

# Weight Discrimination and Selected Health Behaviors

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# Background

- Weight discrimination is pervasive in our society
- Experiences of weight discrimination have been associated with health-related behaviors
  - Physical activity
  - Health information-seeking

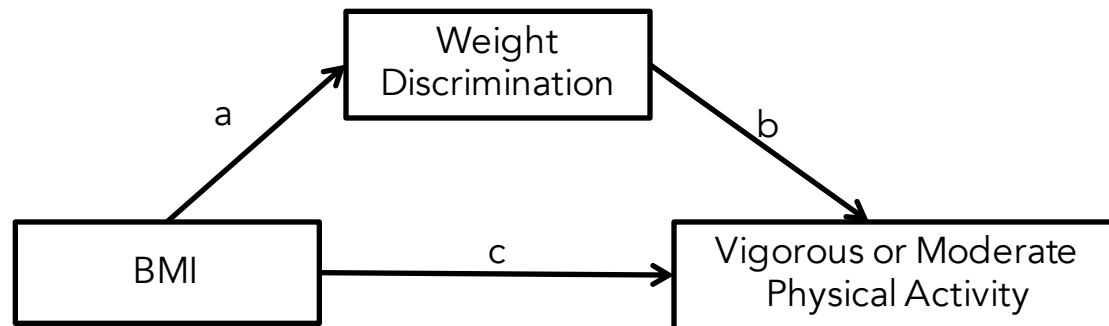
# STUDY 1

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# Study Aim & Hypotheses

Determine the relationship between perceived weight discrimination and level of physical activity among older adults.

- **Hypotheses:** Perceived weight discrimination partially mediates the relationship between BMI and reported level of physical activity among older adults.



# Methods

## **Data Source and Sample:**

- 2010 and 2012 waves of the Health and Retirement Study
- Limited to 2012 respondents who were community-dwelling and aged 50 or older (N=20,554)

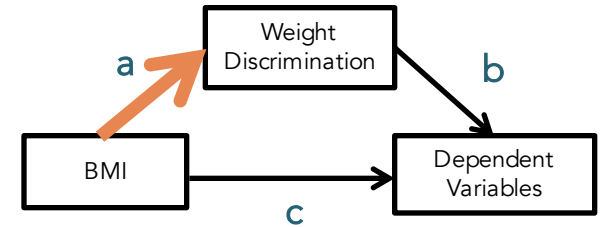
## **Variables:**

- Independent Variable: body mass index (BMI)
- Mediating Variable: weight discrimination
- Dependent Variable: vigorous and moderate physical activity
- Covariates

## **Analyses:**

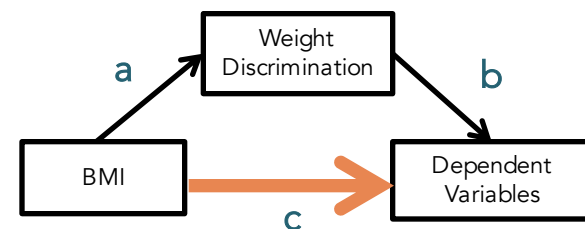
- Baron and Kenny's (1986) steps to mediation analysis
- MacKinnon and Dwyer's (1993) guidance for conducting mediation analysis with dichotomous variables

# Results



- (a) BMI was significantly associated with weight discrimination (AOR=1.14, 95% C.I.=1.13, 1.16).

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- (c) BMI was significantly associated with both vigorous and moderate physical activity.

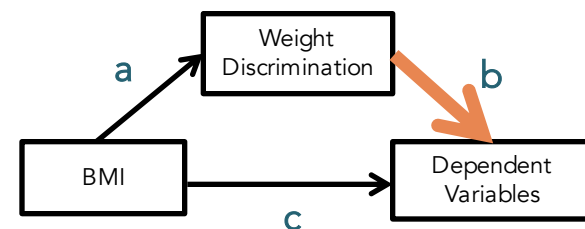
*Imputed and Weighted Multivariate Logistic Regression Results, Variables Associated with Level of Physical Activity, (n=19,382)*

Variable	Ever Vigorous Physical Activity				Ever Moderate Physical Activity			
	Model 1		Model 2		Model 3		Model 4	
	AOR	95% C.I.	AOR	95% C.I.	AOR	95% C.I.	AOR	95% C.I.
BMI	0.96***	0.95, 0.96	0.96***	0.95, 0.97	0.95***	0.94, 0.96	0.95***	0.95, 0.96
Weight Discrimination	-	-	0.79**	0.66, 0.94	-	-	0.76**	0.62, 0.92

\*\*p<0.01; \*\*\* p<0.001

All models were adjusted for race, ethnicity, education, self-rated health status, diagnosed chronic conditions, smoking status, insurance status, whether or not the respondent had a regular source of health care, and number of doctors visits within the past two years.

