Childhood Obesity

Conducting a Psychological Assessment

Caroline Braet

Based on: Braet, C., O. Malley, G., Weghuber, D., Vania, A., A., Erhardt, E., Nowicka, P., Mazur, A., Frelut, M.L., & Ardelt-Gattinger, E (2014). The Assessment of Eating Behaviour in Children who are Obese: A Psychological Approach. A Position Paper from the European Childhood Obesity Group. Obesity Facts, 7,153-164

Authors

Prof. Dr. Caroline Braet is a Psychologist and Professor at Ghent University who specialises in childhood obesity. She has been a founding member of ECOG since 1992.

She is scientific supervisor in the obesity treatment center ‘Zeepreventorium’ and participates in national working groups on pediatric obesity.

Learning objectives

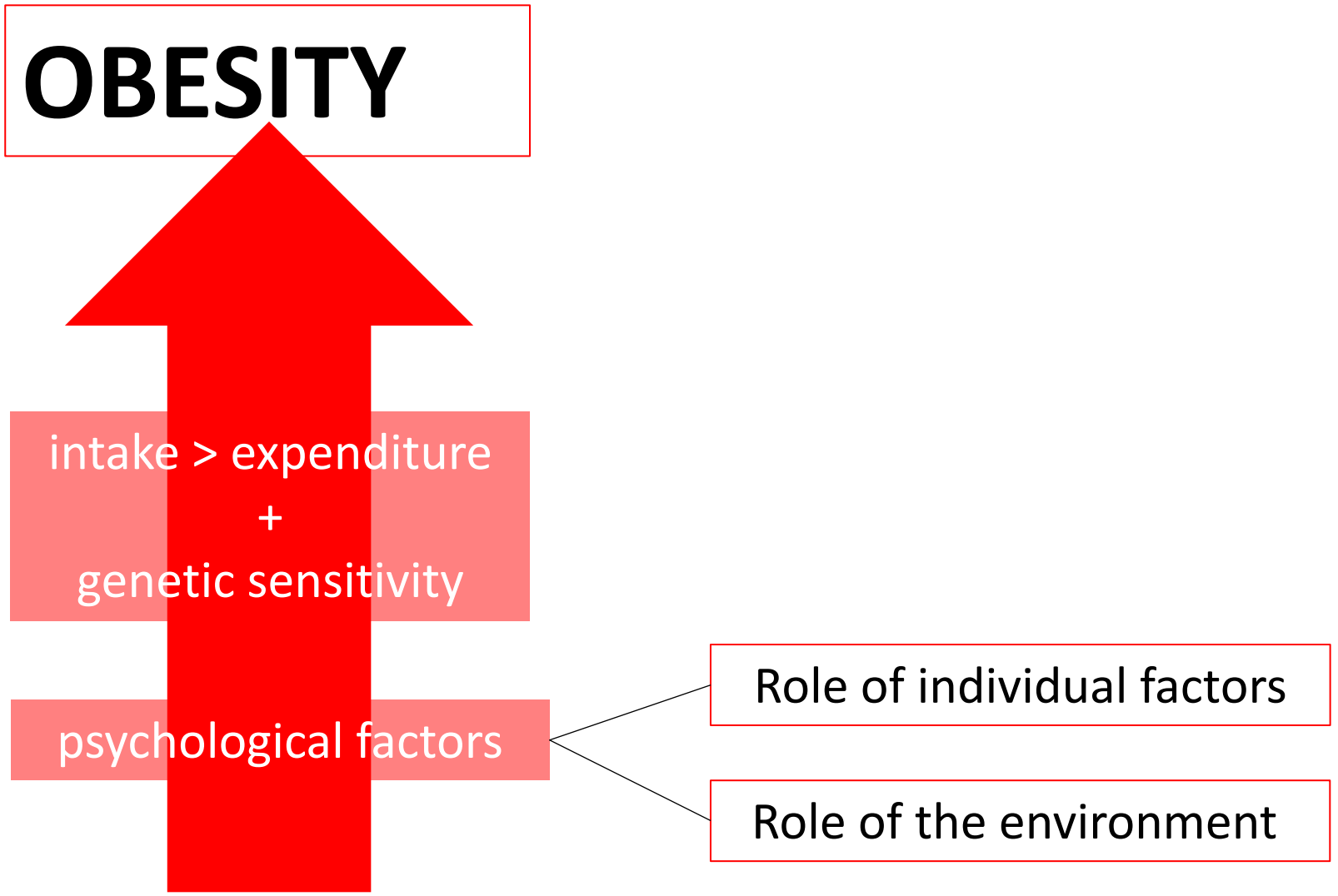
This course should allow you:

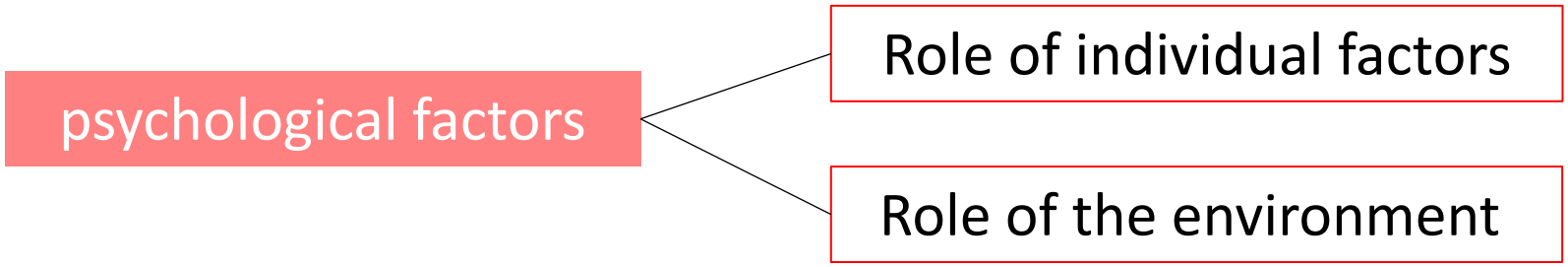
- To distinguish between the various **psychological pathways** leading to overeating
- To be able to **identify** them, **measure** them and **explain** them to a given child or adolescent and its family
- To stipulate an **adequate treatment plan**

Description of the course

This course allows a caregiver **to consider:**

- the range of psychological processes, observed in children or adolescents with obesity
- a step by step assessment of the individual problem embedded in a family context
- personalized interventions
- following up the patient towards realistic and lasting objectives regarding weight and life style changes.


