

Session 4: Diabetes and obesity management in complexity – mental health

Depression, Stress and Trauma

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Eating behaviours and obesity

- **Emotional eating** - binge – depression, anxiety, stress and coping, temptations and lapses
- **External eating** - cue/situation driven (sight, smell, etc.)
- **Mindless eating** – eating while distracted – without attending to appetite cues
- **Reward-driven Eating** – High-fat, High-sugar, energy-dense foods such as snacks (often categorised as ultra-processed) - Large meal portions
- **Eating Pattern** - Eating away from home / skipping breakfast / fast food/beverages

Mental health issues associated with obesity

- **Depression** (Major Depressive Disorder, Dysthymia)
- **Anxiety Disorders** (generalised anxiety disorder, panic disorder, specific phobias, social anxiety, including school anxiety)
- **Eating Disorders** (Binge Eating Disorder, Bulimia Nervosa)
- **Neurodivergence** (Attention-Deficit/Hyperactivity Disorder-ADHD and Autism)
- **Bipolar Disorder, Schizophrenia and Schizoaffective Disorder** (so-called psychotic disorders)
- **Substance Use Disorders** (e.g. Alcohol and Nicotine)
- **Personality Disorders** (including antisocial, avoidant, schizoid, paranoid, and obsessive-compulsive personality disorder)
- **Psychological factors** (including stigma, bias, discrimination, distress, trauma, isolation, body dissatisfaction, and impact of living with obesity), **Biological factors** (chronic low-grade inflammation, hormonal, brain-structure and function, and chronic pain), and **Side Effects of Medications** (e.g., antipsychotic and antidepressant medications)

Psychological characteristics of patients with high BMI

Most common diagnoses in bariatric surgery candidates

Authors/year	Rosenberger et al. 2006	Kalarchian et al. 2007	Mauri et al. 2008	Muhlhans et al. 2009	Jones-Corneille et al. 2010	Mitchell et al. (in submission)
Sample size	174	288	282	146	105	199
Axis I diagnosis (%)						
Psychiatric disorder	36.8	66.3	37.6	72.6	50.5	68.6
Affective disorder		45.5	22.0	54.8	35.2	44.2
Anxiety disorder	15.5	37.5	18.1	21.2	24.8	31.7
Substance use disorder	5.2	32.6	1.1	15.1	28.8	35.7
Alcohol abuse or dependence	4.0	30.9	0.7	11.0	10.5	33.2
Eating disorder	13.8	NA	NA	50.0	NA	26.6
Binge eating disorder	4.6	27.1	11.1	NA	NA	13.1
Bulimia nervosa	0.0	3.5	1.8	6.8	NA	2.5
Eating disorder not otherwise specified	9.2	NA	NA	NA	NA	13.1

