Children with overweight Psychology in the spotlight

Caroline Braet
Ghent University

Ann Tanghe
Zeepreventorium

GHENT
UNIVERSITY

www.zeepreventorium.be

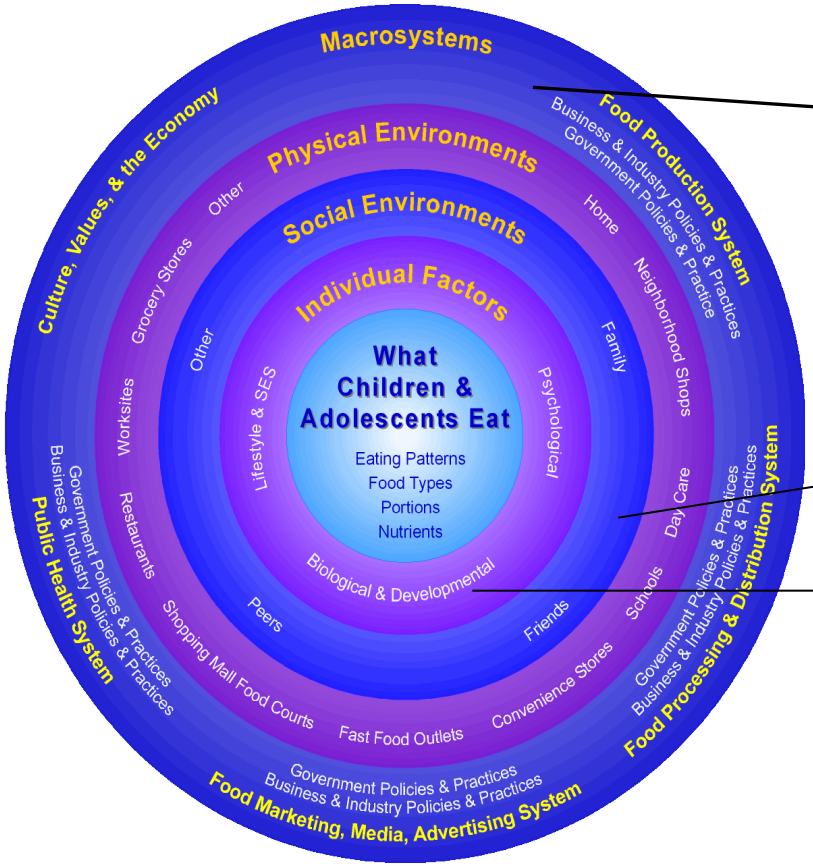
Zee preventorium

Intake > Expenditure + genetic sensitivity

Psychology:

- Role of the environment
- Role of psychological factors

Multiple Influences on What Children Eat



Sociocultural influences
'Obesogenic society'
-Media & Advertising
-School, Peers
-Retail, Horeca

Parents/Caregivers
' Learning context'
-Exposure to novel foods
-Modeling
-Rewards
-Encouragement

X

Individual characteristics
-Food preferences
-Psychological processes

Source: Kolbe, L & Story M. [Modified from] Preventing childhood obesity. National Academies Press; 2005. p.84

Obesogenic environment for our children

https://vimeo.com/44669019

Individual characteristics ?

Executive functioning

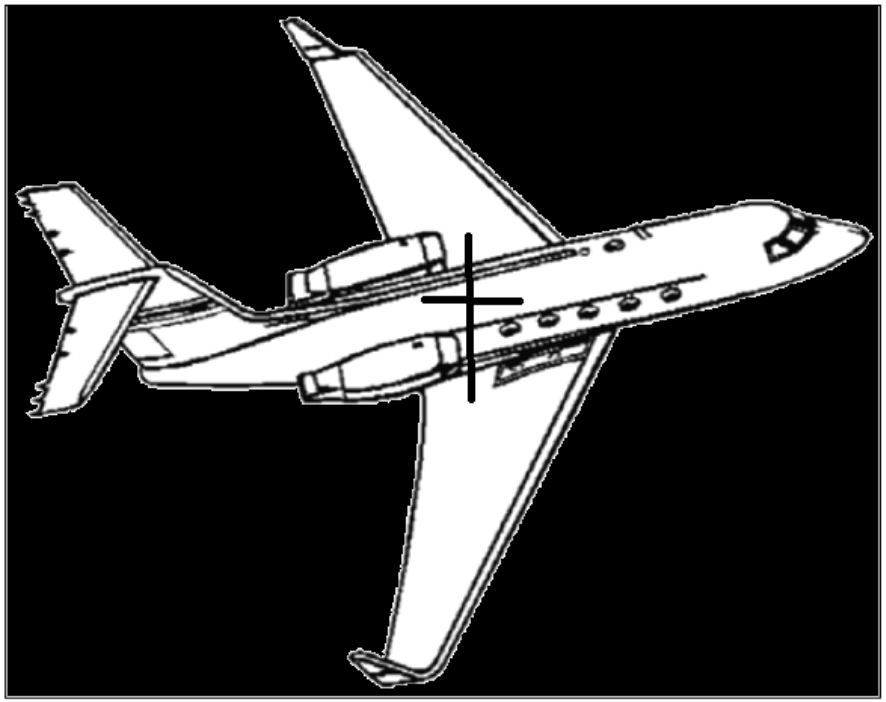
Brain: Inhibition processes: « cold system »