OBESITY
intake > expenditure
+
genetic sensitivity
psychological factors
Role of individual factors
Role of the environment

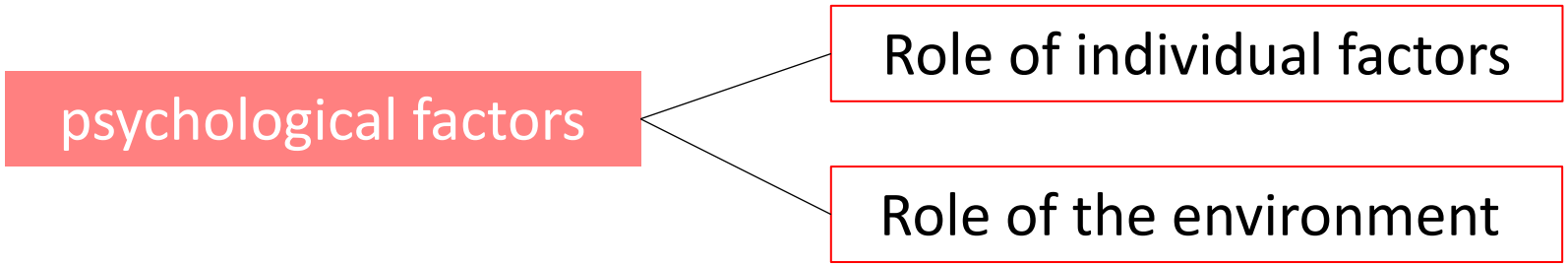


Evaluating:….

- 1. Some children with obesity make efforts to control their weight through dietary restraint
- 2. Some children with obesity are prone to emotion-driven eating
- 3. Some children with obesity have no problems but…

→ their weight and eating patterns may be impacted by factors in their immediate family or peer environment

- 4. Some children with obesity display specific temperamental traits



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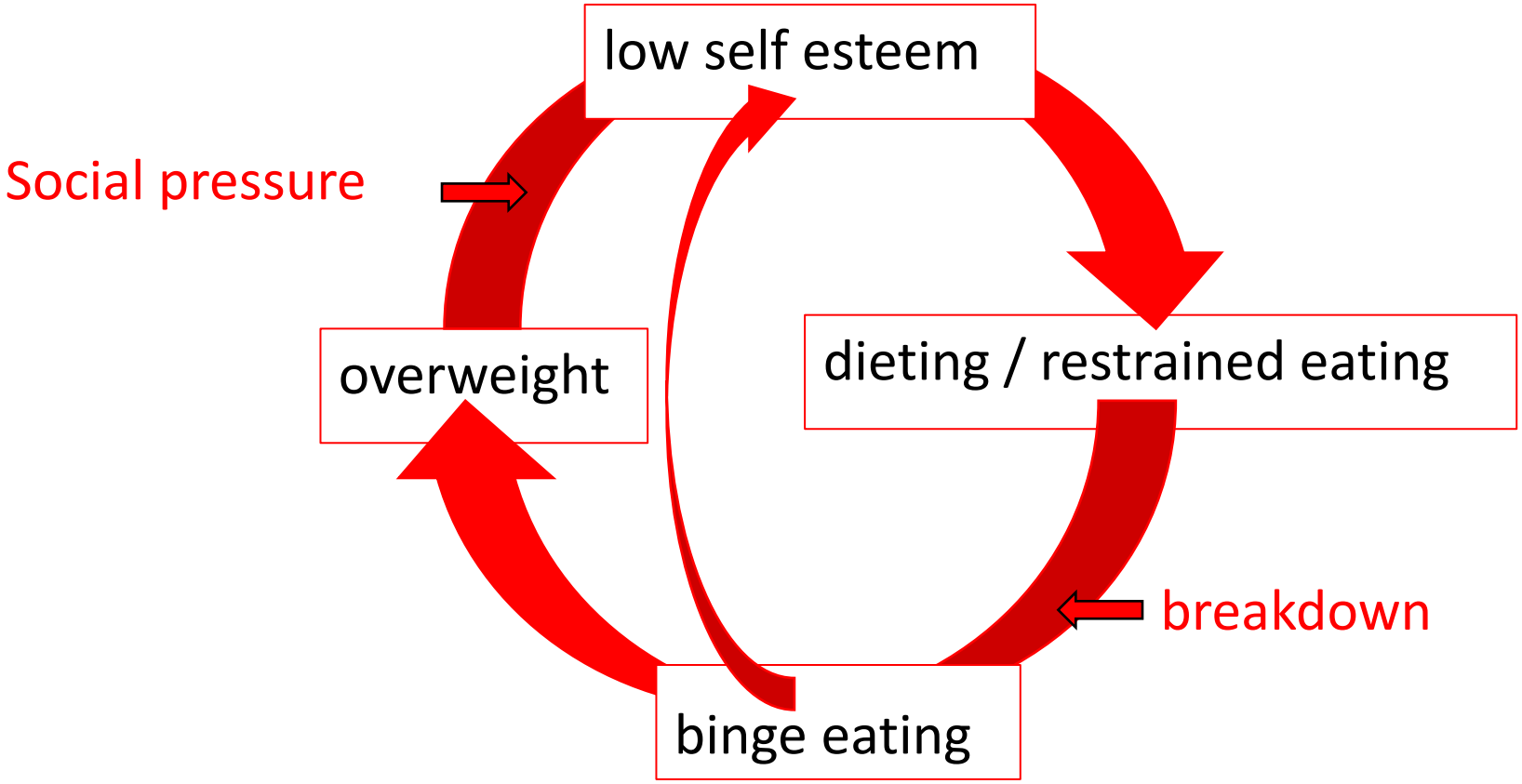

See: Hill et al (1990);Stice et al (2002);Decaluwé et al (2003);Soetens et al (2008),Tanoksky et al (2008)

How to measure?

