

Weight Stigma and Discrimination: Definitions, Prevalence, and Consequences

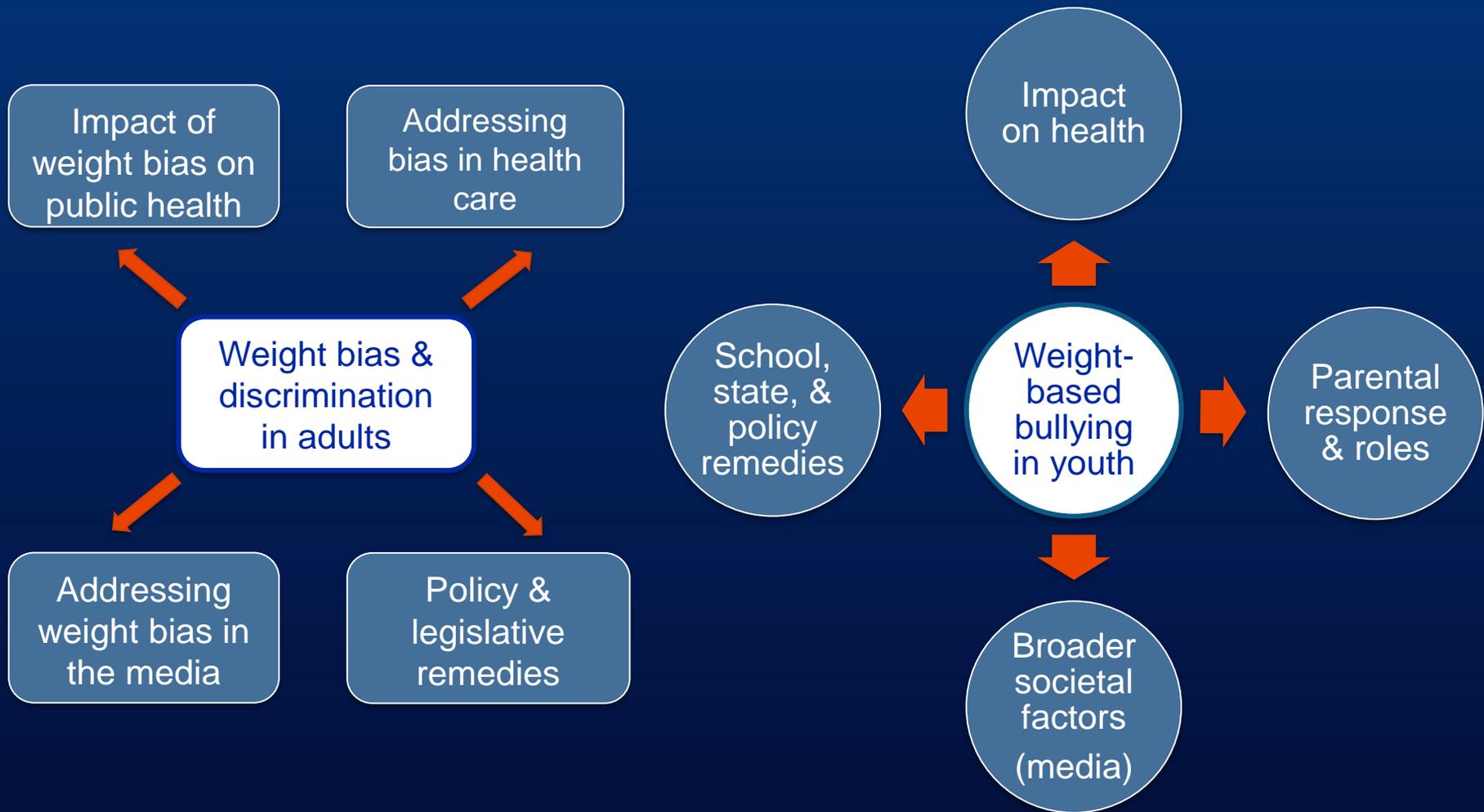
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FOR FOOD POLICY & OBESITY



Definitions

Weight-based stereotypes: generalizations that people with obesity have negative attributes because of their high body weight or large body size.

Common stereotypes:

- Lazy
- Gluttonous
- Lacking in willpower
- Lacking self-discipline
- Non-compliant with treatment
- Incompetent
- Sloppy
- Unmotivated to improve health
- Personally to blame for their weight

Weight-based stereotypes expressed by health care providers

Patients with obesity stereotyped as:

Non-compliant
Lazy
Lacking in self-control
Awkward
Weak-willed
Sloppy
Unsuccessful
Unintelligent
Dishonest



Physicians
Physician Assistants
Nurses
Dietitians
Psychologists
Fitness Professionals

Students trianing in
medicine, nursing,
occupational therapy,
psychology

Berryman et al., 2006; Brown, 2007; Ferrante et al., 2009; Hebl & Xu, 2001; Huizinga et al., 2009, 2010; Miller et al., 2013; Pantenburg et al., 2012; Phelan et al., 2014; Puhl et al., 2013, 2014; Swift et al., 2013; Vroman & Cote, 2011

Definitions

Weight stigma:

- Social devaluation and denigration of people because of their body weight.
- Contributes to bullying, prejudice, unfair treatment, and/or discrimination.

Weight discrimination:

- Overt forms of weight-based prejudice and unfair treatment.
- Weight-based discrimination occurs in multiple life domains, including unfair treatment in the workplace, inequities in education, and prejudice in the health care setting.