Top down
Long
term goal

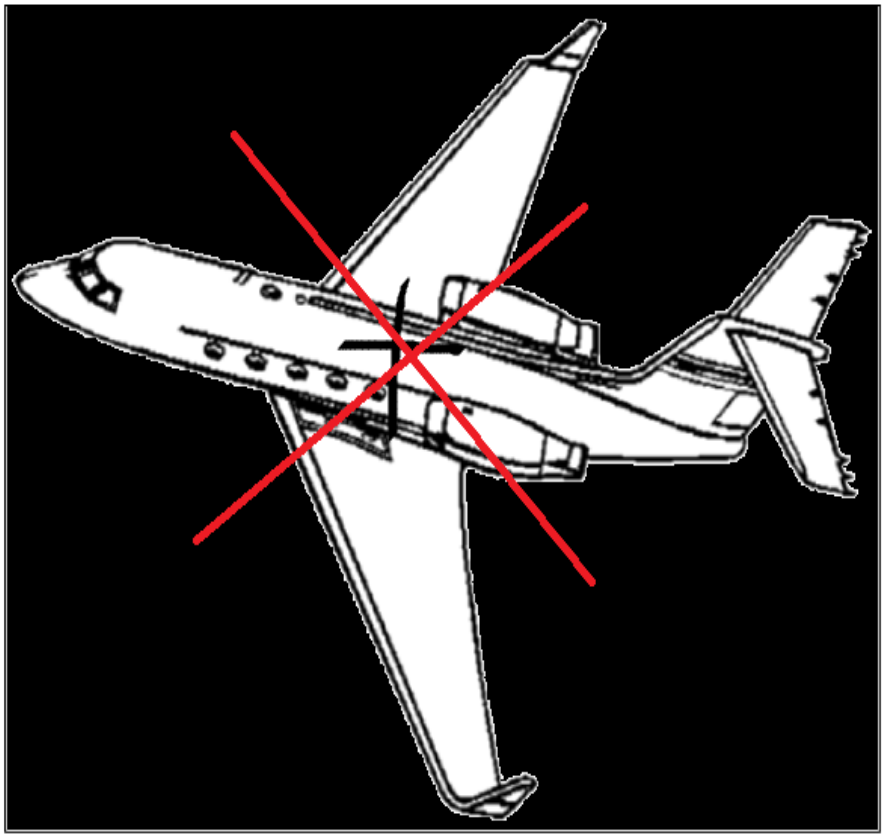
Bottom up
Immediate
reward

Temperament
« hot system »
DRIVE & FOOD APPROACH

Inhibition processes: ComputerTask



Push right



Don’t push

children: 10 – 14 year (n = 12.0)

