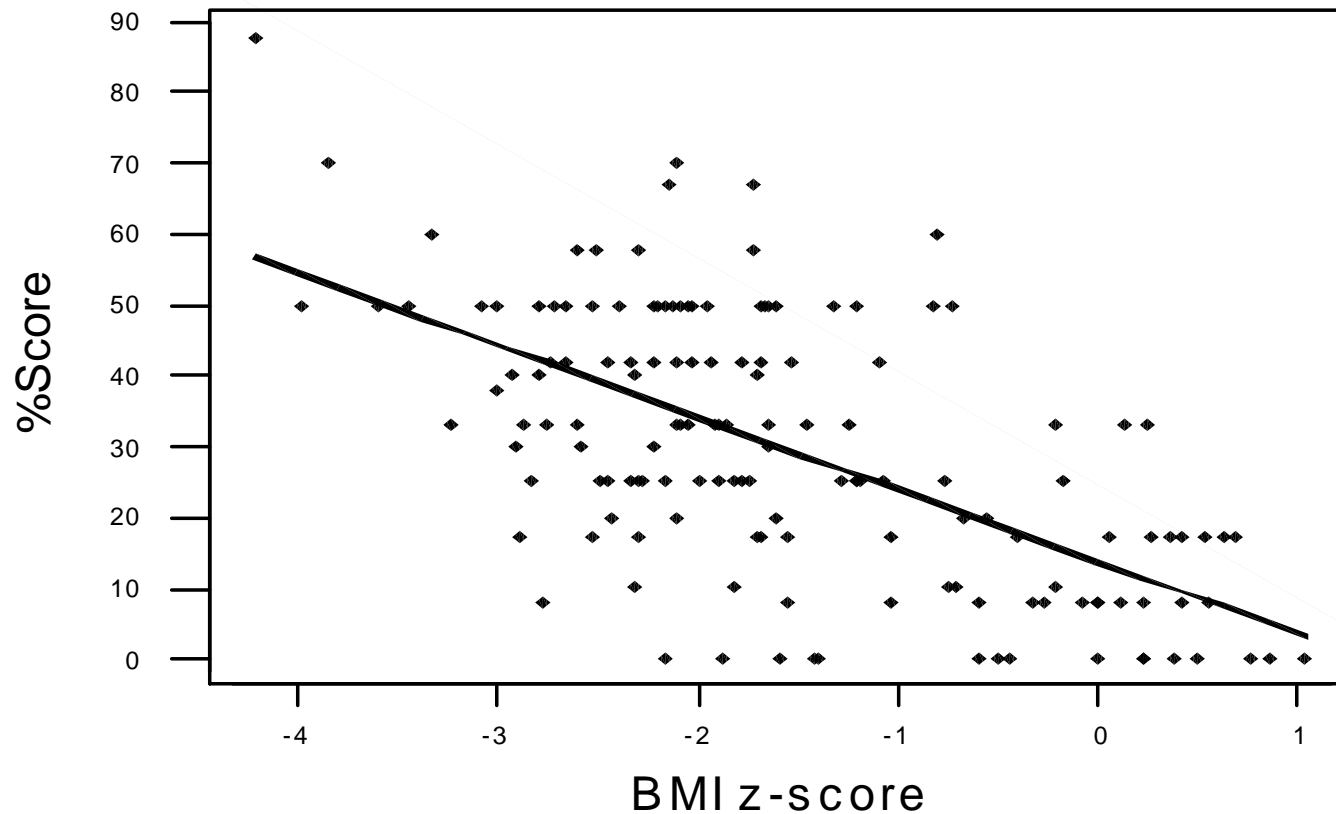
* Correlation between %body fat & %BMI: $r = 0.85$, $p < 0.001$