Self-Reported Diagnosed Psychiatric Condition in European Populations

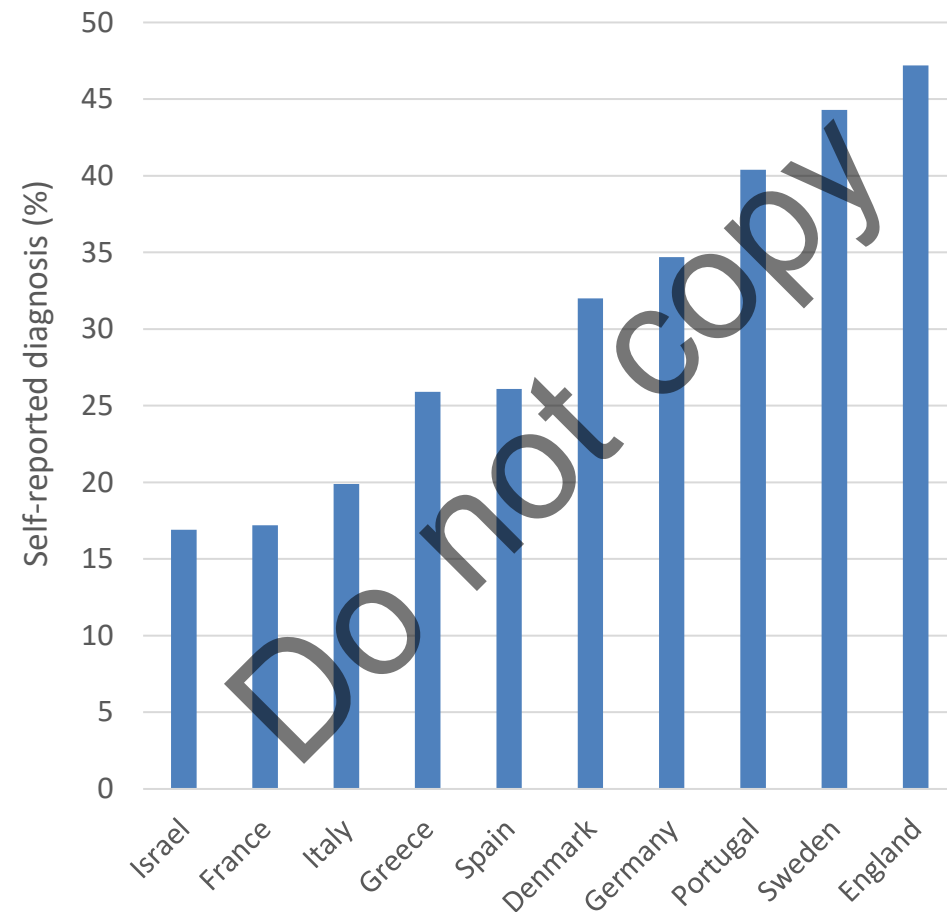


Figure 1. Countries ordered by outcome.
Left: Diagnosed Psychiatric condition; Right: Medical vulnerability