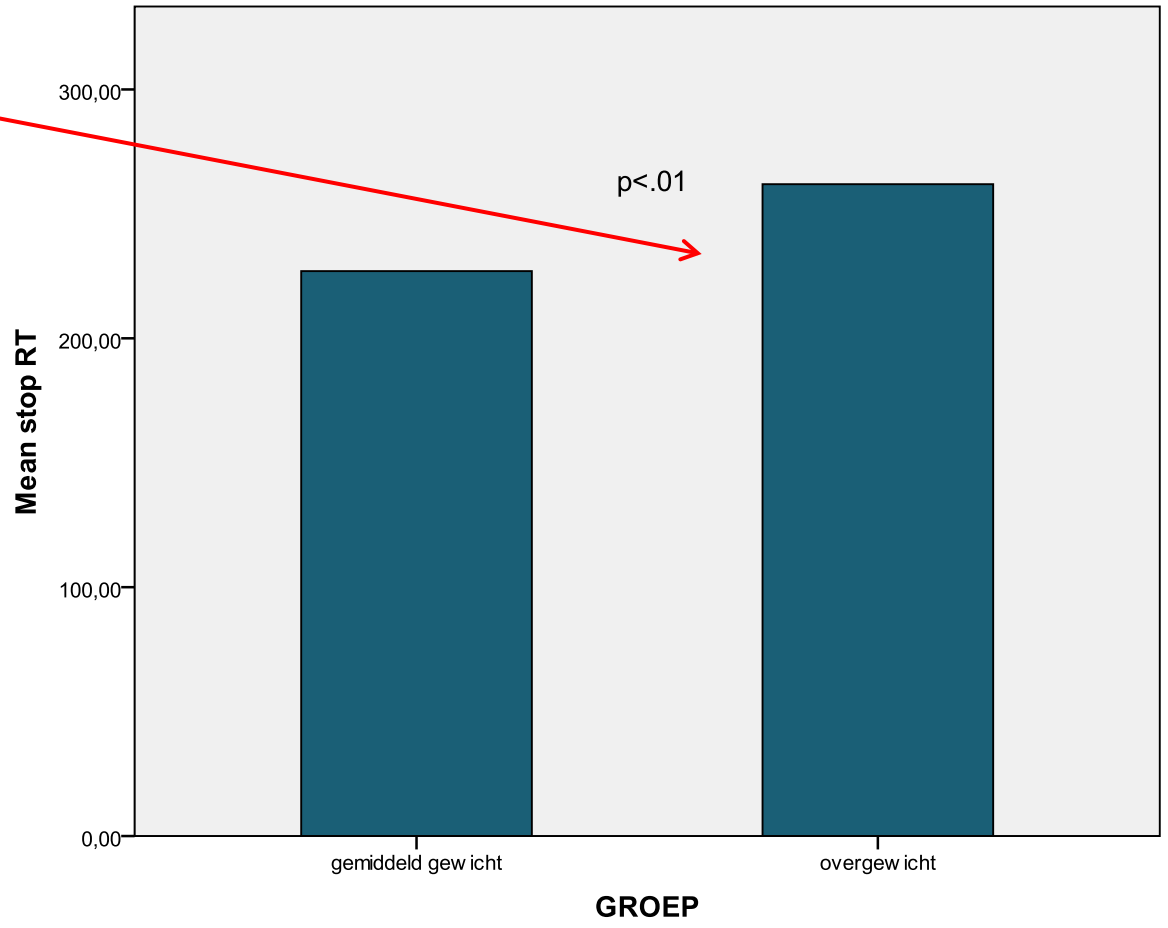
Obese children :

Can not stop

Less inhibition

More impulsive

Cannot resist food



See Verbeken (2012)


Braingames ?

Behaviour Research and Therapy 51 (2013) 290–299

Contents lists available at SciVerse ScienceDirect

Behaviour Research and Therapy

journal homepage: www.elsevier.com/locate/brat

Executive function training with game elements for obese children: A novel treatment to enhance self-regulatory abilities for weight-control

Sandra Verbeken [a,*], Caroline Braet [a], Lien Goossens [a], Saskia van der Oord [b,c,d]

[a] Department of Developmental, Personality and Social Psychology, Ghent University, H. Dunantlaan 2, 9000 Ghent, Belgium
[b] Department of Clinical Psychology, Leuven University, Tiesestraat 102 – Box 3720, 3000 Leuven, Belgium
[c] Department of Developmental Psychology, University of Amsterdam, Amsterdam, The Netherlands
[d] Cognitive Science Center Amsterdam, University of Amsterdam, Amsterdam, The Netherlands

Individual characteristics ?

International Journal of Obesity (2005) 29, S19–S23
 0307-0565/05 $30.00
www.nature.com/ijo

PAPER

Psychological profile to become and to stay obese

C Braet[1]*

[1]*Department of Developmental, Personality and Social Psychology, Ghent University, Ghent, Belgium*

OBJECTIVE: The presentation will successively deal with the psychological models to explain for the onset or maintenance of child obesity.

DESIGN: Five psychological perspectives on childhood obesity are selected. The boundary model of Herman and Polivy (1980) was brought forward as an explanation model for understanding the overeating behaviour in obese people. Others describe obese children as over-responsive to external cues and this over-responsiveness is seen as a personality trait. Learning theories put forward how (dysfunctional) learning mechanisms can explain also why obese people eat in front of food cues, without feeling hungry. Finally, obesity can be seen as an expression of a family pathology or an emotional problem.

1.How many subtypes in obese children?

2. Do some subtypes have a worse profile?

Method

Study 1

200 children with overweight (mean BMI=31; SD=5)

- 10-16 year
- Outpatient (n=50) or inpatient (n=150)
- Assessed pretreatment only

Study 2

122 children with overweight (mean BMI=33; SD=5)

- 7-17 year
- Inpatients: 10-month treatment CBT-program
  + healthy life style
- Assessed pretreament, posttreatment and at follow-up

MEASURES

(study 1 and study 2)

Clustering variables:

EDE-Restraint scale

SPPC-Global self-worth

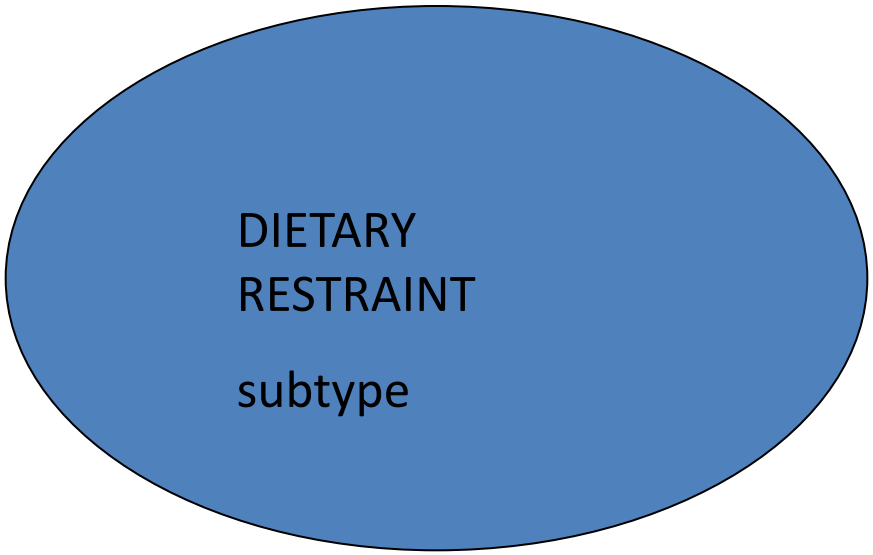
CBCL+YSR-Internalizing scale

Validating variables:

Eating pathology: EDE-concern scales: WC, SC, EC
+ EDI and DEBQ

Psychological adjustment: SPPC: 4 domain specific self-worth
+ CBCL and Negative affect

Obese children:
Evidence for different Psychological Subtypes (1)

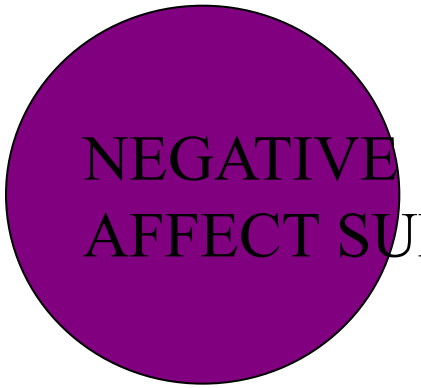


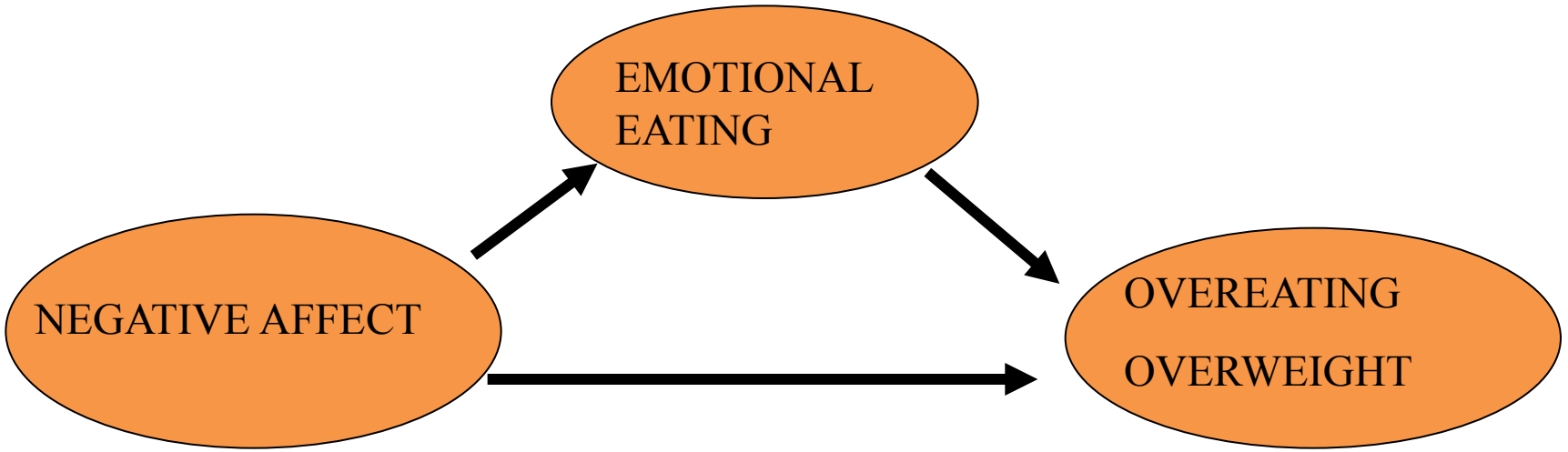
Social pressure → Overweight → Low selfesteem ⇓⇓ Dieting

See: Stice et al (2001) and for children: studies of Decaluwé et al (2005)