# Results



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- (c) BMI was significantly associated with both vigorous and moderate physical activity.
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*Imputed and Weighted Multivariate Logistic Regression Results, Variables Associated with Level of Physical Activity, (n=19,382)*

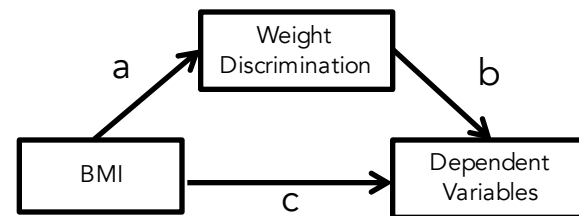
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# Results



## Estimated Total, Direct, and Indirect Effects of Weight Discrimination Binary Meditation Models

		Mediation of the Relationship between BMI and Vigorous Physical Activity (n=11,503)		Mediation of the Relationship between BMI and Moderate Physical Activity (n=11,503)	
		Coef.	95% C.I.	Coef.	95% C.I.
<b>a + b + c</b>	Total Effect	<b>-0.16</b>	-0.19, -0.14	<b>-0.20</b>	-0.22, -0.17
<b>c</b>	Direct Effect	<b>-0.14</b>	-0.17, -0.11	<b>-0.18</b>	-0.21, -0.15
<b>a + b</b>	Indirect Effect	<b>-0.02</b>	-0.03, -0.01	<b>-0.02</b>	-0.03, -0.01
	Proportion Mediated	<b>0.13</b>		<b>0.09</b>	

# Summary, Strengths, & Limitations

## **Summary:**

- Older adults are vulnerable to weight discrimination.
- Experiences of weight discrimination were inversely associated with vigorous and moderate physical activity among older adults.
- Weight discrimination is in the pathway of the relationship between BMI and physical activity among older adults.

## **Strengths Include:**

- Used a large, nationally representative data set
- Able to control for many covariates

## **Limitations Include:**

- Self-reported data
- Cross-sectional design

# STUDY 2

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# Internet Health Information-Seeking

- Negative healthcare experiences associated with Internet health information-seeking
- 50-60% of the U.S. adult population seek health information from the Internet
- Use of interactive communities increasing; allows for sharing and exchanging of health information

# Research Questions

1. How do Internet weight loss forum users describe interactions with healthcare providers?
2. How do Internet weight loss forum users describe the influence of their interactions with providers on their weight loss information-seeking behaviors?

# Data Source

- Collected message board posts from three weight loss-related websites with highest traffic
- Posts collected over a 5-month period.
  - Random selection
  - Targeted searches of key words