- *"Do you sometimes consciously try to limit, restrict or cut back the overall amount of food that you eat because you think this is better for your weight?"*
- → ***Restrained eating***

- *"Do you sometimes experience loss of control?"*
- → ***Binge eating***

- See: Tanofsky-Kraff et al (2008); Braet et al (2014)

Questionnaires (8-18 years):

Eating styles (DEBQ, EDE-Q or EDE-interview):

Restrained eating? Binge eating?

Please check:

compensatory behavior, typical for Bulimia Nervosa?

See: Decaluwé et al (2003); Braet et al. (2007; 2008)

EATING QUESTIONNAIRE

Instructions: The following questions are concerned with the past four weeks (28 days) only. Please read each question carefully. Please answer all of the questions. Thank you.

Questions 1 to 12: Please circle the appropriate number on the right. Remember that the questions only refer to the past four weeks (28 days) only.

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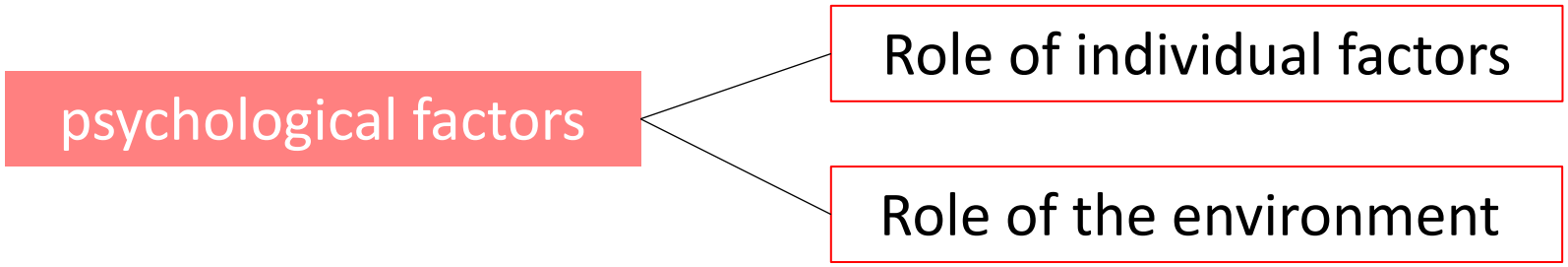
	On how many of the past 28 days …..	No days	1-5 days	6-12 days	13-15 days	16-22 days	23-27 days	Every day
1	Have you been deliberately trying to limit the amount of food you eat to influence your shape or weight (whether or not you have succeeded)?	0	1	2	3	4	5	6
2	Have you gone for long periods of time (8 waking hours or more) without eating anything at all in order to influence your shape or weight?	0	1	2	3	4	5	6
3	Have you tried to exclude from your diet any foods that you like in order to influence your shape or weight (whether or not you have	0	1	2	3	4	5	6

See: Decaluwé et al (2003)

Observation or Diary:

- “How much do you eat every day?”
- “Do you sometimes skip meals or breakfast?”

See: Decaluwé et al (2003); Tanoksky et al (2008); Braet et al (2014)



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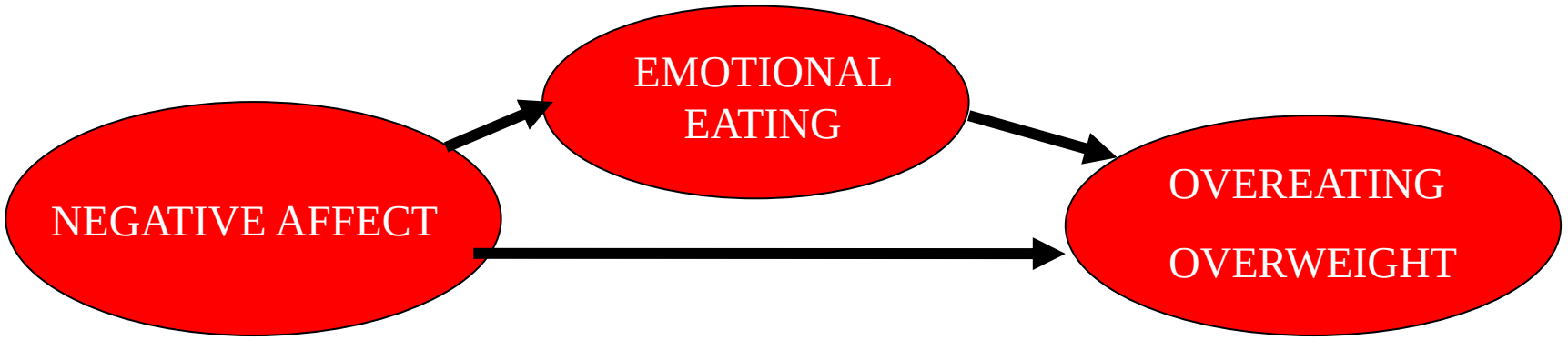


How negative mood induces emotional eating (due to emotional problems)

Grilo, et al (2001); Macht et al (2008); Braet et al (2014)

How to measure?

"Do you sometimes eat snacks when you are feeling alone, stressed or bored?"

Please check:

is the child using psychotropic medications?

See: Macht et al (2008); Braet et al (2014)

Observation or Diary:

“Why do you eat: is it due to hunger, or not?”