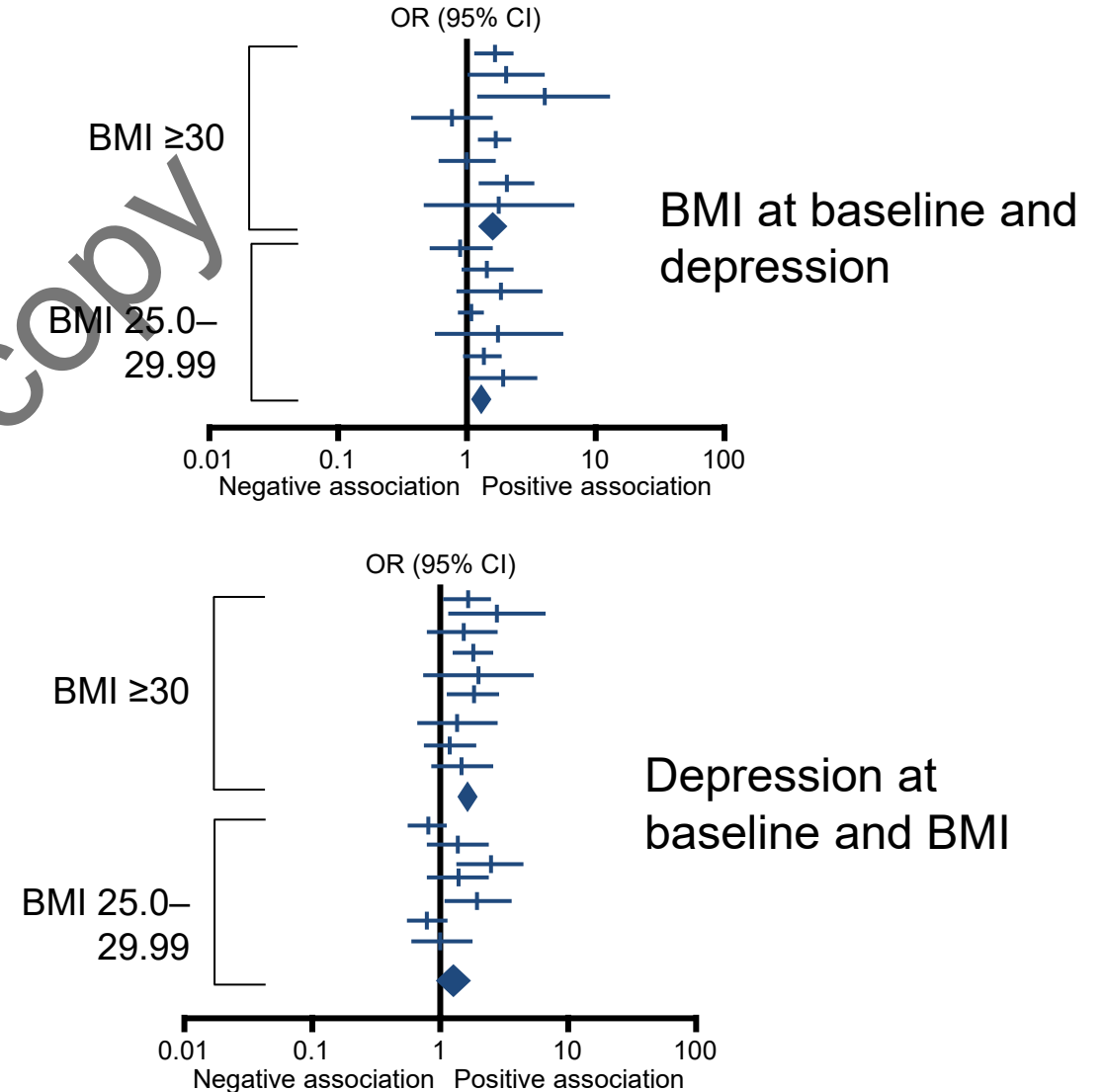
Overweight, Obesity, and Depression



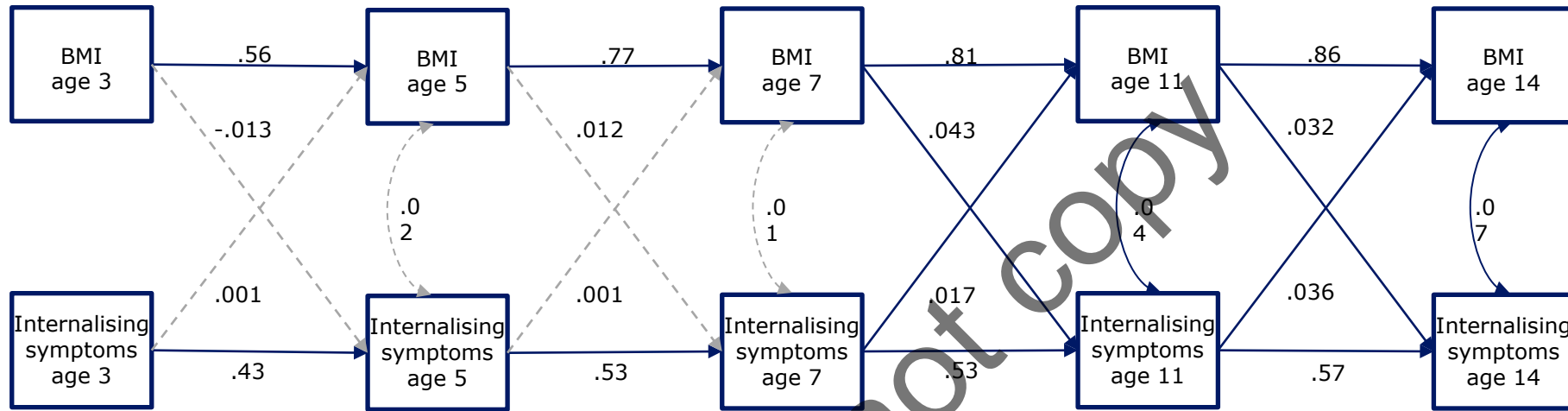
1. Obesity at baseline increased the risk of onset of depression at follow up.
2. Overweight increased the risk of onset of depression at follow-up.
3. Baseline depression increased the odds for developing obesity.

Conclusion: a reciprocal link between depression and obesity

Luppino FS et al. Arch Gen Psychiatry 2010;67:220–229.



Early Origins of Depression and Obesity (Millennium Cohort Study, N=17,215)



Patalay & Hardman,
2019 JAMA Ped

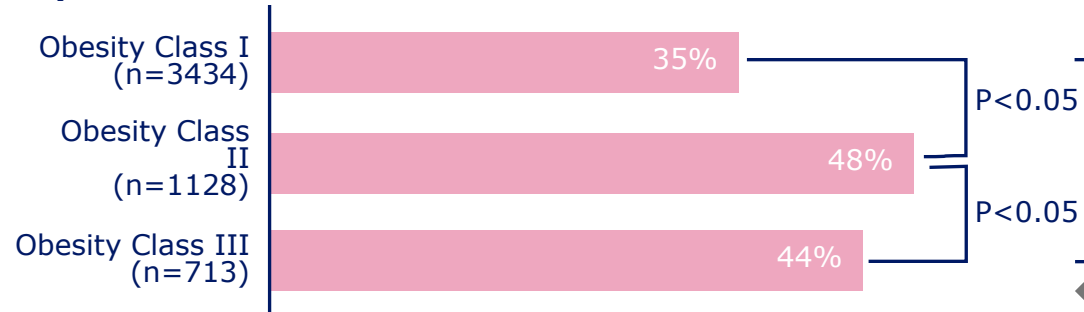
Model Fit: RMSEA=.046,
CFI=.94, TLI=.90,
SRMR=.048