See: Herman & Polivy, 1980, Stice et al (2001) and for children: studies of Decaluwé et al (2005)

Obese children:
Evidence for different Psychological Subtypes (2)





Grilo, Masheb & Wilson (2001); for children: studies of Goossens et al (2008, 2009)

Stice (2001):

- ‘restraint model’
  →side effects of dieting
- ‘affect regulationmodel’
  → emotional eating

→ ‘dual pathway model’

Low self-esteem

→ extreme concerns weight and shape

→dieting

overeating → obesity

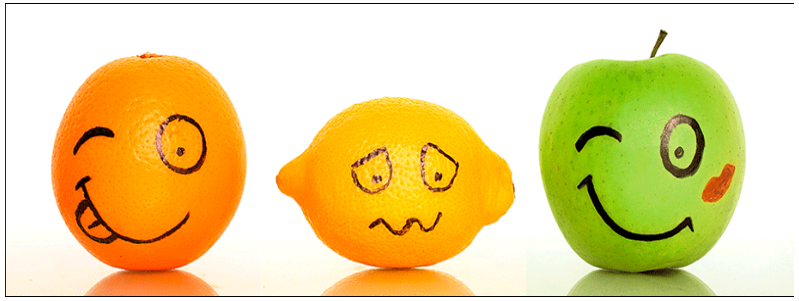
→ affective dysregulation

→emotional eating

Emotional eating and emotionregulation ?

- Stress seems to play an important role in the development of obesity (De Vriendt, T., Moreno, L.A., & De Henauw, S (2008); Koch, F., Sepa, A., & Ludvigsson, J. (2008); Dallman,, M.F. et al. (2003)).

- Scientific research to explain the link between stress and obesity



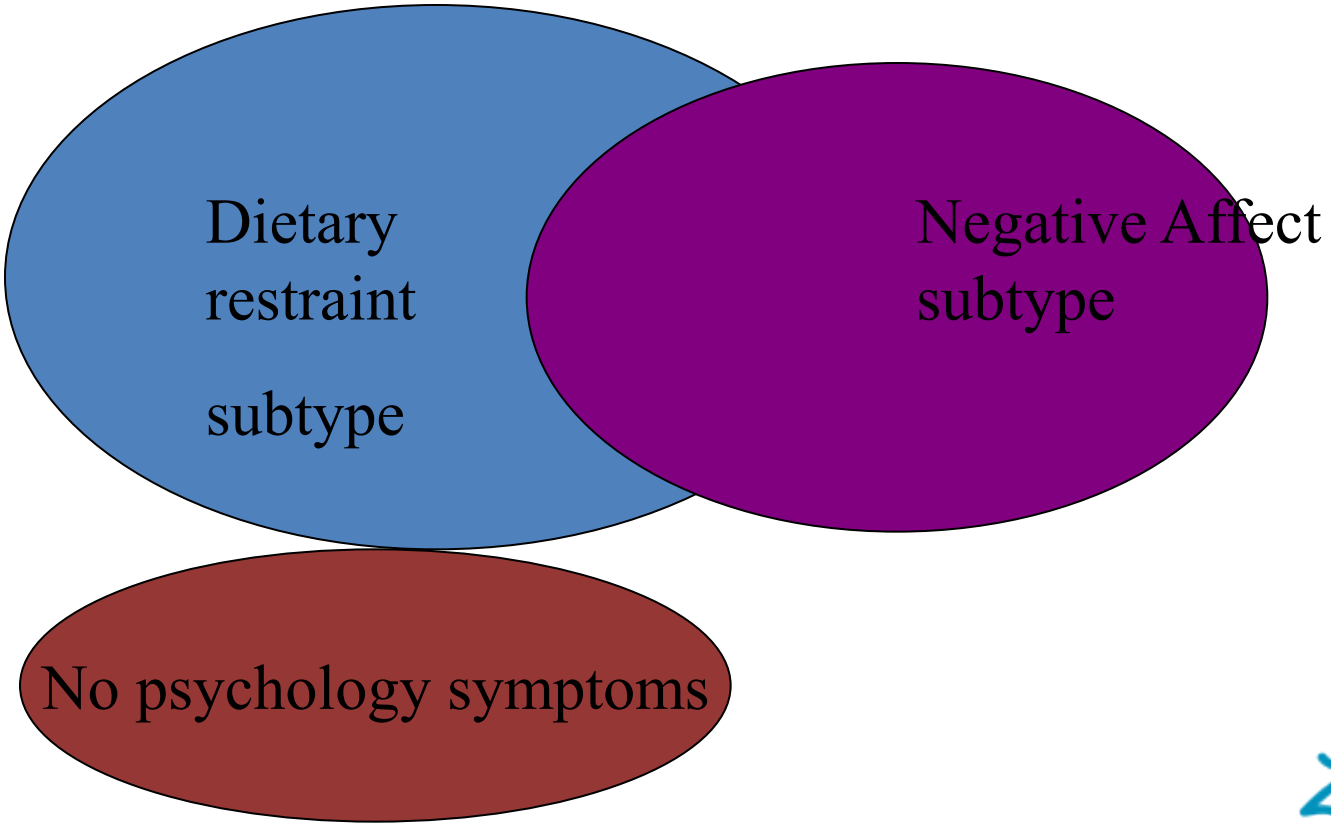
- 2 mechanisms
  - Emotional eating
  - Emotionregulation strategies

What's emotional eating?