Weight stigma exists in many life domains

Social Relationships

Teasing
Bullying
Exclusion
Shaming

Educational Settings

Lower expectations
Worse academic
outcomes
Teasing/stereotypes
from teachers

Employment

Hiring inequities
Reduced salaries
Job Termination
Stigma from
co-workers

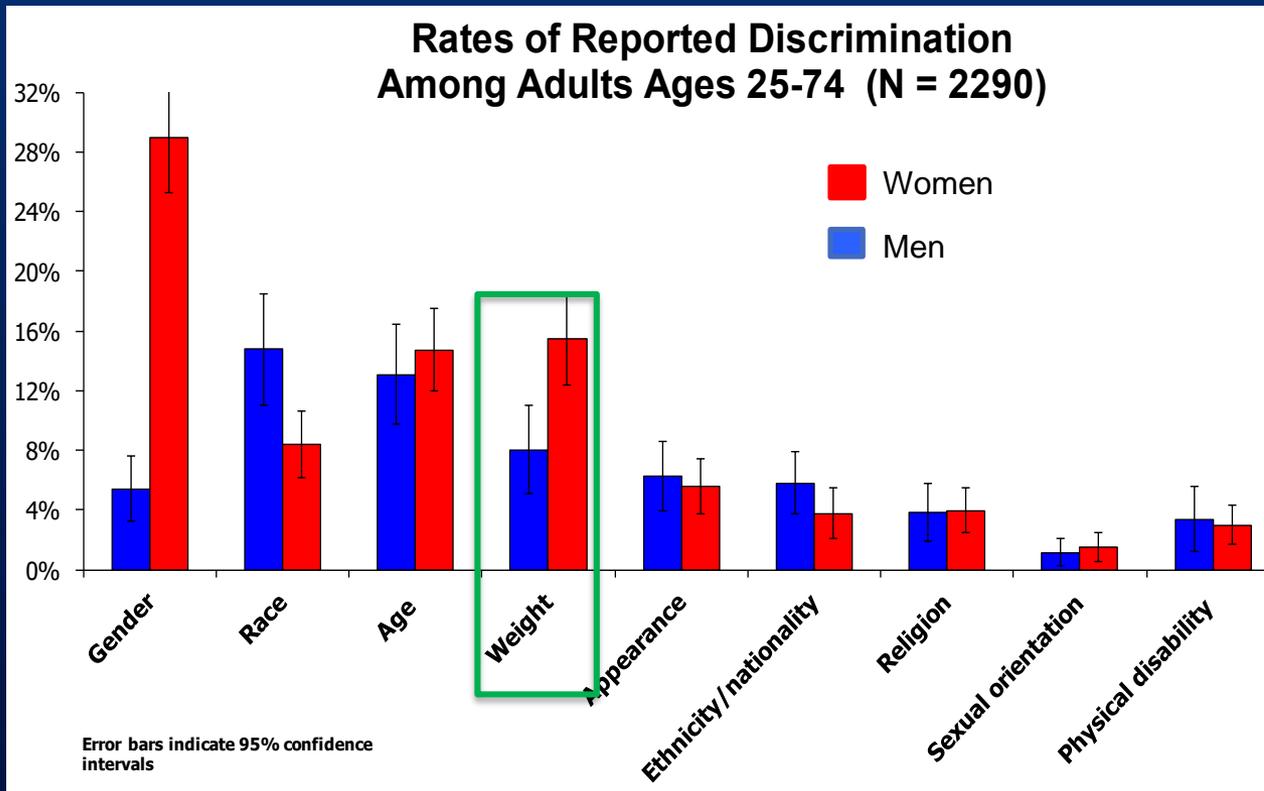
Health Care Settings

Bias from providers
Lower quality of care
Denied procedures
Patients
blamed/judged

Mass Media

Stereotypical
portrayals in
entertainment & news
media, TV, films,
social media

Prevalence of Weight Discrimination in Adults



Women 2x more likely than men

People with obesity reported rates of weight discrimination 3x higher than those with lower weight

No difference in the relationship between obesity and weight discrimination by race, education, marital status

Puhl, Andreyeva, Brownell, *Obesity*, 2008

Prevalence in Adults

National U.S. Panel Studies	2012 ^a (N=1064)	2015 ^b (N=1115)	2015 ^c (N=2866)	2017 ^d (N=2378)
Self-reported experiences of weight-based victimization, unfair treatment, or discrimination	41.4%	44.6%	43%	40.7%

*Percentages higher in women vs men

*Increased prevalence in people with obesity (2x higher) vs lower weight

45%

26%

33%

^aPuhl, Peterson, Luedicke. *Int J Obes* 2012; ^bPuhl et al., *J Pub Health Pol*, 2015;

^cPuhl et al., *Int J Obes* 2015; ^dHimmelstein, Puhl, Quinn. *Am J Prev Med*, 2017

2016 Meta-Analysis on Prevalence of Weight Discrimination

9 Studies: Almost all U.S. national panels and nationally representative datasets (MIDUS, CARDIA); one Swedish study (ULF)

Pooled prevalence of perceived weight discrimination:

- 19.2% among individuals with class I obesity (BMI: 30-35)
- 41.8% among individuals with more severe obesity
- Higher prevalence in women than men
- Several studies found that younger adults and Caucasians were more vulnerable to weight discrimination

Spalholz et al., *Obes Rev*, 2016

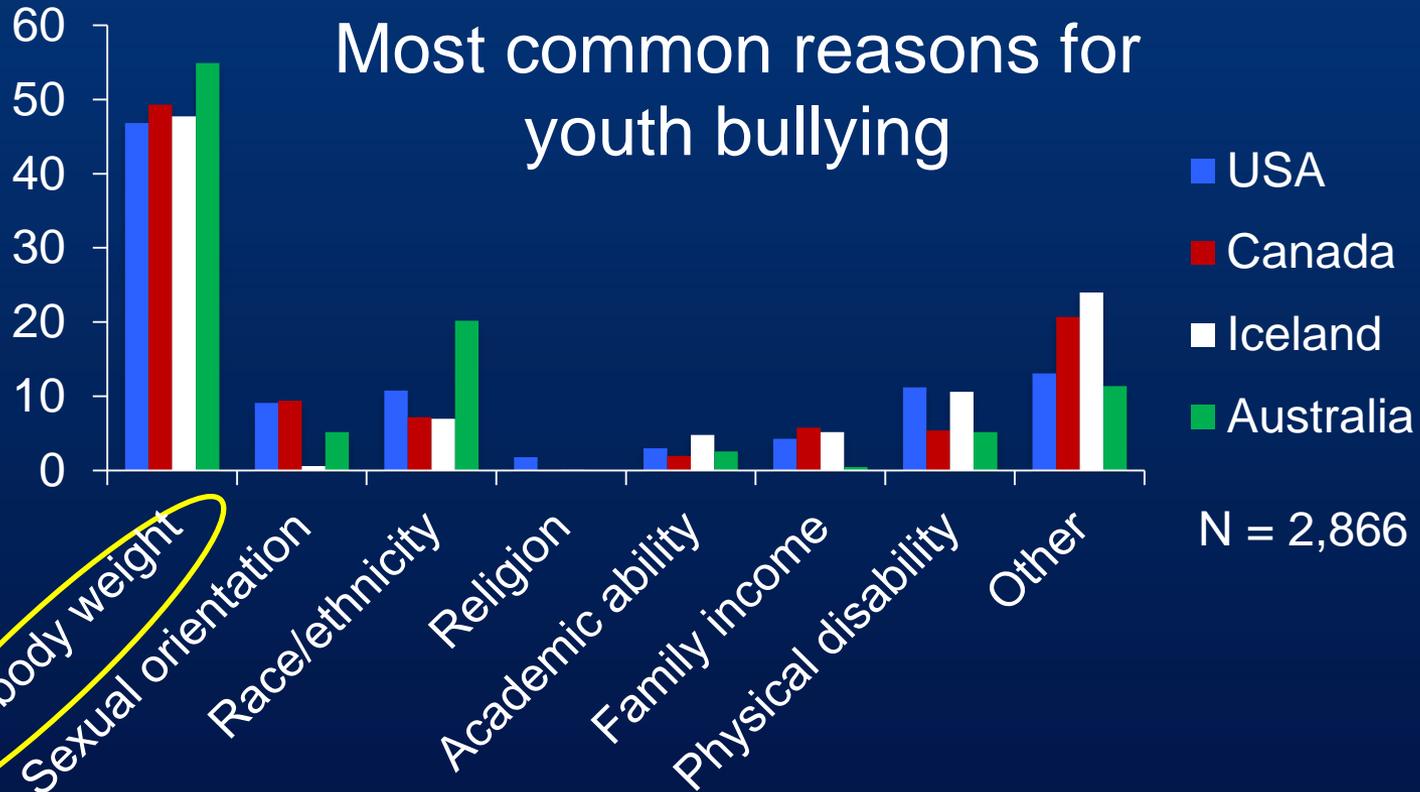
Definitions: What about youth?