- BMI and internalisation increase from early childhood (weak association and not a risk factor for each other) – high-level clinical symptoms increase from 5% in three-year-olds to 18% in children with obesity
- Bidirectional emerges between 7 and 14 (Full baseline model) - Associations explained in part by socio-economic risk

Mental Well-being and Self-esteem by Obesity Class in Adolescents

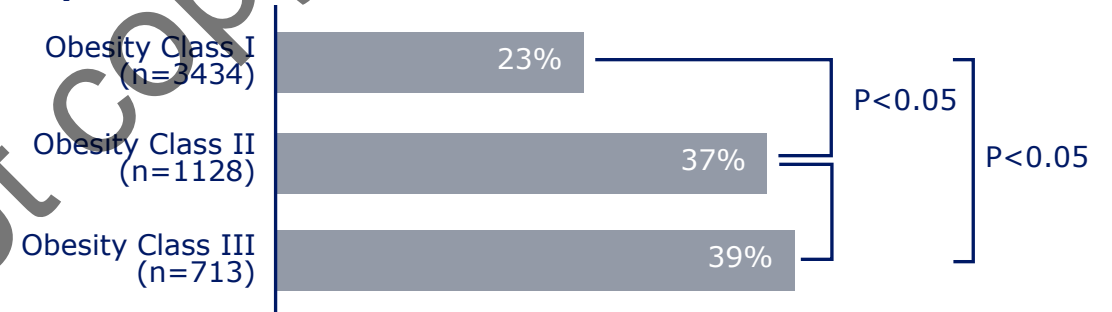
Proportion of ALwO with WHO-5 score¹ <50 by obesity class

A) WHO-5 score <50



Proportion of ALwO with RSES score² <15 by obesity class

A) RSES score <15



- A high proportion of ALwO had poor mental well-being and low self-esteem, particularly in:
 - Females, older adolescents and those with Obesity Class II and III
- HCP awareness of the need for active screening for depression in ALwO may help to improve obesity care

Percentages are proportions of ALwO who had a WHO-5 score <50 (which indicates poor well-being) or an RSES score <15 (which suggests low self-esteem).

Obesity Class I: BMI ≥95th percentile for age and sex; Obesity Class II: BMI ≥120% of 95th percentile for age and sex; Obesity Class III: BMI ≥140% of 95th percentile for age and sex.

ALwO, adolescents living with obesity; BMI, body mass index; HCP, healthcare professional; RSES, Rosenberg's Self-Esteem Scale; WHO-5, World Health Organization-Five Well-Being Index.

1. Topp CW, et al. *Psychother Psychosom* 2015;84:167–76; 2. Rosenberg's Self-Esteem Scale. <https://www.norton.com/college/psych/psychsci/media/rosenberg.htm>. Accessed 26 September 2022.

Trauma and Obesity

Life Events, Abuse, Stress, and Trauma

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Life Events and Trauma

Current events: Traumatic life events such as relationship breakups, or widowhood, or other forms of loss can affect body weight (Jeffry & Rick, 2002; Eng et al 2005).

Past trauma / history of trauma (including PTSD): well-established and significant relationship between trauma (especially childhood trauma) and obesity.

Childhood maltreatment, neglect, bullying, physical, emotional, verbal and sexual abuse have all been associated with obesity in later life. **Severity** rather than the type of trauma seems the critical factor (D'Argeno et al. 2009)

Mechanisms: maladaptive coping, defence mechanism, changes in emotional regulation.