BMI: Close relationship to Clinical Features in Under-nutrition

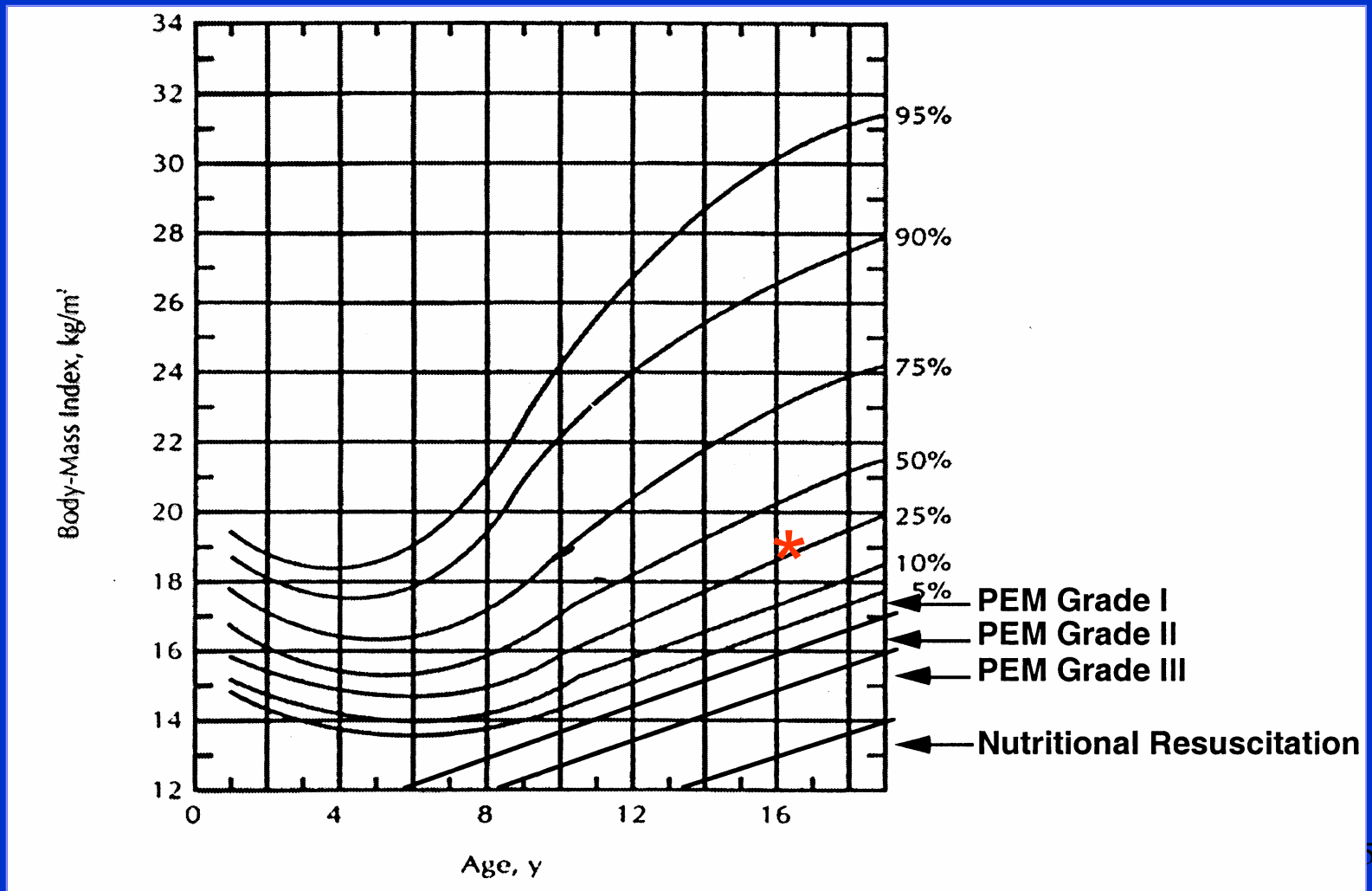
Regression Plot

$$Y = 13.8348 - 10.1544X$$

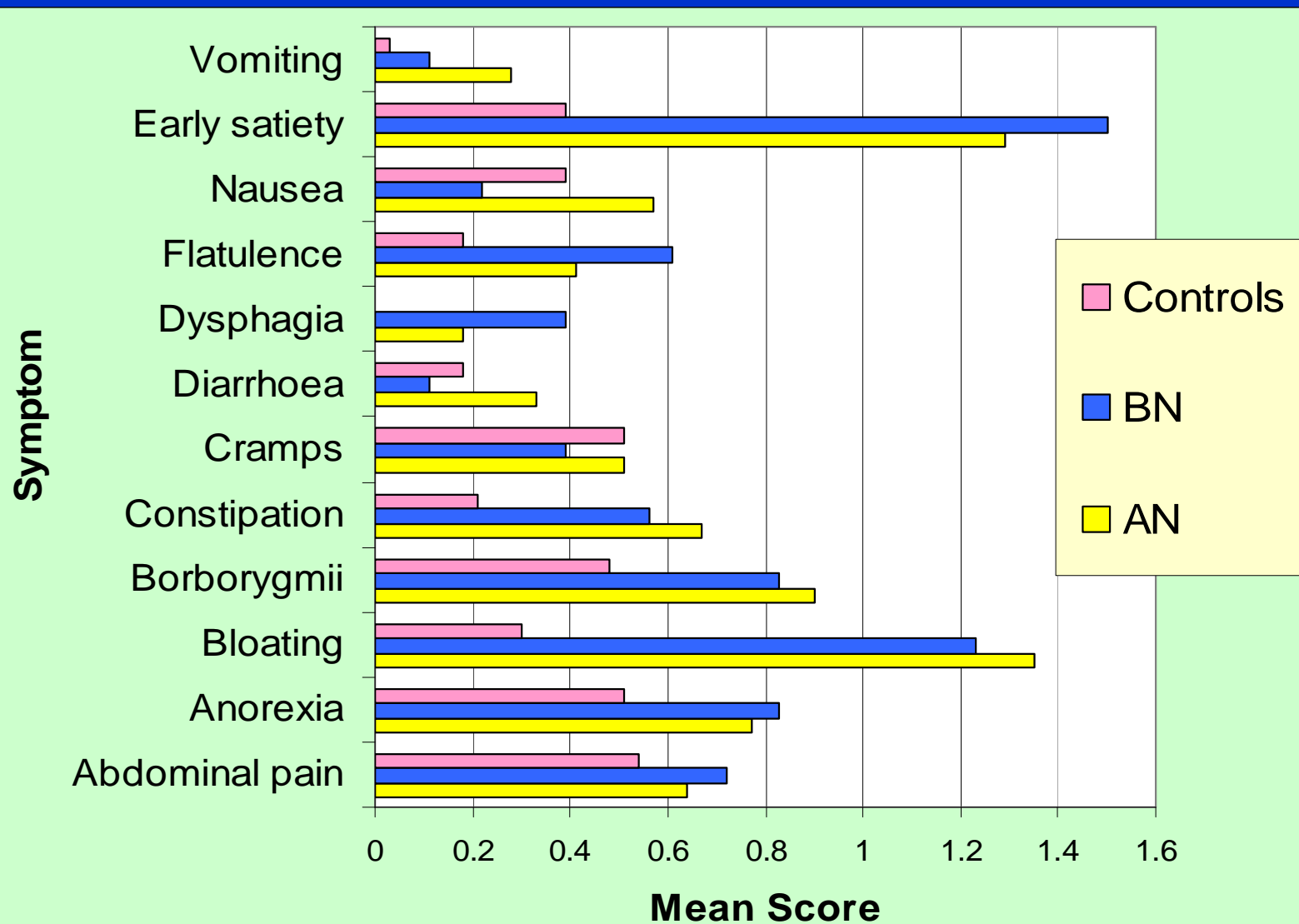
R-Sq = 37.6 %



Use appropriately: an age-adjusted measures of malnutrition

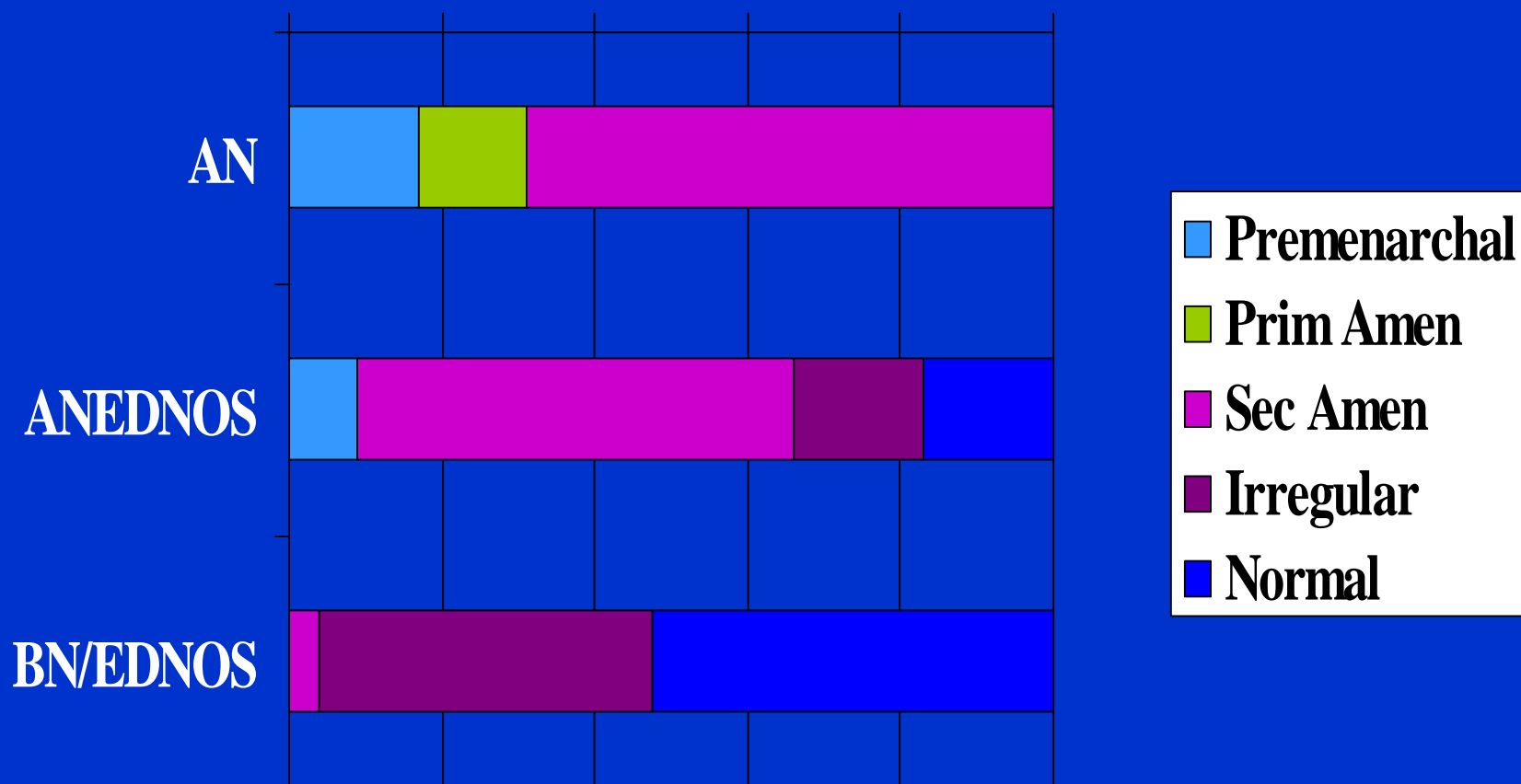


Gastrointestinal Symptoms are common



Menarche & Menstrual Disturbances

0% 20% 40% 60% 80% 100%



Anorexia Nervosa & Low Bone Density