Weight-based Victimization:

- Being teased, bullied, harassed because of one's weight

- Youth with overweight or obesity face weight-based victimization in multiple forms:
 - ***verbal teasing***
 - ***cyber-bullying***
 - ***physical aggression***
 - ***relational victimization***
- Youth face weight-based victimization from multiple sources:
 - ***peers*** - ***teachers***
 - ***parents*** - ***coaches***

Most common reasons for youth bullying



Puhl et al, *Ped Obes* 2015

Youth enrolled in weight loss programs:

90% teased/bullied about weight from peers

37-60% teased/bullied about weight from parents/family

Puhl, Peterson, Luedicke, *Pediatrics*, 2012; Puhl & Himmelstein, *Ped Obes*, 2018

Weight-based Bullying in Adolescents

Adolescent reports of why peers are teased/bullied (N = 1555)

Reason for bullying	Primary reason peers are bullied %	Observed by peers sometimes/often/ very often %
High body weight (OV/OB)	40.8	78.5
Sexual orientation	37.8	78.5
Ability in school	9.6	61.2
Race / ethnicity	6.5	45.8
Physical disability	3.3	35.8
Religion	1.2	20.8
Low income status	0.8	24.9

- 95% observed weight-based bullying toward peers
- 75% observed it at least “sometimes” or “often”

Internalized weight bias

Societal and/or interpersonal experiences of weight stigma

Negative external judgments that people face become an internalized process of negative self-judgment

Self-directed stigma

Prevalence of Weight Bias Internalization (WBI)

Original Article
EPIDEMIOLOGY/GENETICS

Obesity

Internalizing Weight Stigma: Prevalence and Sociodemographic Considerations in US Adults

Rebecca M. Puhl^{1,2}, Mary S. Himmelstein², and Diane M. Quinn³

In general population samples:

- 18-20% endorsed *high WBI*

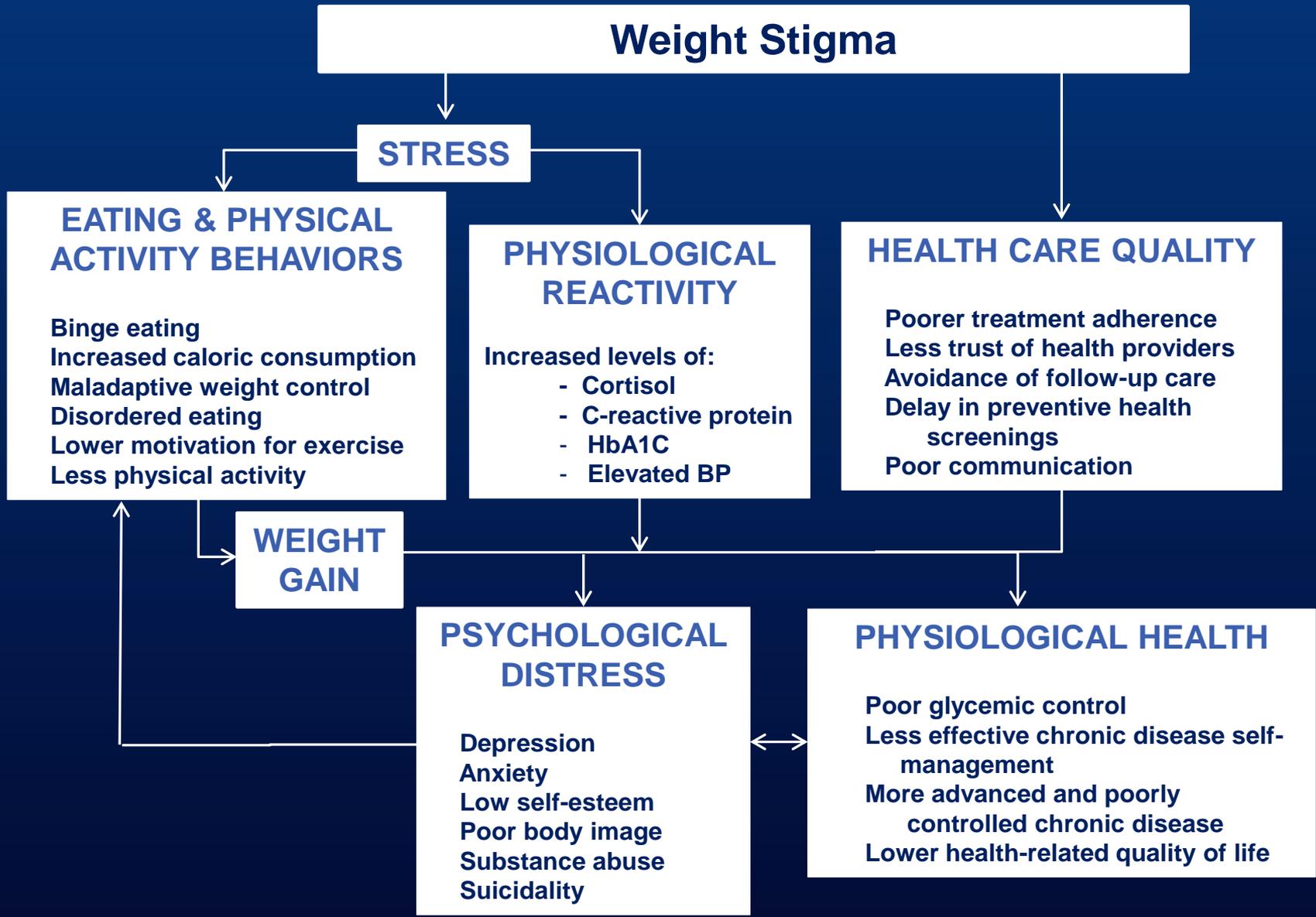
Among adults with obesity:

- 52% endorsed *high WBI*
- Levels of WBI similar to treatment samples of adults with obesity, BED, or seeking weight loss surgery

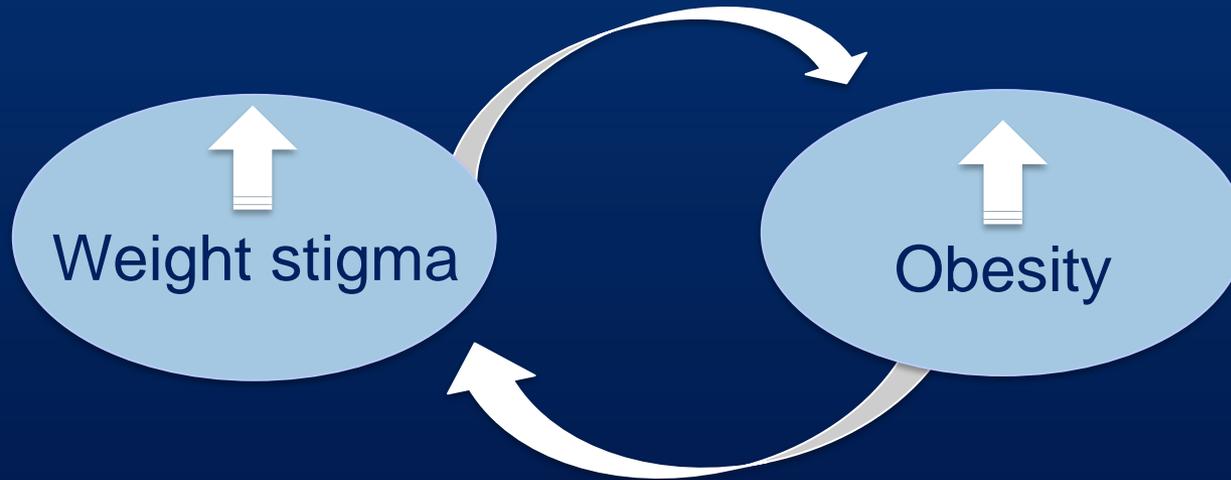
Increased vulnerability of WBI

- White
- Women
- High BMI
- High subjective weight
- Lower education and income
- Younger adults
- Currently trying to lose weight
- Experienced stigma