OBESITY AND TRAUMA

46%
higher odds
of adult obesity
in people exposed
to multiple adverse
childhood experiences



69%

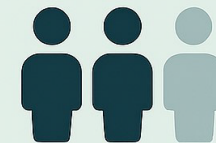
have a history of
childhood abuse or
neglect



among bariatric surgery patients



39.5%
of individuals with PTSD
are obese



2 in 3 adults
have experienced at least
one adverse childhood experience

Stress, Mood and Weight Management

- The effects of stress and mood on dietary restraint and weight management success are widely acknowledged phenomenon^{1,2}
- In pairs of identical twins discordant for body weight, the difference in visceral fat accumulation between siblings is associated with psychosocial stress³
- Repeated exposures to stressful life situations are associated with emotional eating and a greater preference for energy-dense foods rich in sugar and fat⁴
- Underpinning biological mechanisms: elevated cortisol, hormonal and metabolic changes and inflammation

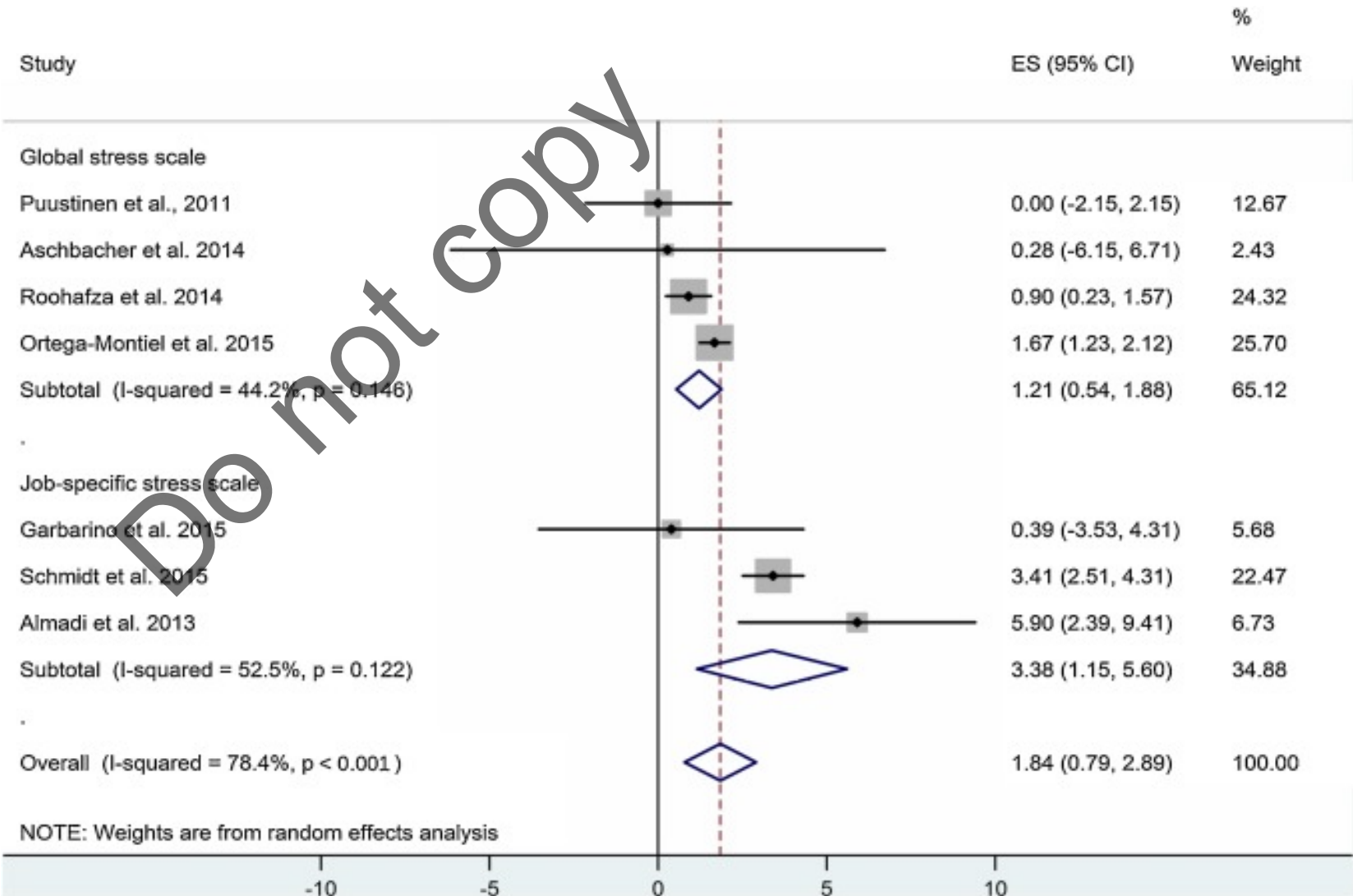
Stress management and appropriate / inappropriate coping mechanisms are critical factors



Perceived (global and job-specific) stress correlates with visceral obesity (WC)

Fig. 3. Forest plot representing the differences in waist circumference values of low- and high-stress groups with regard to global and job-specific stress.