- Emotional eating = eating as a reaction on emotions
- positive and negative emotions
- Literature : emotional eating =
  - ❖ a maladaptive emotionregulation strategy
  - ❖ The consequence of use of maladaptive ER-strategies

Are ER strategies teachable ?

Obese children:
Evidence for different Psychological Subtypes (3)



Journal of Consulting and Clinical Psychology
2009, Vol. ●●, No. ●, 000–000

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

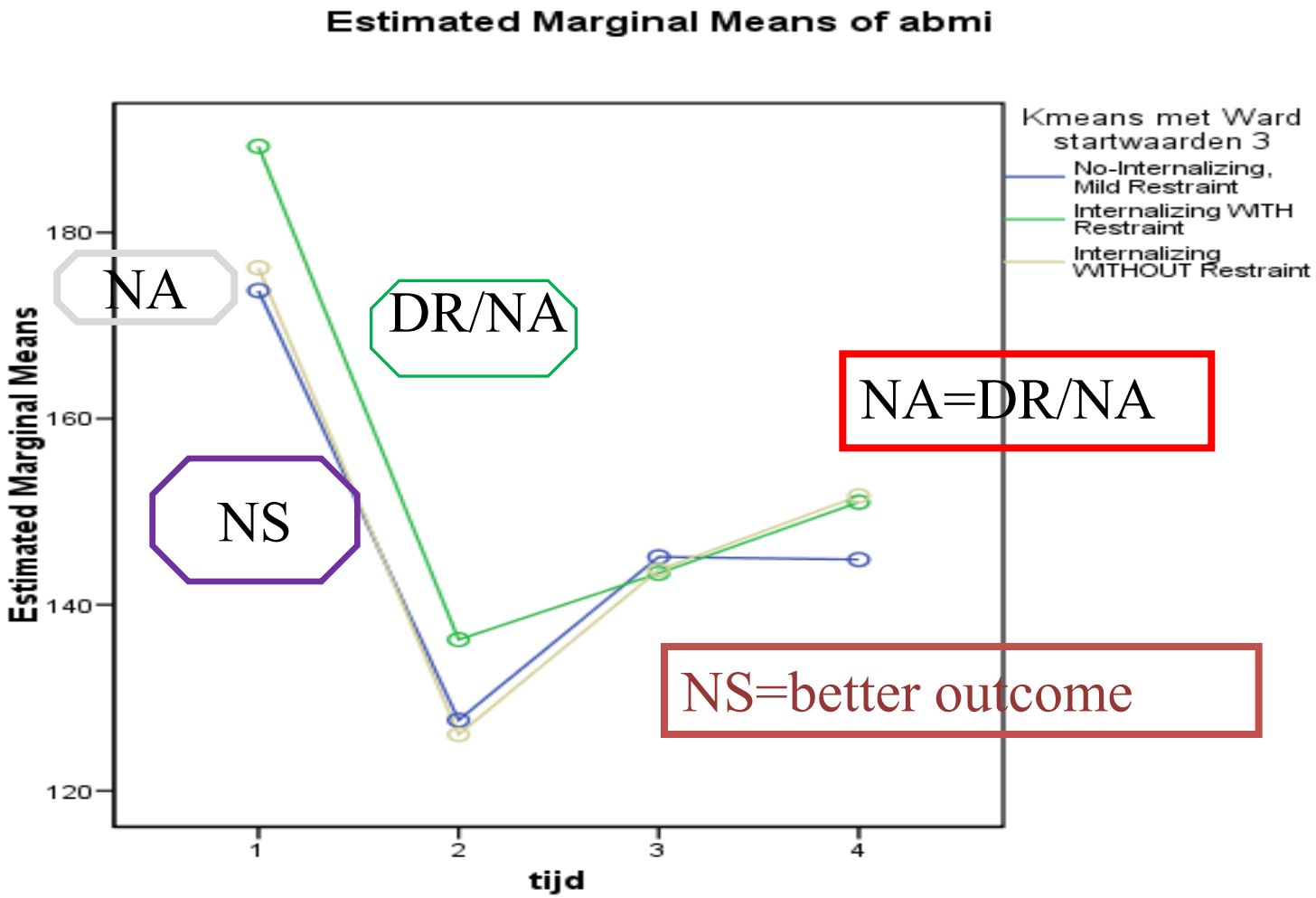
Subtyping Children and Adolescents Who Are Overweight: Different Symptomatology and Treatment Outcomes

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.