Puhl, Himmelstein, Quinn. *Obesity*. 2017
Hilbert et al., *PLoS One*. 2014



Weight Stigma and Obesity



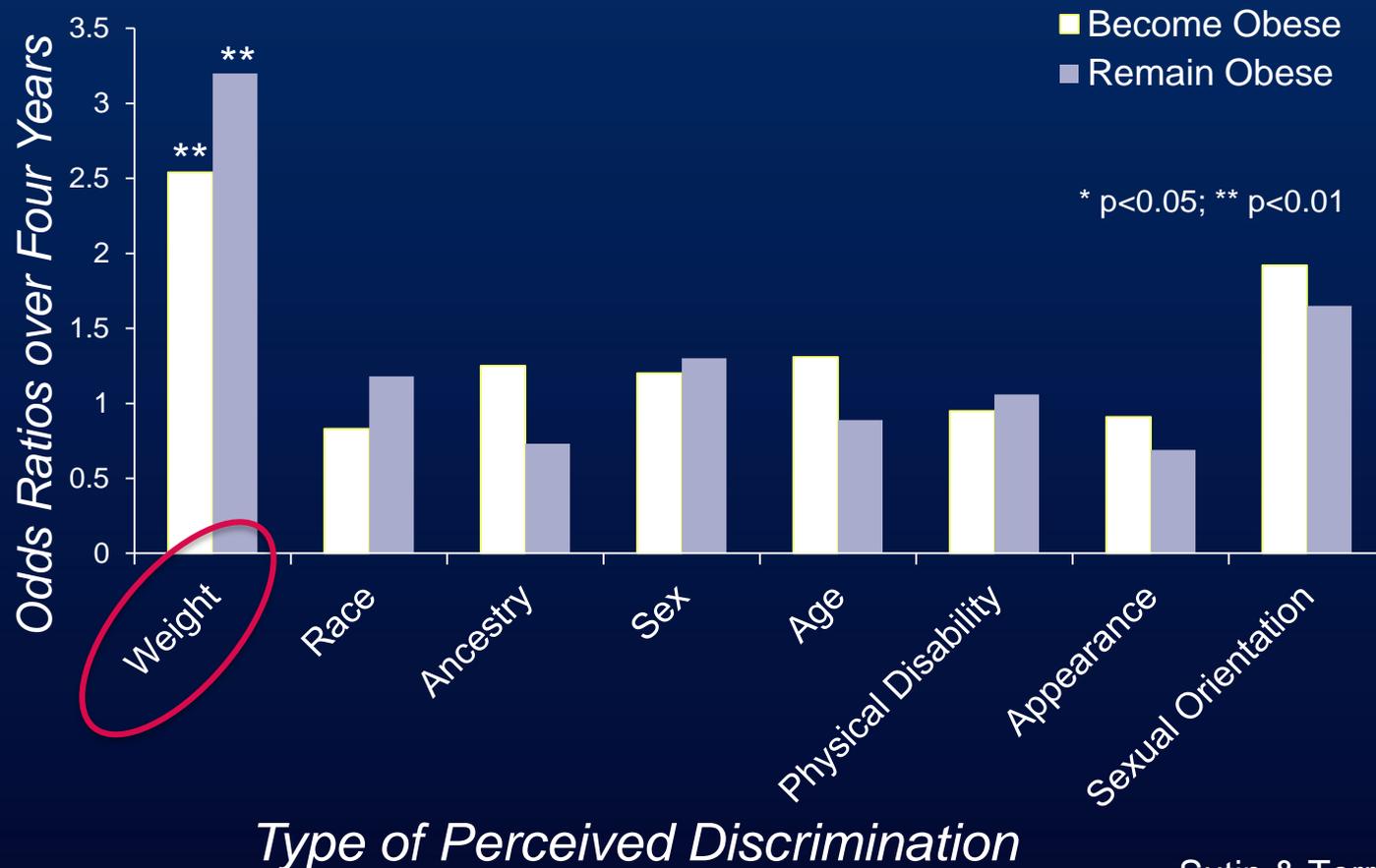
Experiencing weight stigma is longitudinally associated with increases weight gain and obesity

Regardless of age, baseline BMI, race/ethnicity, and socioeconomic factors

Sutin & Terracciano, 2013; Sutin et al., 2014; Quick et al., 2013; Schafer & Ferraro, 2011; Hunger & Tomiyama, 2014

Weight discrimination predicts weight gain in adults

Nationally representative study that followed 6,157 U.S. adults from 2006 to 2010:



Regardless of age, sex, ethnicity, education, and controlling for baseline BMI

Sutin & Terracciano (2013)

Weight-based teasing predicts obesity 15 years later

- Project EAT-IV (*Eating & Activity in Teens and Young Adults*)
- 15-year study examining factors related to eating & weight outcomes in adolescents (1,830 adults)

Weight-based Teasing in Early Adolescence

From family and peers



Adulthood (30's)

Women

- Odds of obesity 2x higher
- Eating to cope with emotions
- Unhealthy weight control

From peers only

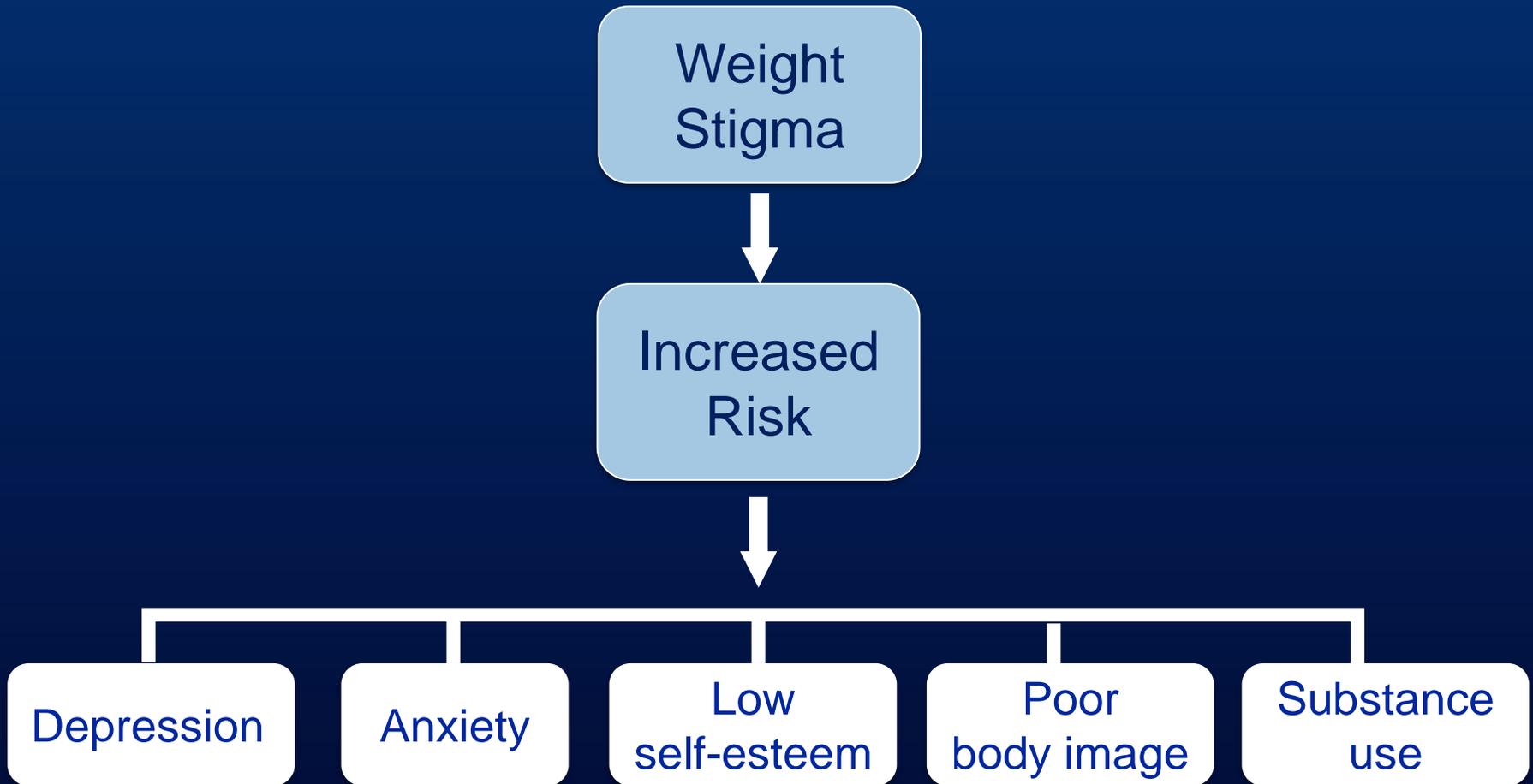


Men

- Odds of obesity over 2x higher
- Eating to cope with emotions

*Adjusted for baseline race, body weight, SES, and age

Psychological Consequences



Bucchianeri et al., 2014; Hatzenbuehler et al., 2009; Koball & Carels, 2011; Madowitz et al., 2012; Puhl & Latner, 2007; Puhl & Luedicke, 2012, Wu & Berry, 2017.