Squares show the difference in mean values with the grey area reflecting the weight assigned to the study. Horizontal bars indicate 95% confidence intervals (95% CI). The diamond shows the overall effect size (ES) with its corresponding 95% CI.



Healthcare settings can themselves reinforce trauma for people living with obesity.

Weight stigma and discrimination (Mundi et al, 2020):

Patients with obesity often report feeling **judged, disrespected, or dismissed by healthcare providers**

Weight stigma is associated with increased stress and poor mental health (Figueroa et al, 2025)

Effects on care:

- Reduced trust in clinicians
- Avoidance of healthcare
- Poorer engagement with treatment

Healthcare interactions can re-traumatise patients, worsening both psychological well-being and physical outcomes.



Psychological Approaches to Treatment

- **Cognitive Behavioural Therapy (CBT)**: Identifies and changes dysfunctional thoughts and behaviours related to eating and physical activity (cognitive restructuring, self-monitoring, problem-solving and coping strategies).
- **Behavioural Therapy (BT) / Intensive Behavioural Therapy**: Modifies habits through structured interventions (stimulus control, goal setting, building social support).
- **Motivational Interviewing (MI)**: Non-confrontational, patient-centred conversations to resolve ambivalence about weight loss.
- **Acceptance and Commitment Therapy (ACT)**: Promotes psychological flexibility and acceptance of difficult emotions without resorting to overeating.
- **Mindfulness-Based Cognitive Therapy (MBCT)**: Reduces stress eating and emotional eating by increasing awareness of hunger cues and emotional triggers (an approach to food noise).
- **Compassion Focused Therapy (CFT)**: Addresses obesity by focusing on self-criticism and shame linked to weight struggles.
- **Trauma-based therapy** (e.g. **Trauma-Focused CBT**): Addresses the psychological roots of weight issues, such as childhood trauma or weight-related bullying.

Compassion-focused therapy (CFT) for obesity

Aims to reduce shame, self-criticism, and emotional distress that often underpin eating behaviours.

Helps develop self-compassion, recognising that weight-related struggles are influenced by biology, environment, and past experiences rather than personal failure.

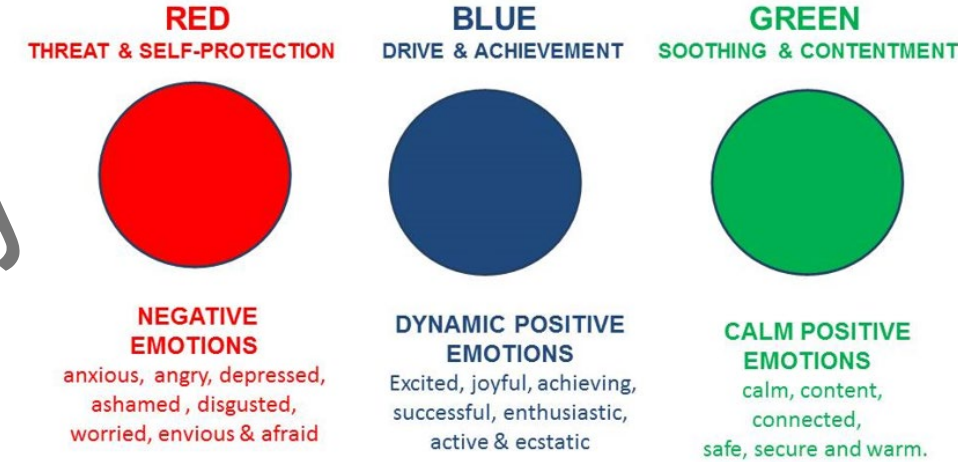
Techniques include soothing-rhythm breathing, compassionate imagery, and reframing negative self-talk.

CFT supports emotional regulation, reduces binge or comfort eating, and improves motivation for health behaviours.

Fostering a kinder relationship with oneself enhances engagement with treatment and promotes sustainable lifestyle change, making it a valuable psychological approach in holistic, person-centred obesity care.