See: Macht et al (2008); Braet et al (2014)

Questionnaires (8-18 years):

Self-worth

- global, physical appearance, social

Internalizing problems

- emotional problem-scales

depressive symptoms?, unhappy?, sleep? DSM-psychiatric disorders? Total mental illness?

Eating styles

- emotional eating?

When interested in the cause of the problems, a variety of screening tools could be administered: e.g. history of bullying, trauma, ASS, life-events, ...

•See: Zamatkin et al (2004); Braet et al. (2007; 2008), Achenbach et al (2008); Nguyen-Rodriguez et al (2008); d'Autume et al (2012); APA (2013)

Subtypes of children	Study 1	Study 2	Treatment Guidelines?
Emotional eating	47%	45%	Psychological treatment: Coping emotions
Restrained eating	??	??	Non-diet healthy lifestyle
No evidence of eating or weight concerns	31%	33%	Dietary advices Evaluate:health literacy

See: Braet & Beyers (2009); Braet et al (2014)

Subtypes of children	Study 1	Study 2	Treatment Guidelines?
Emotional eating	47%	45%	Psychological treatment: Coping emotions
Restrained eating	??	??	Non-diet healthy lifestyle
Restraint + Emotional Eating	22%	22%	Psychological treatment: Coping emotions Non-diet healthy lifestyle
No evidence of eating or weight concerns	31%	33%	Dietary advices Evaluate: health literacy

See: Braet & Beyers (2009); Braet et al (2014)

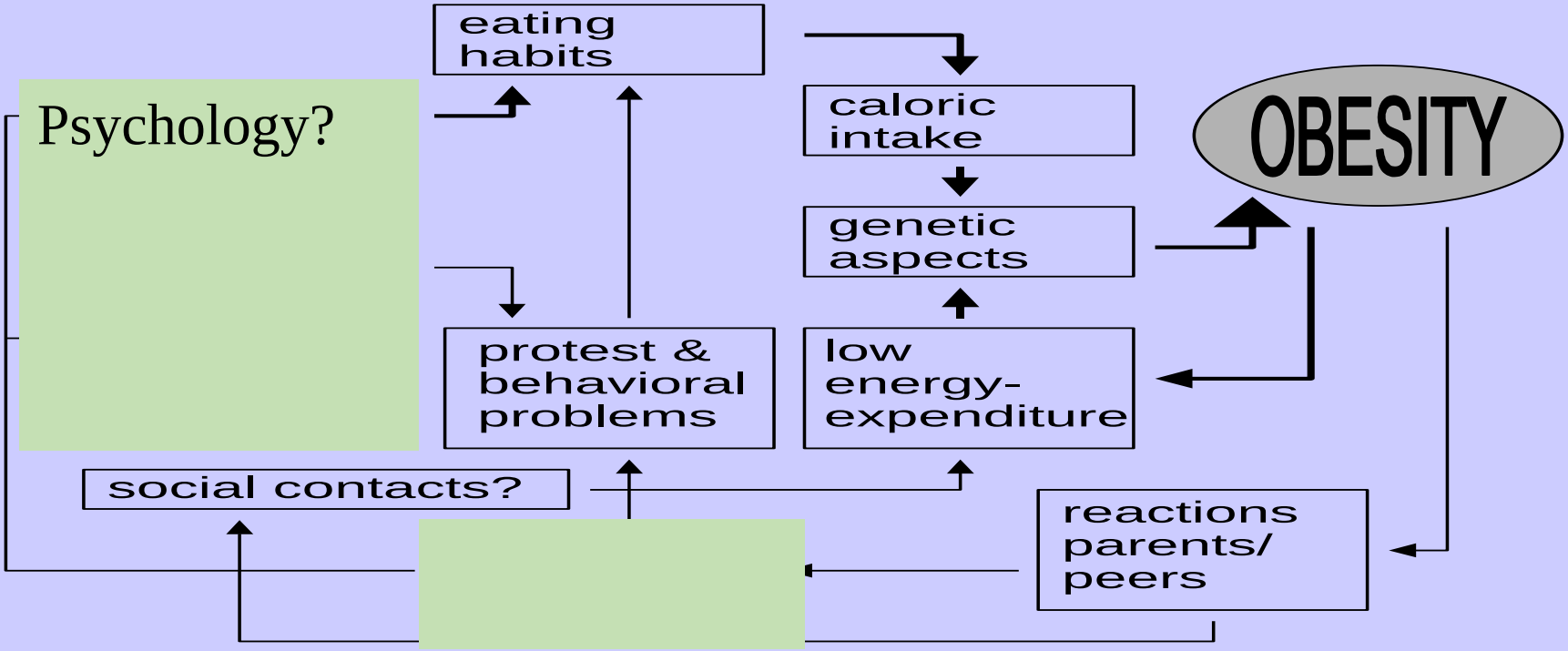
Subtypes of children	Study 1	Study 2	Community Study	Treatment Guidelines?
Emotional eating	47%	45%	14%	Psychological treatment: Coping emotions
Restrained eating	??	??	??	Non-diet healthy lifestyle
Restraint + Emotional Eating	22%	22%	30%	Psychological treatment: Coping emotions Non-diet healthy lifestyle
No evidence of eating or weight concerns	31%	33%	56%	Dietary advices Evaluate: health literacy

See: Braet & Beyers (2009); Braet et al (2014)

Case-Study
STEVE, 12-year old boy

- Overweight: 83%
- Only child
- Parents do not agree with how to support child with weight and eating
- Prefers carbohydrates and sugary foods

Note: It is common for families to have conflicts. However, if parental relationship is poor, this may impact how they parent their children.



Based on: Braet, C. (1999). Treatment of obese children: a new rationale. *Clinical Child Psychology and Psychiatry, 4*, 579-591.