Lower Physical Activity

Adults:

Those who experience weight stigma have more:

Negative feelings towards exercise

Avoidance of exercise (*regardless of age, body dissatisfaction, self-esteem*)

Less willing/intention to exercise

Youth:

85% of adolescents witness peers being teased about weight in **gym class**

Weight teasing leads to:

- Avoidance of PA
- Lower levels of PA
- Skipping gym class
- Less self-efficacy for PA
- Less enjoyment of sports

Case et al. (2015); Desmet et al. (2014); Greenleaf et al. (2014); Pearl et al. (2014); Puhl & Luedicke, 2012; Vartanian & Shaprow (2010); Vartanian & Novak (2011); Seacat & Mickelson (2009); Schmaz (2010)

Weight stigma contributes to unhealthy eating behaviors



Brown et al., 2016; Jendryzca & Warschburger, 2016; Lampard et al., 2014; Olvera et al., 2013; Quick et al., 2013; Rojo-Moreno et al., 2013; Vartanian & Porter 2016; Zeeck et al., 2011.

Coping strategies may play a role...

2,449 women in a self-help weight loss support organization:

- *How do they cope with weight stigma experiences?*

79% reported eating - turning to food as coping mechanism

Stigma is a stressor:

- Both acute and chronic form of stress
- Eating is common coping strategy in response to stress

Coping with weight stigma in unhealthy ways

Study: National sample of 2,378 American adults

More Weight Stigma
(Experienced or
Internalized)



Cope with stigma by engaging in:

- Disordered Eating Behaviors
- Increased Eating / Food Intake
- Avoidance of physical activity

Exposure to weight stigma in media increases calorie consumption

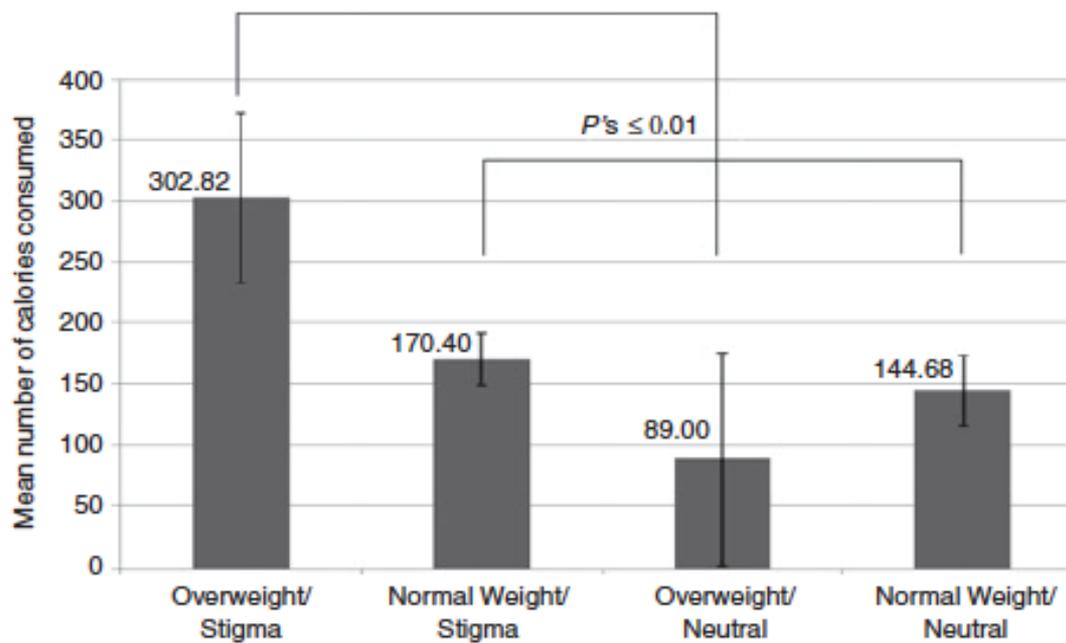
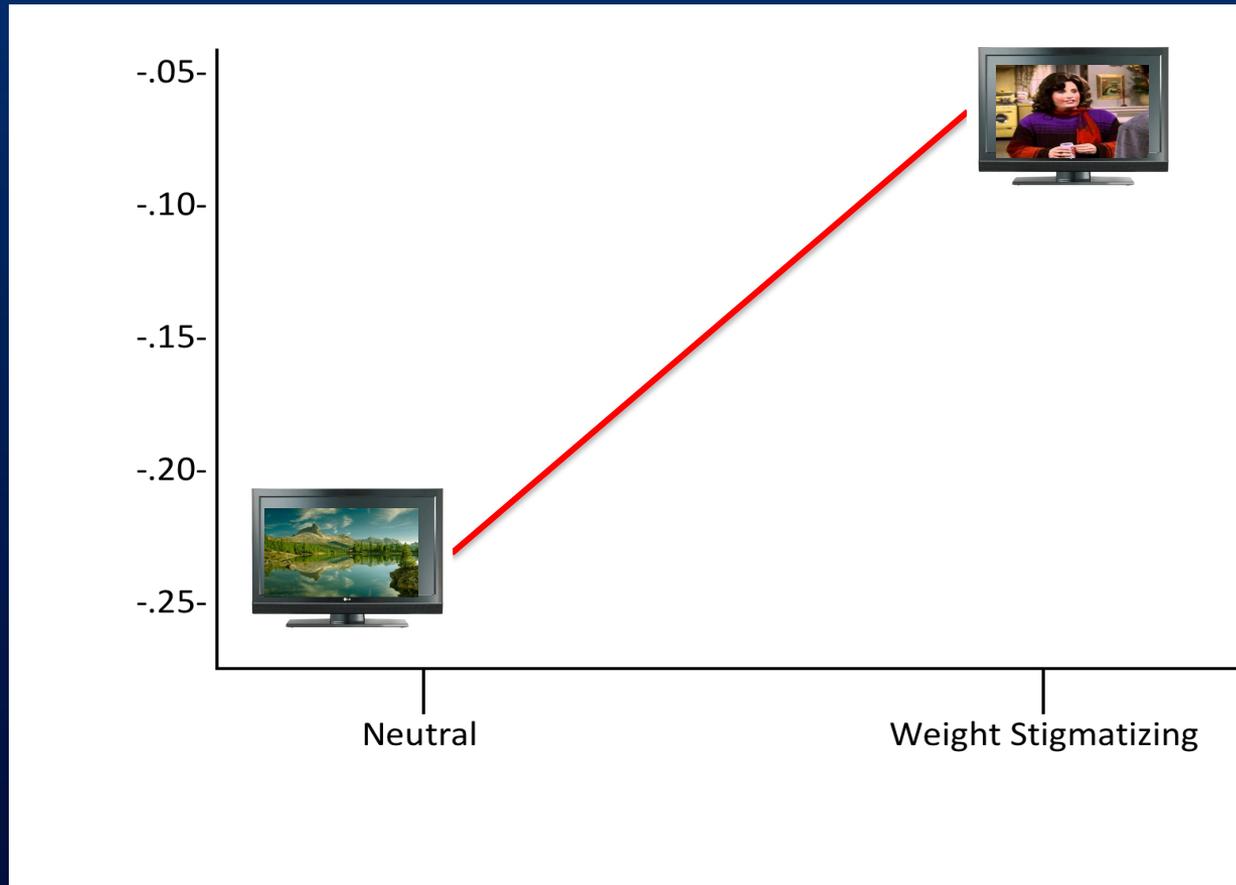


Figure 2 Total calories consumed by group (unadjusted means).