Conclusions

3 subtypes of overweight children	Study 1	Study 2	Treatment Guidelines?
(1) Children NA (emotional eaters)	47%	45%	Psychological treatment: Coping emotions
(2) Children NS (no psych sympt.)	31%	33%	Less intensive treatment
(3) Children DR +NA (DietingRestraint attitudes) (emotional eaters	22%	22%	Psychological treatment: Coping emotions Coping DR



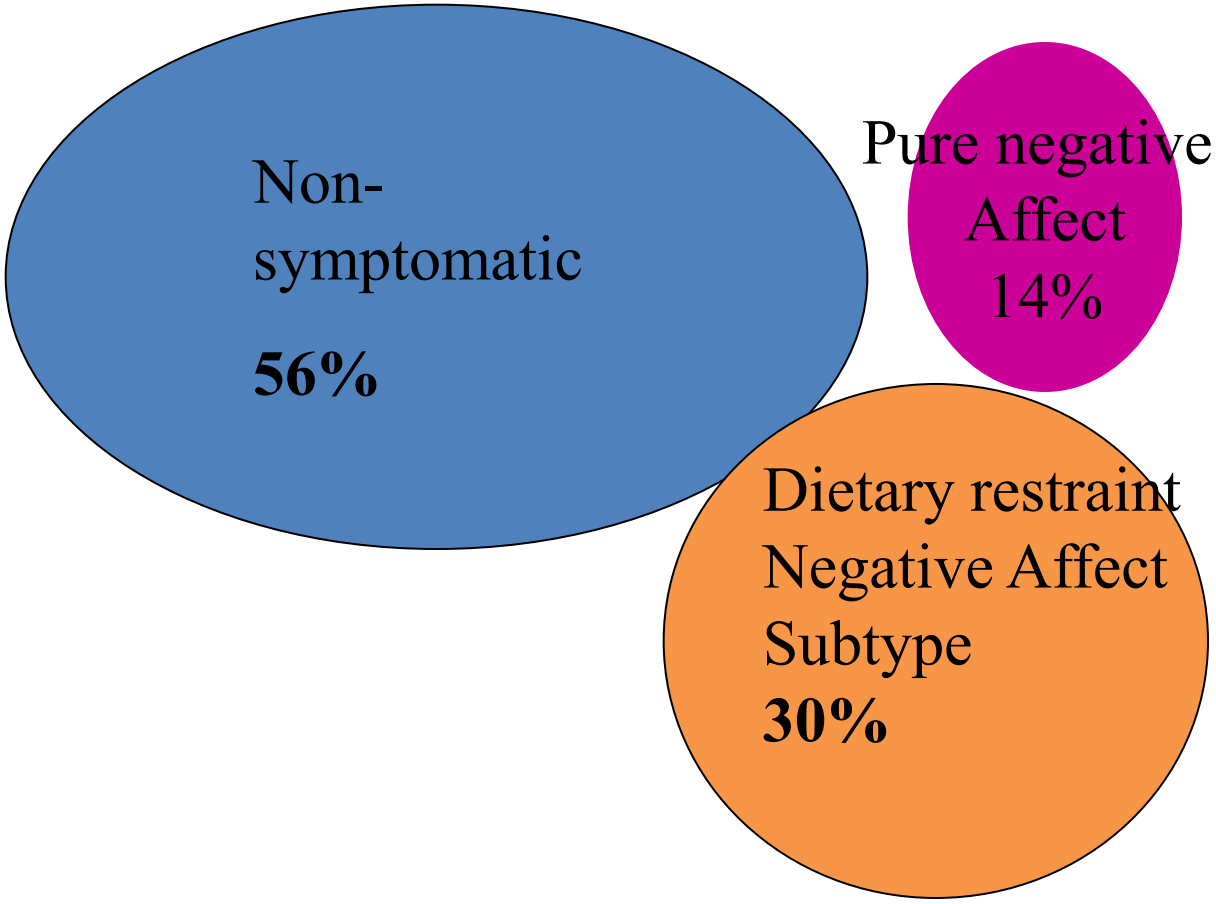
treatment follow-ups

Community study : method

Study 3

- 138 youngsters with overweight (46% boys)
  (BMI z-scores between 0.97-2.58)
- 12.8 year (SD=2.3)
- Recruited via advertisements, school mailings, etc
- The ChEDE-Q restraint scale (7-items)
- The CBCL + YSR: global screening negative affect
  (internalizing scale)

CONCLUSION COMMUNITY STUDY



Conclusion

3 subtypes	Study 1 overweight children	Study 2 overweight children	Study 3 community
(1) Children NA (emotional eaters)	47%	45%	14%
(2) Children NS (no psych sympt.)	31%	33%	56%
(3) Children DR +NA (DietingRestraint attitudes) (emotional eaters	22%	22%	30%


SURFCLUB
OUTSIDE
oostende

Yes ! Obese children display a specific personality

Role of parents ?