Questionnaires (8-18 years):

1. Self-worth
2. Internalising emotional problem-scale
3. Eating styles
   (emotional or restrained eating?)

See: Nguyen-Rodriguez et al (2008); d'Autume et al (2012); APA (2013); Braet et al (2014)

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See: Decaluwé et al (2003)

Eating Questionnaire (EDE-Q)

Naam kind.....Leeftijd.....

Jongen / Meisje.....Geboortedatum.....

Identificatienummer ☐☐☐

Restraint (R)
EatingConcerns (EC)

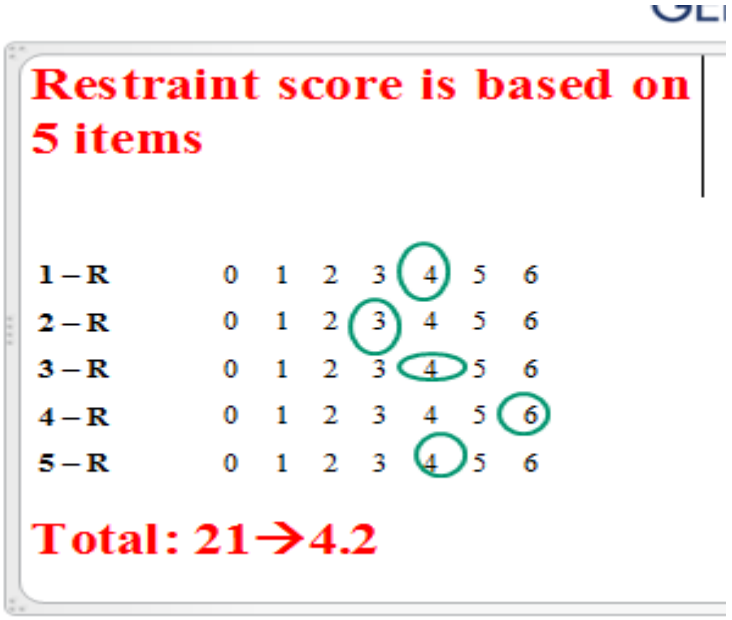
1 – R	0	1	2	3	(4)	5	6
2 – R	0	1	2	(3)	4	5	6
3 – R	0	1	2	3	(4)	5	6
4 R	0	1	2	3	4	5	(6)
5 R	0	1	2	3	(4)	5	6
6 EC	0	(1)	2	3	4	5	6
7 EC	0	1	(2)	3	4	5	6
9 – EC	0	(1)	2	3	4	5	6
15 EC	0	1	(2)	3	4	5	6

Weight Concerns (WC)
Shape Concerns (SC)

11 – WC/SC	0	1	(2)	3	4	5	6
14 – WC	0	1	(2)	3	4	5	6
23 – WC	0	1	2	(3)	4	5	6
25 – WC	0	(1)	2	3	4	5	6
26 – WC	0	1	2	(3)	4	5	6
10 – SC	0	(1)	2	3	4	5	6
12 – SC	0	1	(2)	3	4	5	6
13 – SC	0	(1)	2	3	4	5	6
24 SC	0	1	2	(3)	4	5	6

Restraint score is based on 5 items

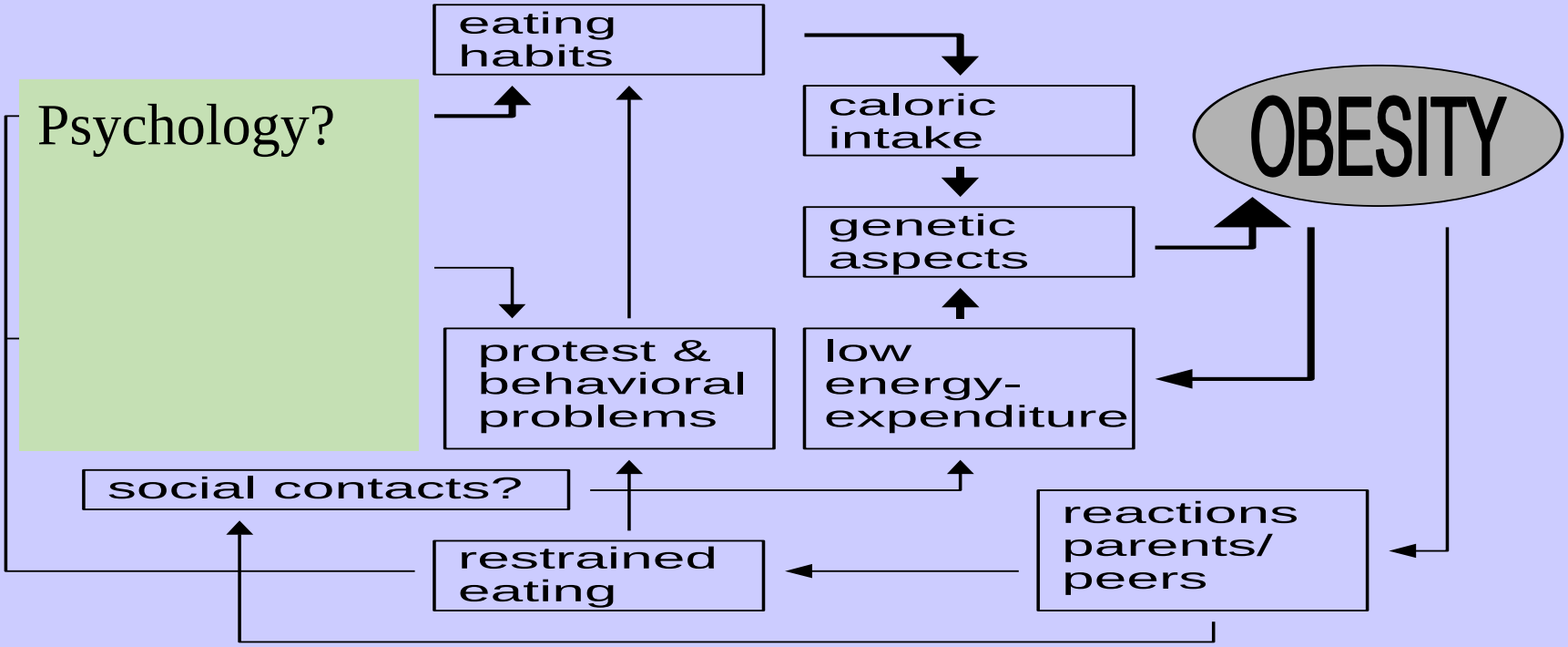
1 – R	0	1	2	3	4	5	6
2 – R	0	1	2	3	4	5	6
3 – R	0	1	2	3	4	5	6
4 – R	0	1	2	3	4	5	6
5 – R	0	1	2	3	4	5	6