Schvey, Puhl, Brownell. *Obesity*, 2011

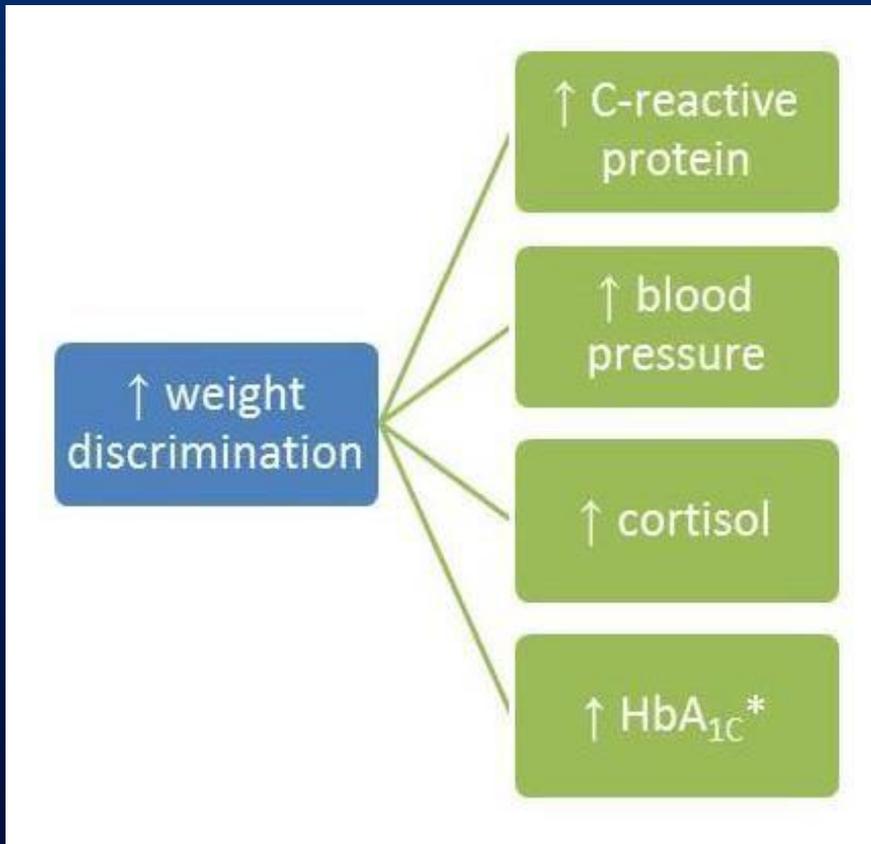
Media exposure to weight stigma increases physiological stress



N = 128 women. $F(1, 94) = 6.436, p = .013, \eta^2 = .06$

Schvey, Puhl, Brownell. *Psychosomatic Medicine*. 2014

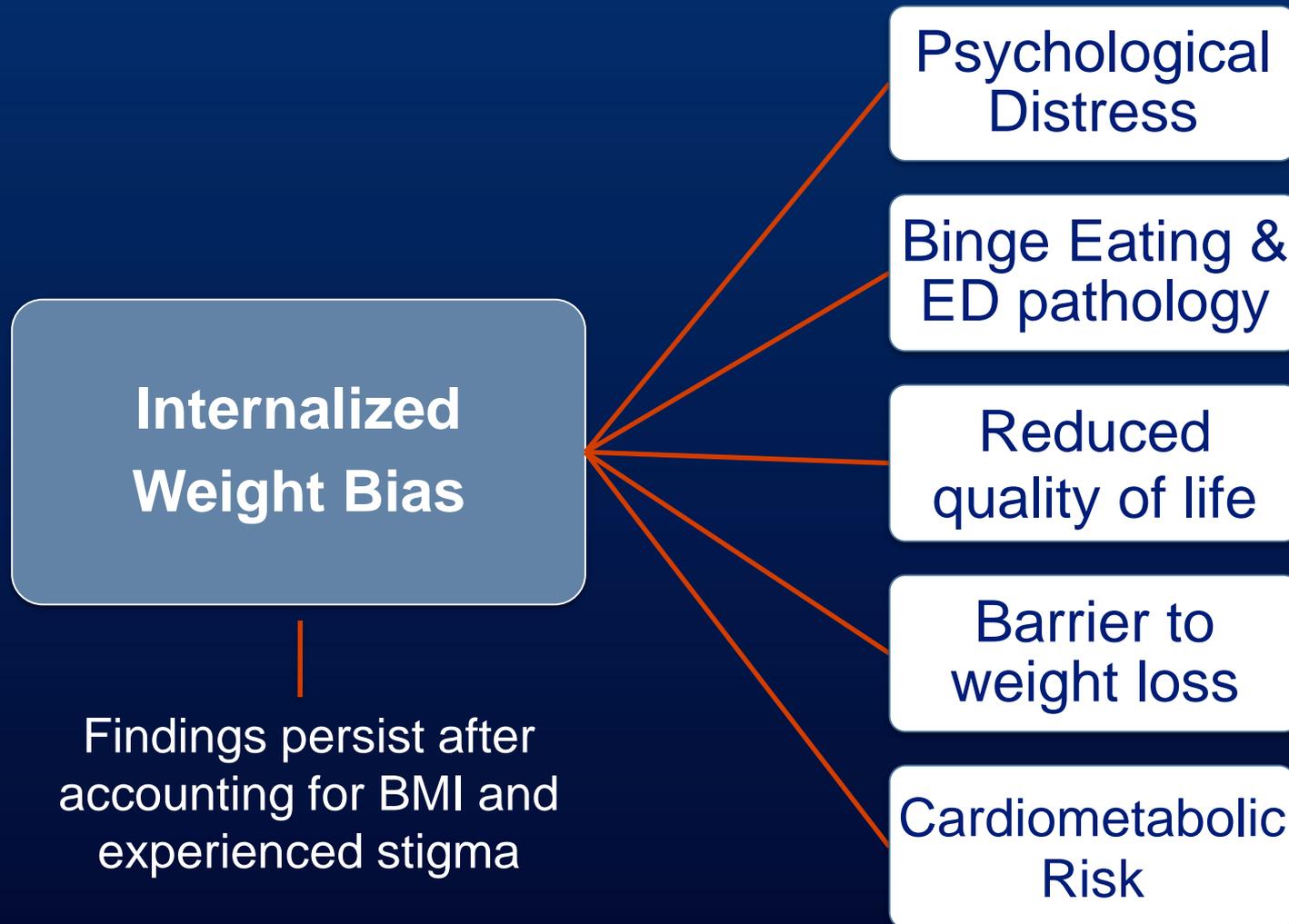
Physiological Risk Factors



Increased risk of cardiovascular disease, metabolic and endocrine disorders

Perceived weight stigma/discrimination predicts increased physiological risk factors independent of BMI

Poor health linked to internalized weight bias



WBI & Weight Loss Maintenance

- National, community sample of 549 adults who reported intentional weight loss of $\geq 10\%$ in the past year
- 314 maintained weight loss, 235 re-gained weight
- *What factors are related to weight loss maintenance?*

Demographics

Age
Sex
Race/ethnicity
Education
Income



Some predictive value for WLM

Behaviors linked with sustained WL

Eating breakfast
Dietary monitoring
Self-weighing
Physical activity



Did not predict WLM outcomes

Weight Bias

Experienced bias

Internalized bias



Unique predictive value to WLM

For every 1-unit increase in internalized weight bias, the odds of maintaining weight loss decreased by 28%

Internalized bias

Self-blame

Negative self-judgment



May interfere with efforts to sustain weight loss, independent of experienced stigma

Prospective Findings

- National Weight Control Registry Participants (N=1,250)
- Assessed weight bias internalization (WBI) at baseline & 12 months

Although WBI was higher in women than men, higher baseline WBI predicted weight gain among men ($n = 254$; $t = -2.28$; $P = 0.02$) but not women ($n = 608$; $t = 1.22$; $P = 0.22$)

Weight loss was associated with a reduction in WBI in both women and men. A one-point reduction in WBI was associated with a 3% weight loss.