## Breast Cancer Support Group

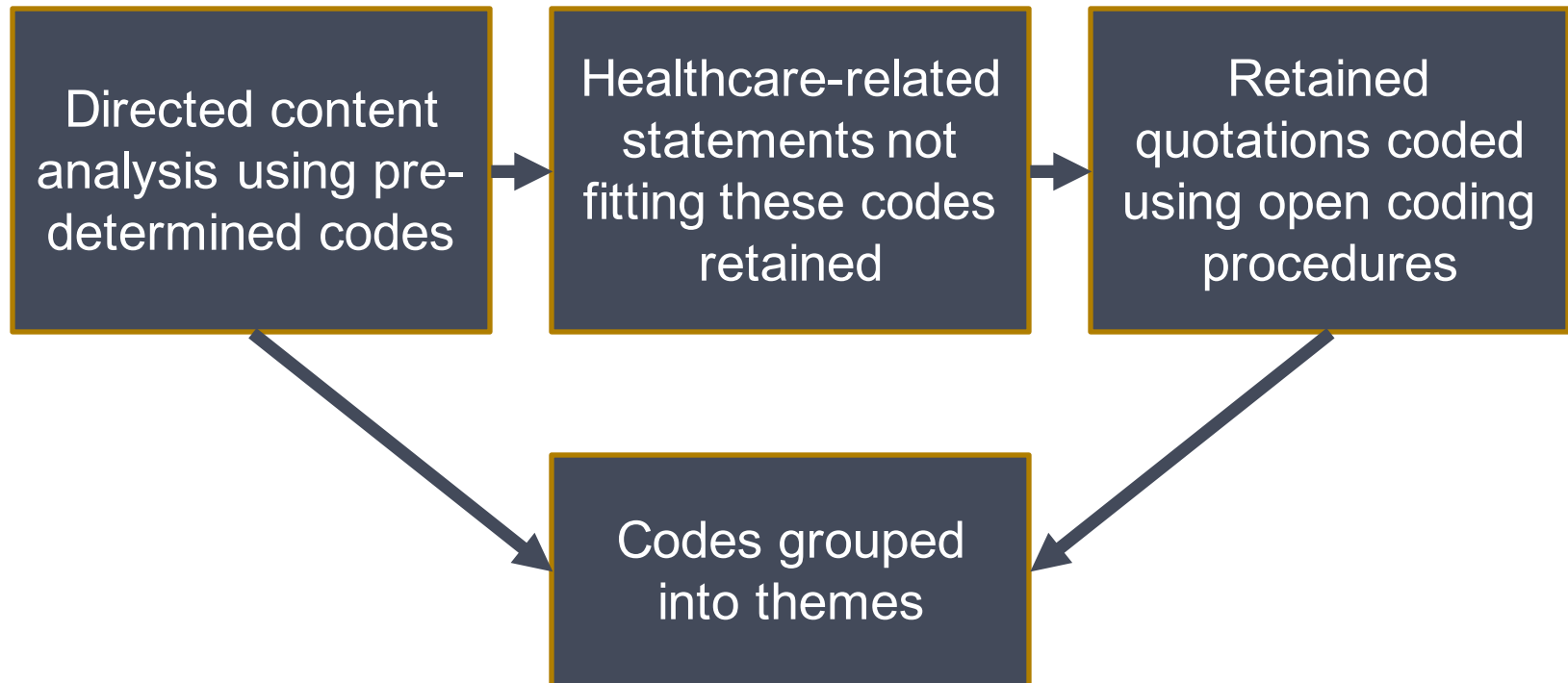
Recent Discussions

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Topics	Replies	Last Post
 <a href="#">My Best friend/teacher has breast ...</a>	6	By [redacted] 8:28 am
 <a href="#">Why don't Drs share all of the inf...</a>	3	By [redacted] Yesterday
 <a href="#">2nd Ultrasound today and told I ne...</a>	8	By [redacted] 05/27/14
 <a href="#">Just finished 16 rounds of chemo</a>	5	By [redacted] 05/27/14
 <a href="#">New Tamoxifen recommendations</a>	2	By [redacted] 05/26/14
 <a href="#">Waiting to see surgeon for a biopsy</a>	1	By [redacted] 05/22/14
 <a href="#">How is everyone?</a>	7	By [redacted] 05/19/14
 <a href="#">two year survivor</a>	9	By [redacted] 05/19/14
 <a href="#">Letrozole - generic for Femara and...</a>	2	By [redacted] 05/18/14
 <a href="#">Coping with breast cancer diagnosi...</a>	5	By [redacted] 05/18/14
 <a href="#">What was the first sign??</a>	6	By [redacted] 05/14/14
 <a href="#">eye of the storm</a>	9	By [redacted] 05/12/14
 <a href="#">My dearest friend has breast cancer</a>	5	By [redacted] 05/03/14
 <a href="#">DCIS First Oncology visit</a>	6	By [redacted] 04/26/14
 <a href="#">just had surgery took both off</a>	14	By [redacted] 04/26/14


# Data Management & Analysis

- Posts copied verbatim into Atlas.ti
- Retained data related to personal healthcare experiences
- Data Analysis by two coders



# Results

- Shame and embarrassment about weight led forum users to avoid providers



I should talk to my doctor, but I'm embarrassed and he'd laugh at me.


I gained weight. I'm afraid to go to the doctor. If she sees me like this she will 'kill' me. The way they treat us is so humiliating.

I avoid going to the doctor because I am embarrassed when he brings up my weight at every visit.



# Results

- Some reported disrespectful treatment during clinical encounters, leading to a shutdown in communication.




I told my doctor my weight loss goal and he laughed.

The dietitian rolled her eyes at me.

I had a doctor try to tell me to lose weight in a way that was offensive. He tried to make it a joke.

# Results

- Some were angry and disappointed with providers who discussed their weight during clinical encounters



Doctors can be so cruel. My medical records say I'm obese and he never lets me forget it. I was so hurt.

I am aware that I'm obese, and my doctor yelling at me about my weight only increases my shame.

She told me I should work on losing weight. I was devastated and cried after the appointment.

He mentioned that I needed to lose weight at every visit. I was so angry and annoyed at him.

# Summary, Strengths, & Limitations

## Summary

- Forum users associated negative emotions with provider visits; some changed or avoided providers as a result.
- Interactive forums might be an important weight loss information source among those who have negative experiences with healthcare providers.

## Strengths

- Qualitative: experiences described in participants' own words.
- Unobtrusive data collection
- Random and targeted selection

## Limitations

- Only examined three weight loss forums within a 5 month period
- Only included views of those voluntarily discussing providers

# Discussion

**Weight discrimination influences health behaviors.**

## **Implications for practice:**

- Consider the influence of weight discrimination on exercise behavior
- Improve communication skills of healthcare providers

## **Implications for future research:**

- Identify and address factors that perpetuate weight stigma
- Examine the relationship between weight discrimination and healthcare-related outcomes

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