Total score: ranges between 0 and 30

Mean score: Total score/5

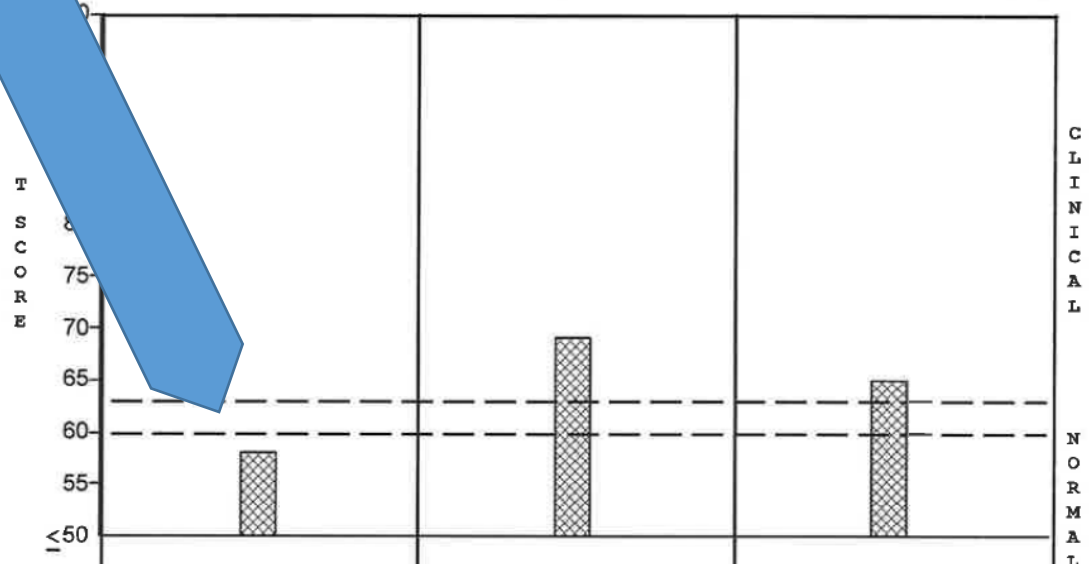
Mean score: max: 6, min: 0


Psychology?
eating habits
caloric intake
genetic aspects
low energy-expenditure
protest & behavioral problems
social contacts?
restrained eating
reactions parents/ peers
OBESITY

No emotional problems

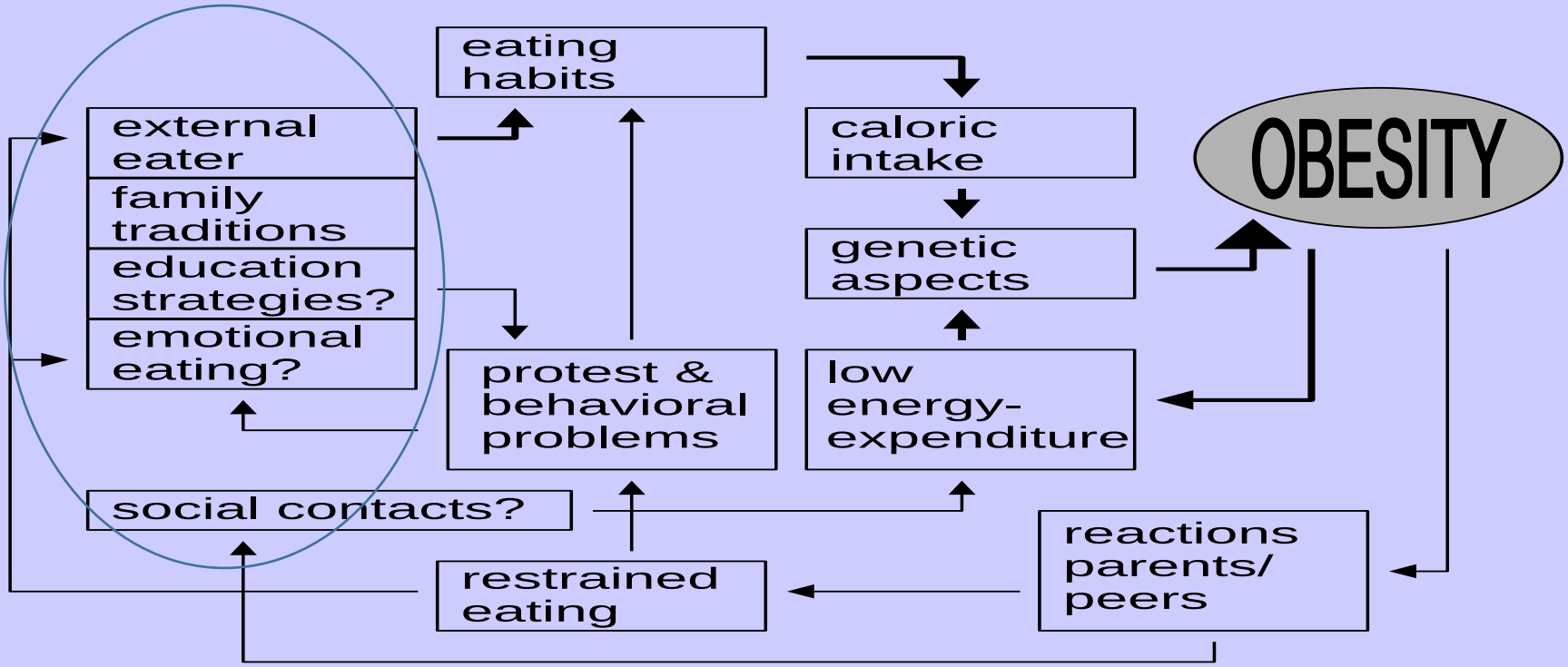
alizing, Externalizing, Total Problems, Other Problems for Boys 6-11
Scored using T scores for ASEBA Standard