Density	Low Bone Density	Normal Bone
Spine BMD z score	< -1.5	> -1.5
	N = 21	N = 48
Current age (years)	15.7 (1.5)	15.0 (1.3)
Duration dieting (mths)	13.9 (9.4)	8.0 (6.3)*
Weight (kg)	37.6 (6.6)	42.8 (6.4)**
BMI (kg/m²)	14.8 (1.8)	16.1 (2.0)**
Exercise Score	6.6 (10.2)	12.3 (13.5)
Age at menarche (yrs)	13.4 (0.8)	12.3 (1.1)***
2⁰ amenorrhoea (mths)	15.3 (14.5)	5.9 (4.3)*

*p < 0.05, ** p < 0.01, ***p < 0.001

Turner, Bulsara, McDermott, Byrne, Prince, Forbes
Int J Eating Disorders 2001

Anorexia Nervosa & Osteopaenia

Risk Factors for Low Bone Density

	OR	95% CI	p value
BMI (per kg/m ²)	0.6	0.4 – 0.9	0.01
Lean body mass (per kg)	0.7	0.5 – 0.8	0.001
Duration of dieting (per month)	1.1	1.0 – 1.2	0.006
Not achieved menarche	7.0	1.4 – 34.7	0.02
Primary amenorrhoea	5.7	1.0 – 32.0	0.05
Age at menarche (per year)	5.5	1.9 – 16.2	0.002
Duration 2 ^o amenorrhoea (per month)	1.2	1.0 – 1.4	0.06