Cardiometabolic risk

- 159 adults with obesity (88% women, 67% Black)
- WLM Study: Baseline medical screening and surveys
- 32% met criteria for metabolic syndrome

Odds of meeting criteria for metabolic syndrome were greater among participants with higher WBI

Higher WBI predicted greater odds of having high triglycerides (OR = 1.88, 95% CI = 1.14–3.09, $P = 0.043$)

Analyzed categorically, high (vs. low) WBI predicted greater odds of metabolic syndrome and high triglycerides ($P_s < 0.05$)

*Controlled for BMI, sociodemographic variables, depression, medication use

Weight stigma can impact quality of health care

Compared to providing care to thinner patients, when it comes to patients with obesity, providers demonstrate:

- Less time in appointments
- Less discussion with patients
- Less intervention
- Less respect for patients of higher body weight

Patients with obesity:

- Lower trust in providers
- Reluctant to discuss weight
- Perceive lack of empathy
- Believe they won't be taken seriously
- Report that weight is blamed for unrelated medical problems
- More likely to switch doctors
- More likely to avoid health care

Amy et al., 2006; Gudzone et al., 2013; 2014; Mensinger et al., 2018; Mulherin et al., 2013; Phelan et al., 2015; Turner et al., 2012

Provider-Patient Communication about Weight

PEDIATRIC OBESITY
ORIGINAL RESEARCH doi:10.1111/ijpo.12275

Adolescent preferences for weight terminology used by health care providers
R. M. Puhl^{1,2} and M. S. Himmelstein²

International Journal of Obesity (2013) 37, 612–619
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www.nature.com/ijo

ORIGINAL ARTICLE
Motivating or stigmatizing? Public perceptions of weight-related language used by health providers

Parental Perceptions of Weight Terminology That Providers Use With Youth

WHAT'S KNOWN ON THIS SUBJECT: Language that providers use to describe excess weight can have pejorative connotations, reinforce weight-based stigma, and jeopardize discussions about health with overweight patients. However, few researchers have examined parental perceptions of weight-based terminology in the context of childhood obesity.

WHAT THIS STUDY ADDS: In discussions of excess weight with youth, parents prefer that doctors use the terms "weight" and "unhealthy weight" rather than "fat," "obese," and "extremely obese." Parents perceive the latter terms as stigmatizing and blaming and least likely to motivate youth to lose weight.

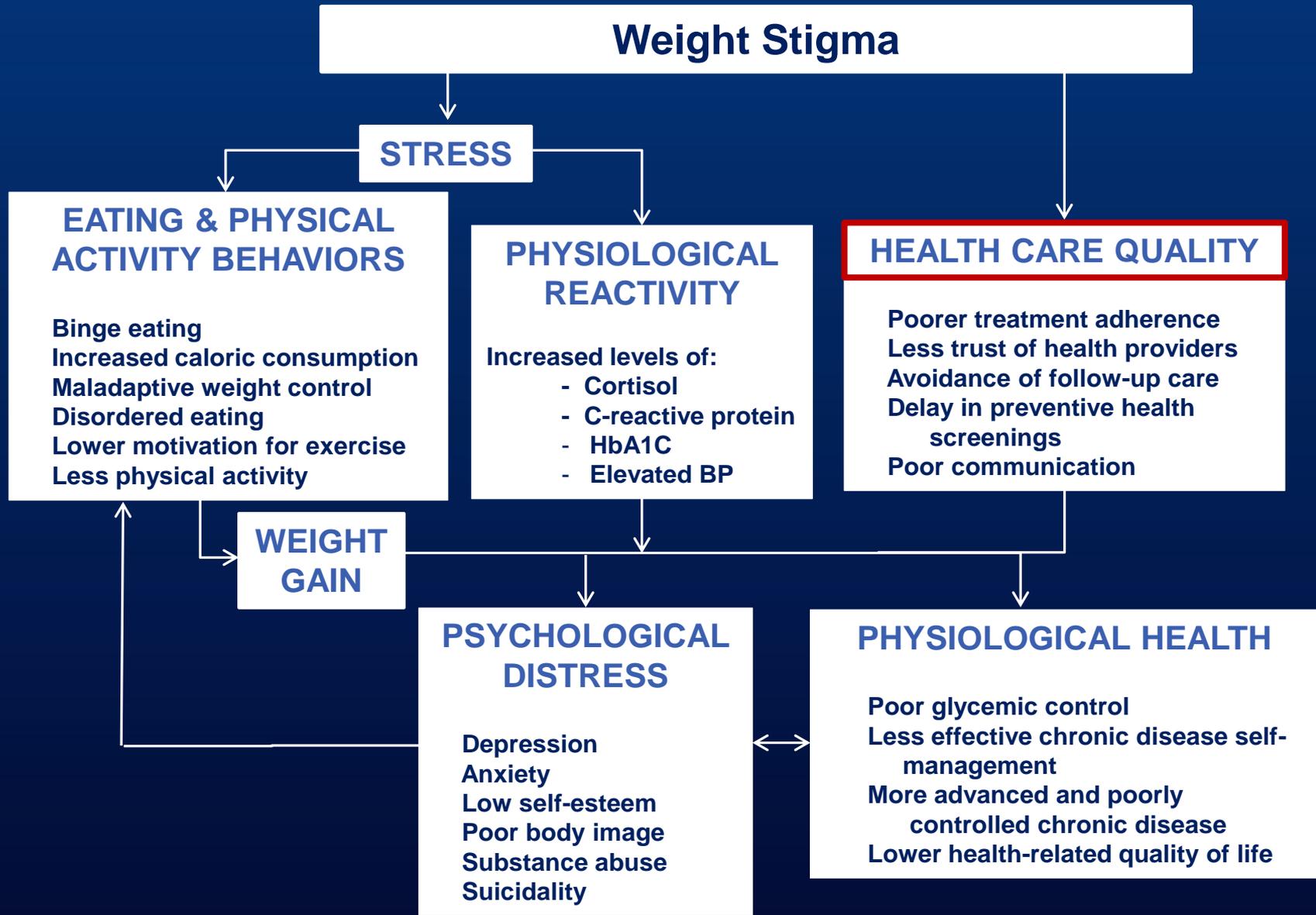
AUTHORS: Rebecca M. Puhl, PhD, Jamie Lee Peterson, MA, and Joerg Luedicke, MS
Rudd Center for Food Policy and Obesity, Yale University, New Haven, Connecticut

KEY WORDS: obesity, overweight children, parental attitudes, stereotyping, physician-patient/parent communication