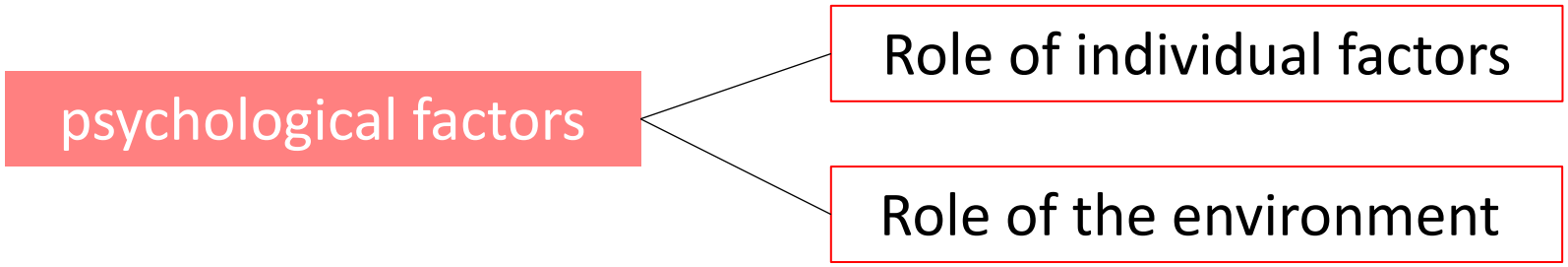
le Date Filled: 05/03/2013 Clinician: Informant:
Birth Date: 03/08/2002 Agency: Relationship: Special Ed



	Internalizing Problems	Externalizing Problems	Total Problems
Total Score	7	25	64
T Score	58	69-C	65-C
Percentile	79	97	93

B = Borderline clinical range; C = Clinical range *Broken lines = Borderline clinical range*


eating habits
external eater
family traditions
education strategies?
emotional eating?
caloric intake
genetic aspects
OBESITY
protest & behavioral problems
low energy-expenditure
social contacts?
reactions parents/ peers
restrained eating



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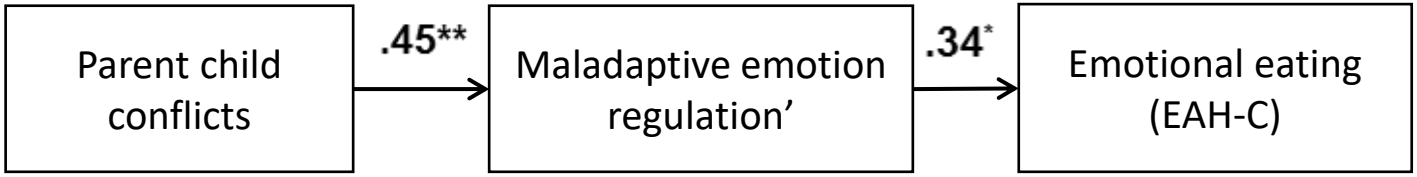
See: Costanzo et al (1984); Kinston et al (1988); Golan et al (2004); Moens et al (2007)

Mechanism?



** $p < .01$; * $p < .05$

How parent/child interaction can induce emotional eating and prevent the child learning good self-regulation

How to measure?

"Does the family complain that this child is difficult to educate?"

See: Costanzo et al (1984); Kinston et al (1988); Golan et al (2004); Moens et al (2007)

Observation or Diary:

Parenting behaviour during mealtime?

Discuss:

- Being consequent?
- What if too permissive?
- What if over-controlling?

The Mealtime Interaction Coding System can be used to rate video-taped parental practices at real mealtime (or during role-play):

Ratings for Parental 'Control' and 'Support'

- 'Behaviour Control'
- 'Interpersonal Involvement'

See: *MICS; Dickstein, Hayden, Schiller, Seifer & San Antonio, 1994)*

Questionnaires (8-18 years):

1. How are the **parental feeding styles** (parenting)?
2. **Parental problems** because of parenting stress, depression and other mental health factors….
3. **Socio-economic** background information

See:

Puhl et al (2001); Costanzo et al (1984); Kinston et al (1988); Golan et al (2004); Moens et al (2007)

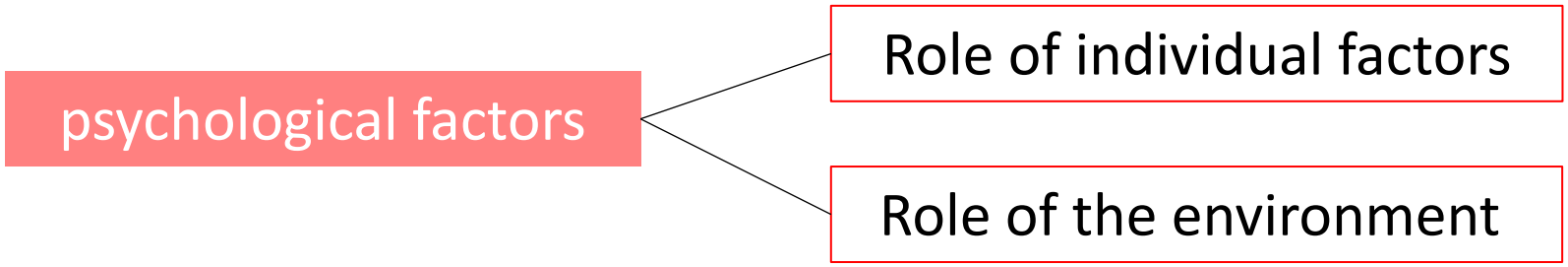
Parenting?