Low self-esteem

→ extreme concerns weight and shape

→dieting

overeating→ obesity

Insecure attachment

→ affective dysregulation

→ emotional eating

Vandewalle J: role of attachment

Take home messages

- Make a psychosocial profile of the child and the familiy

- Develop stepped care approach
  - no symptoms: healthy diet + exercises
  - Obesity treatment: multidisciplinary for children with NA and NA/DR

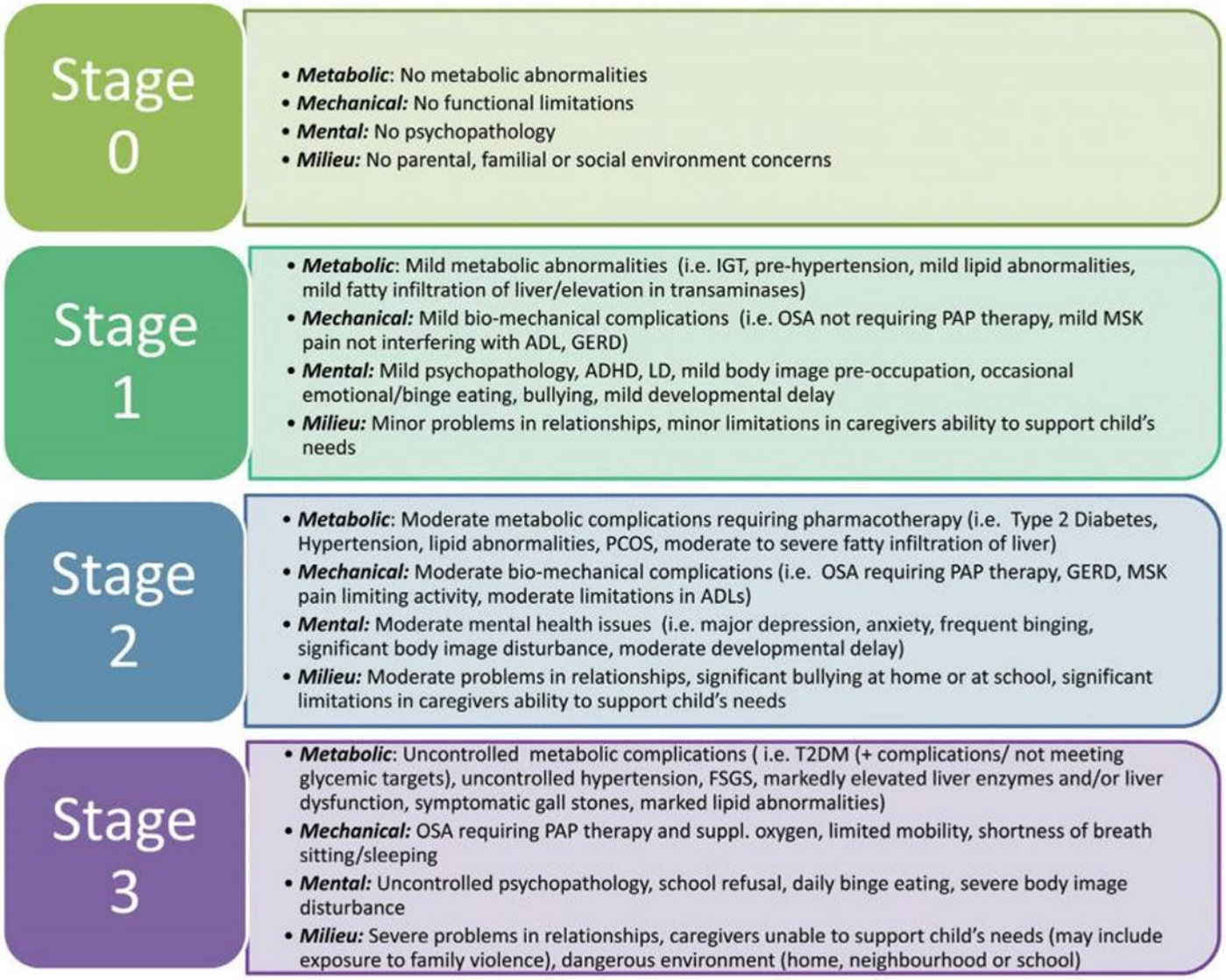
Future ?

Who needs

- Executive functioning training
- Emotion regulation training or …
- Both ?

- Or just help for parents ?

Edmonton Obesity Staging System–Pediatrics (EOSS-P)



Thank you !

Questions ?