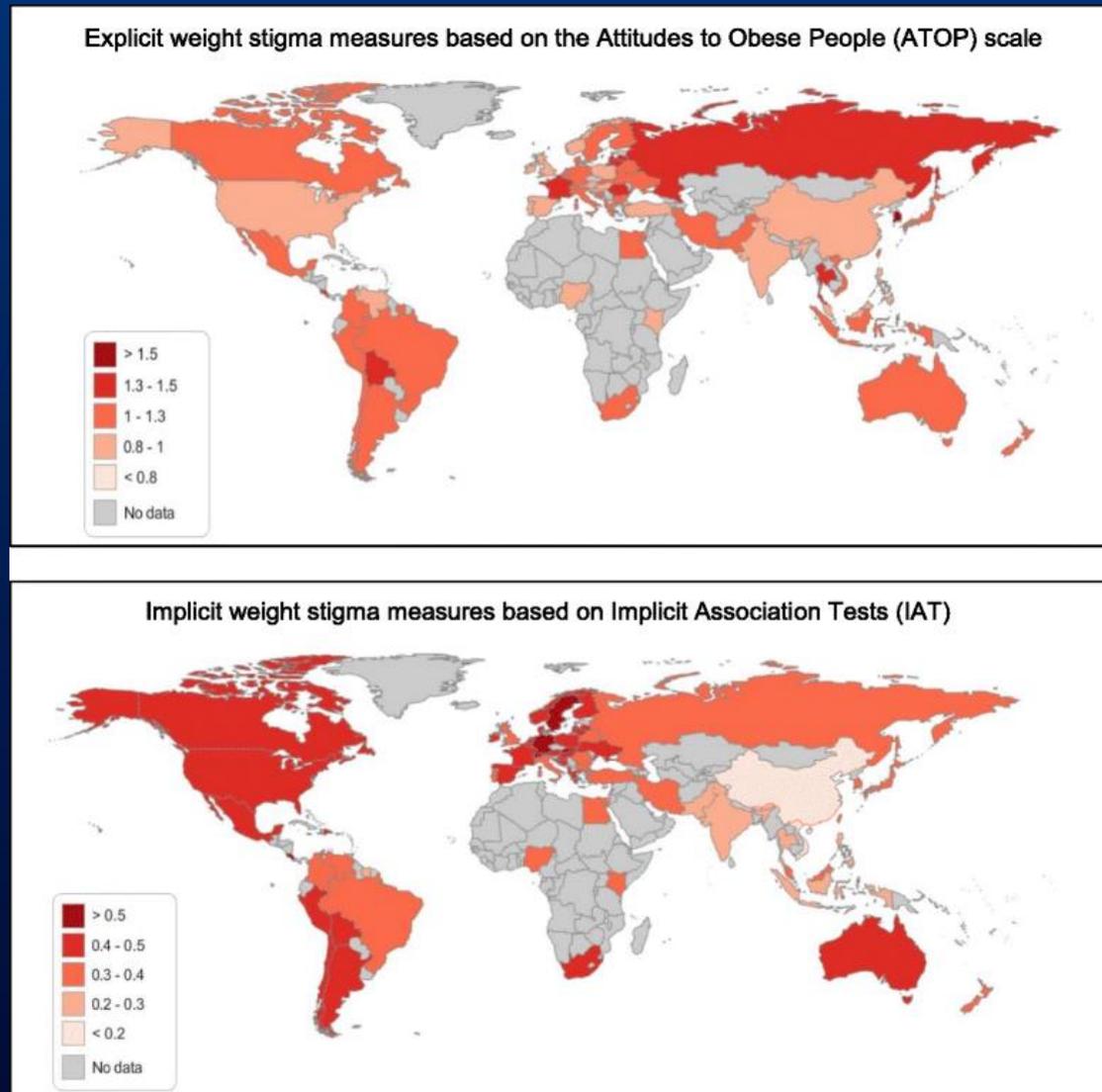
ABBREVIATION: SSI—Survey Sampling International
Dr Puhl conceptualized the project and design, interpreted findings, and led the writing; Ms Peterson reviewed relevant literature, contributed to study measures, managed data collection, and contributed to article drafts and revisions, and Mr Luedicke analyzed the data, interpreted results, created tables, and contributed to writing.

Stigmatizing communication about weight from providers has implications for patients' health care utilization

Reactions to Stigmatizing Language from Providers	Adults (intentions for self)	Parents (intentions for child)
Upset/embarrassed	41%	37%
Seek new doctor	21%	35%
Avoid future medical appts	19%	24%



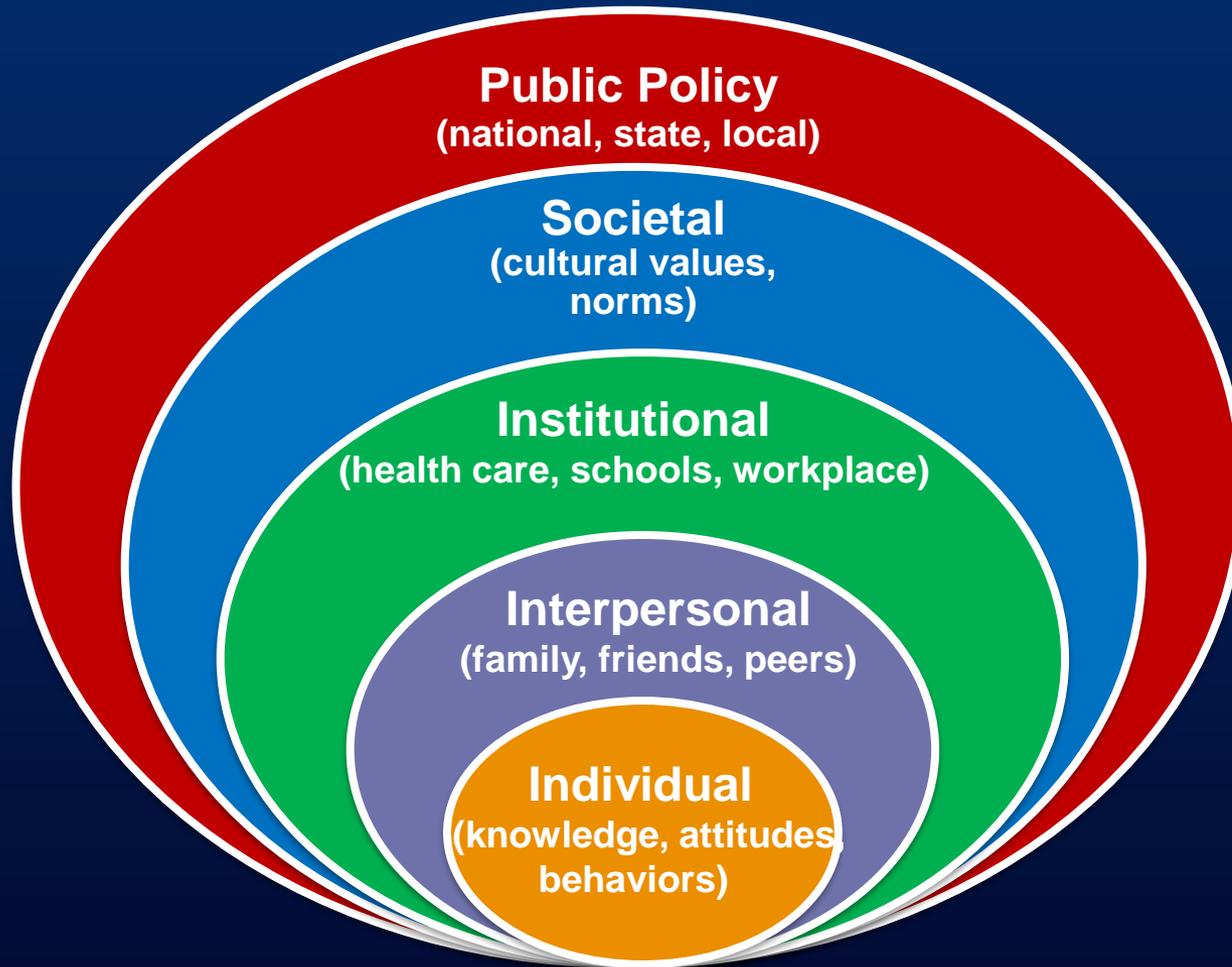
“Obesity Stigma as a Globalizing Health Challenge”



Brewis et al., *Globalization and Health*, 2018

Thinking big:

Must address weight stigma across multiple levels



How can we reduce weight stigma and support individuals with obesity at all levels?

Thank you

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