Extra psychological treatment?

Pure Negative Affect

mixed Restrained Negative Affect Subtype

Intensive treatment



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Dual pathway model

Bottom up
'drives'

Temperament
« hot system »
DRIVE & FOOD APPROACH

See: Cortese et al (2007); Volkow et al (2007)

Top down
'control'

Brain
« cold system »
INHIBITION
PROCESSES

Bottom up
'drives'

Temperament
« hot system »
DRIVE & FOOD APPROACH

See: Cortese et al (2007); Volkow et al (2007)

How to measure?

- *“Do you sometimes struggle to resist the urge to eat after you have seen or smelled food?”*

See: Cortese et al (2007); Volkow et al (2007)

Questionnaires (8-18 years):

Impulsive eating, not driven by hunger:

1. **Eating Style** (External Eating)
2. **Temperament** (Response Reward /Behavior Approach Scale)
3. **Brain functions** (Power of Food Scale)

Low Inhibition :

1. **Eating Style** (low Restrained Eating)
2. **Temperament** (Behavior Inhibition Scale)
3. **Brain functions** (Self Control Scale, BRIEF)

See: : Lowe et al (1975); Gray (1975); Carver at al (1994); Beaver et al (2006); Braet et al (2014)

To conclude:

several psychological profiles

Retrain your brain
Brain games?

Disinhibited eating

Parenting?

Extra psychological treatment?

Pure Negative Affect

mixed Restrained Negative Affect Subtype

Intensive treatment

To conclude: several psychological profiles

Retrain your brain Brain games?

Disinhibited eating

parenting

Standard treatment

Extra psychological treatment?

Pure Negative Affect

mixed Restraint Negative Affect Subtype

Intensive treatment

See: Braet & Beyers (2009); Braet et al (2014)

Discussion

- **Make a psychosocial profile of the child (and family)**
- **Develop stepped care approach**
- **Do some subtypes had a different developmental trajectory/outcome?**
- **Do we need specific questions for adolescents prior to**
  - **treatment (e.g. self-efficacy?, beliefs?, social network? barriers?)**
  - **surgery? (e.g. quality of life?)**

See: Braet & Beyers (2009); Braet et al (2014)

Questions

1. A child with overweight:

- ❑ You always have to evaluate if there is a binge eating problem
- ❑ Only when the child has high restrained attitudes, consider binge eating
- ❑ Binge eating will be observed mostly in the most severe group (severe obesity)

2. When a child suffers from emotional eating:

- ❑ You always have to evaluate if there is a family problem
- ❑ Consider first which emotions are negative and where they come from
- ❑ You do not have to handle them, as it is the result of stigmatisation that will stop if the child lose overweight

Questions

3. Compared with restrained eaters, emotional eaters will need :

- ❑ More psychological help
- ❑ Less psycholoical help
- ❑ Both need equal psychological help

4. What is most evidenced so far :

- ❑ Childhood Obesity is always an expression of family problems
- ❑ Childhood Obesity is always an expression of family habits
- ❑ For each child you have to assess whether there are family issues (or not)

5. When facing an 8 years old child that can not resist food:

- ❑ You hope that it will improve as they are still young or immature
- ❑ You advice the family to limit the food in the house
- ❑ You recommend specific inhibition training

Obesity Facts
The European Journal of Obesity

Present ppt is based on:

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Review Article

The Assessment of Eating Behaviour in Children Who Are Obese: A Psychological Approach. A Position Paper from the European Childhood Obesity Group

BARI-AD: Leitlinien-basiertes Interview als Grundlage psychologischer Stellungnahmen vor einem Adipositas-chirurgischen Eingriff bei Adoleszenten

Elisabeth Ardelt-Gattinger[1,2]; Erich Gattinger[2]; Barbara Andersen[2,3]; Karl Miller[2,4,5]; Christoph Kreuzer[2,13]; Markus Meindl[1]; Roman Metzger[6]; Susanne Ring-Dimitriou[2,7]; Wolfgang Siegfried[8]; Louisa Studtmann[1]; Martin Wabitsch[9]; Sylvia Weiner[10]; Johanna Brix[11,12]; Daniel Weghuber[2,13]

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0022-006X/09/$12.00 DOI: 10.1037/a0016304

Subtyping Children and Adolescents Who Are Overweight: Different Symptomatology and Treatment Outcomes

Caroline Braet and Wim Beyers
Ghent University

Children and adolescents who are overweight are a heterogeneous group. Whether pretreatment characteristics, such as dietary restraint and psychopathology, are related to differential treatment outcomes was not studied before. Using cluster analysis, the authors of this study examined the validity of subtyping along dietary restraint and internalizing psychopathology in 2 independent samples of treatment-seeking children and adolescents who were overweight (Study 1: $n = 200$; Study 2: $n = 120$). Three subtypes emerged: a dietary restraint/internalizing (DR/IN) group, a pure internalizing (IN) group, and a nonsymptomatic (NS) group. The DR/IN subtype showed more problems than the NS subtype, with complete consistency across the 2 studies for 1/4 of the validating variables. Although total weight change was not different across subtypes, compared with NS, the DR/IN and IN subtypes had a less positive weight prognosis during follow-up. Restraint scores only showed increases over time in the initially low-restraint IN group. These findings suggest that individual characteristics, such as degree of dietary restraint and internalizing psychopathology, can be useful in (a) classifying children and adolescents who are overweight, (b) stipulating specific treatment guidelines, and (c) making differential prognoses.