Turner, Bulsara, McDermott, Byrne, Prince, Forbes.
Int J Eating Disorders 2001; 30: 245-251

Indications for Hospital Admission in Anorexia Nervosa

- Patients with BMI in severe malnutrition range
- Patients with evidence of medical instability
 - Dizziness and fainting
 - Extreme cold sensitivity
 - Temperature $< 35.5^{\circ}\text{C}$
 - Postural hypotension: systolic BP decrease > 20 mm Hg
 - Postural tachycardia: HR increase > 30 BPM
 - Capillary return > 1.0 secs
- On going wt loss despite nutrition counselling
- Energy intake $< 50\%$ RDI for 90% wt/ht

Cochrane Systematic Review

Topics

↳ Depression, anxiety, neuroses
↳ Eating Disorders (5)

AN (1) Individual psychotherapy in the outpatient treatment of adults with AN. Hay, Bacaltchuk, et

BN (3) Antidepressants versus placebo for people with BN.

Antidepressants versus psychological treatments & their combination for BN. Bacaltchuk, Hay, et

Psychotherapy for BN and bingeing. Hay, Bacaltchuk

EDNos (1) Interventions for preventing EDs in children and adolescents. Pratt, Woolfenden

Where we are with evidence based medicine

AN

Little data for children and adolescents other than early evidence family therapy treatment of choice if < 18 years old.

BN

Better data, CBT-BN efficacy supported for BN & BN-like syndromes.

Evidence for longer-term IPT.

Combination therapy superior to single psychotherapy (although addition of medication decreased treatment acceptability).

The Anorexia therapy menu

- Supportive-eclectic individual therapy
- Psychodynamic theories and the later developmental modifications of Bruch and Crisp
- Cognitive behavior therapy for anorexia nervosa
- More recent:

Dialectical behavior therapy

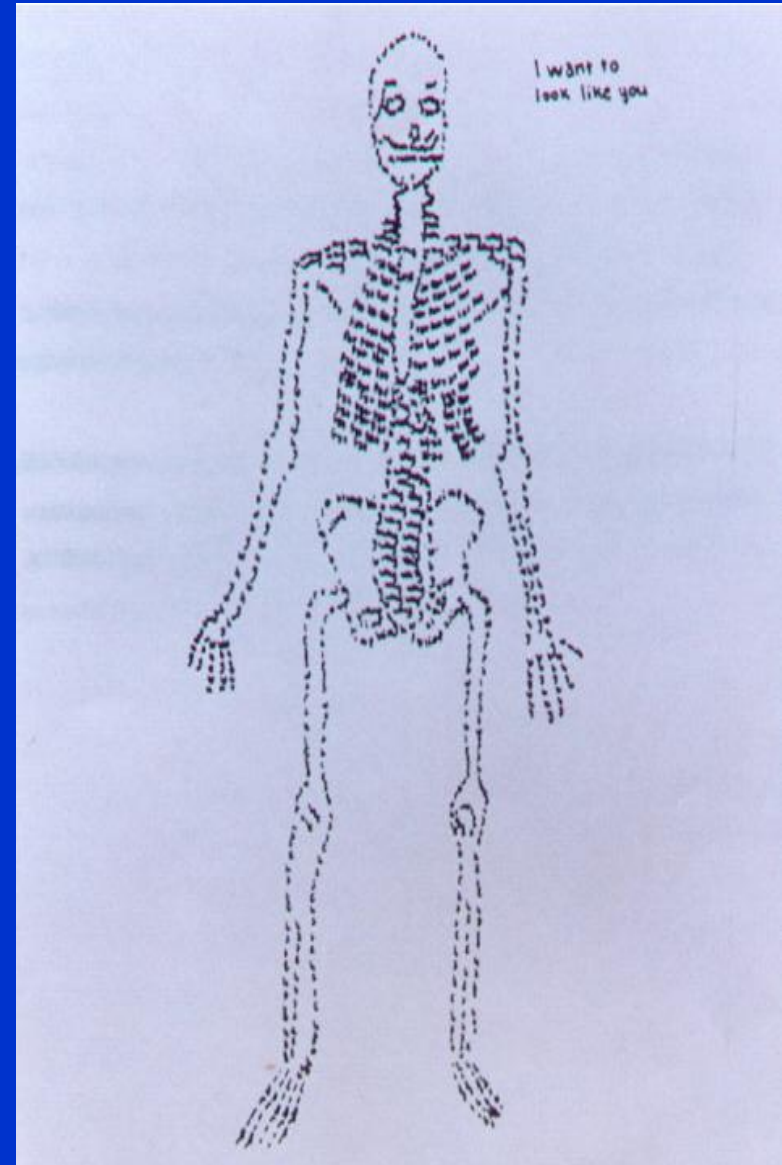
Motivational enhancement therapy

Schema focused therapy

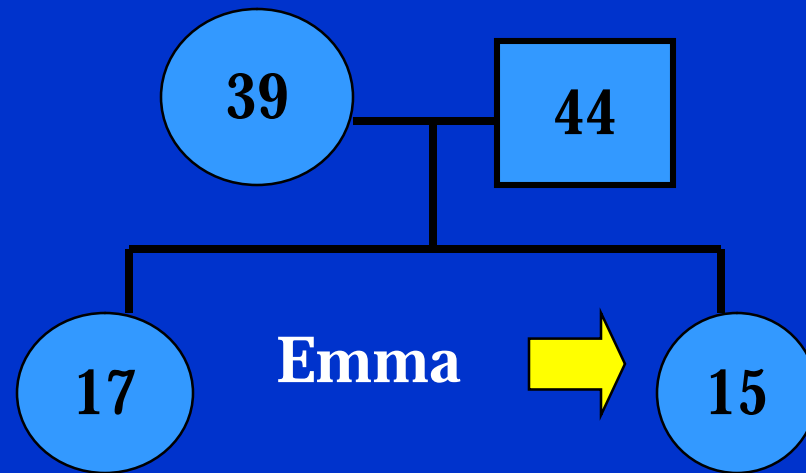
McDermott, Harris, Gibbon. C&A Psychiatry Clinics of North America, 2002.

Emma: presentation

- 15 yr old dancer
- 4/4 DSM-IV criteria Anorexia Nervosa.
- Severe restriction.
- Denies a problem.
- Nil binge-purge, “bingers are weak”
- one year of treatment, 2 medical admissions)



Emma's family



Youngest of 2 siblings, intact family.
Diminished feeling of warmth. High expectations and punishment/rejection when standards not met (by silence, decreased involvement).

Diagnostic formulation

- Emma is a 15 year old girl, in Year 10, the youngest of 2 in a intact family. Developmentally perfectionistic. Referred by G.P. with a restrictive eating pattern, weight-loss, and depressed mood, all of extreme severity of at least 1 year duration. At assessment she met criteria for Anorexia Nervosa, with a BMI of 14.6, severe malnutrition, bradycardia, hypothermia and amenorrhoea.

Psychological formulation: Key issues

- Experiences outside family expectation intolerable, denied or punished.
- No experience of loss of control, unwilling to experiment.
- Schema of self as failure, unworthy, hateful.
- Oscillates assertive help-rejecting versus helpless, special transference.
- Family experienced as lacking warmth, difficult to join with, 'special communication'.

Treatment package

Family therapy: not structural, strategic – systemic. Themes family's position re control, risk taking, past experiences with emotion/relationships, de-emphasis food/ED.

Individual:

trust and safety, engagement and avoidance.

expressive – creative techniques

graduated exploration (emotions/experiences)

shaping control away from food

schema re safety & the world

Place of expressive therapies

Range of effective applications:

- Exercises to establish rapport.
- Assessment in 'mute' child.
- Communication of complex emotions.
- Strategic or educative interventions with families/parents.
- In therapy challenging over-control.
- In therapy creating meaning.
- In therapy.....

Future Directions

More research needed!

For child and adolescent ED may require multi-center protocols.

Developmental issues:

- Family therapy likely to be always indicated in some degree.
- Creative therapies great assistance to engagement
- Developmental changes provide ongoing therapeutic opportunities.