3 CIRCLES EMOTIONAL SYSTEMS

adapted from Paul Gilbert's Compassion-Focussed Therapy



The Core Principles of Compassion-Focused Therapy



Trauma-informed care for obesity

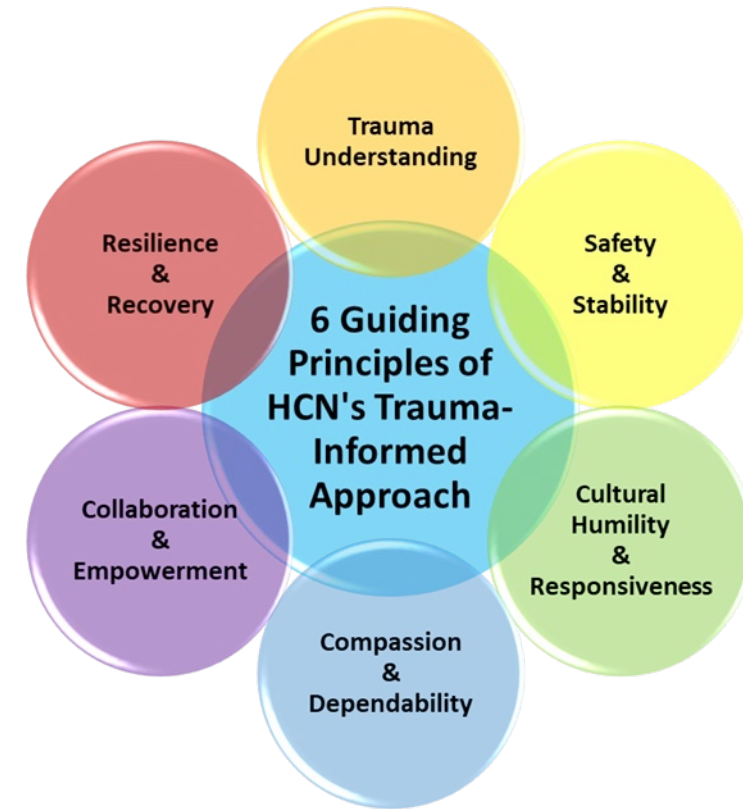
Recognises that past trauma (e.g., abuse, neglect, chronic stress) can shape eating behaviours, metabolism, and engagement with healthcare.

Emphasises creating safe, respectful, non-judgemental environments, avoiding weight stigma, and building trust with patients.

Focus on understanding the “why” behind behaviours rather than blaming individuals.

Key principles include collaboration, empowerment, and choice. Approaches may involve screening for trauma, supporting emotional regulation, and tailoring interventions to individual needs.

Overall, trauma-informed care aims to improve engagement, reduce harm, and support sustainable, compassionate weight management.



Practising trauma-informed care:

- Use **non-judgmental, respectful communication** to build trust and empathy
- Avoid weight bias and assumptions (and blaming)
- Acknowledge the potential role of trauma in health behaviours
- Screen for emotional regulation and mental health issues
- Integrate **psychological support alongside physical care**
- Create safe, patient-centred clinical environments
- Support patient choice and empowerment (Koball et al, 2024)

Effective obesity care requires addressing **underlying trauma, not just weight.**

It should improve engagement, reduce re-traumatisation and support sustainable health changes rather than focusing solely on weight-loss outcomes.



More Than Weight:
Exploring the human, social
and economic cost of obesity



Social cost of obesity

Obesity affects how people are treated - in public, in healthcare, and in relationships

- 73.5% of participants said they avoid social events due to shame or exclusion
- Over one-third described negative effects on intimacy and relationships
- 11.8% of participants reported eating disorders linked to social judgement and shame
- Participants reported inaccessible environments such as transport, theatres, seating and cafés
- Many participants described healthcare harm: symptoms routinely dismissed and being told to "just lose weight"
- Many participants recall being mocked as children for their weight

"It's not just about weight. It's about being seen. Being believed. Being treated like a whole person."

Societal toll:
Stigma and exclusion strip away dignity and belonging. Environments that are not designed for larger bodies create daily barriers, while shame and discrimination undermine trust and participation.

Source:
More Than Weight: Exploring the human, social and economic cost of obesity. (West Yorkshire ICB and Humber and North Yorkshire ICB 2025).
Findings based on 119 lived experience survey responses, 190 workforce survey responses, and 5 focus groups.

Thank you.

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