



NCI Research Day – 20th June 2022

*Measuring attitudes towards obesity
from a behavioural perspective: theory
and research*

Dr Conor Nolan

Today...

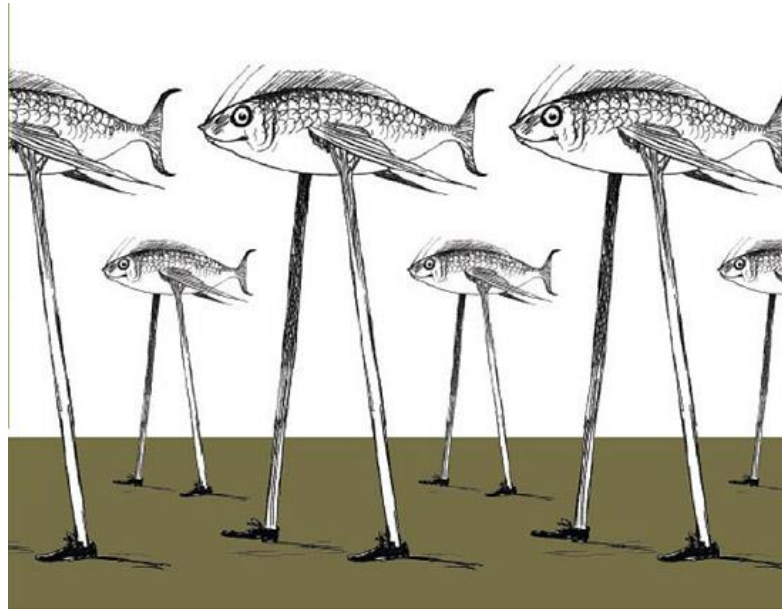
- Theory:
 - BRIEF!
 - Why?
 - Disclaimer
- Research:
 - “Attitudes” towards weight/obesity
 - Do these attitudes predict exercise?

▷ Teach you a new word

▷ Βλυσκ

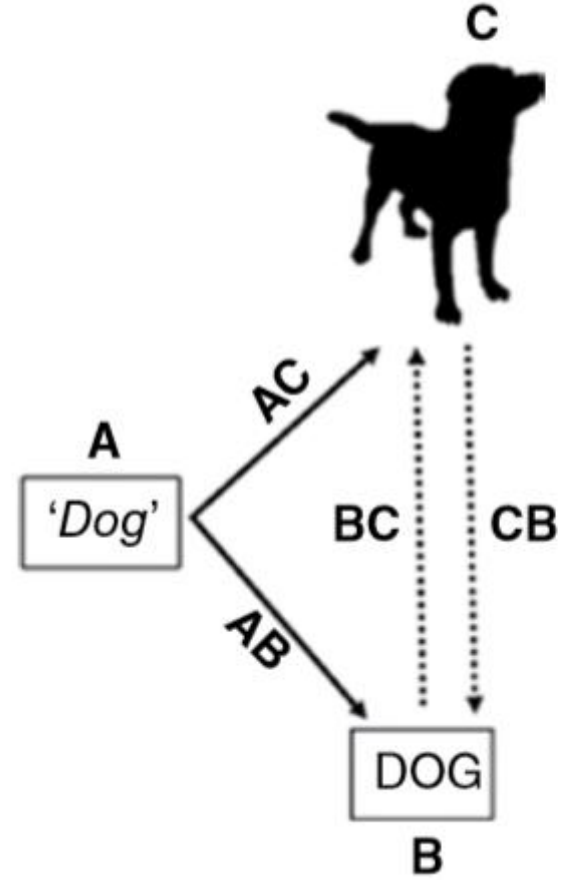
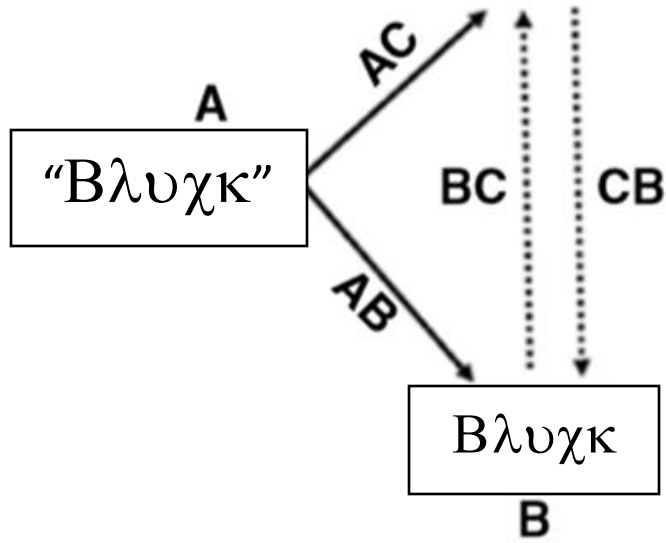
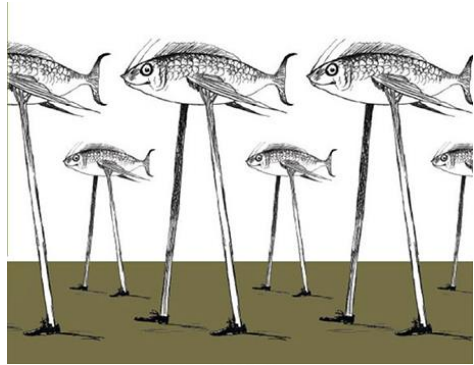
▶ Ηελο

Βλυχκ



▶ Ηελο

Βλυχκ



- ▶ Evidence suggests that derived relational responding is not a prewired capacity, but that it is **learned** (Rehfeldt & Hayes, 1998).
- ▶ Taught thousands of examples through language in early years, and learn the ability to derive relations.
- ▶ Not everyone can do it.

- ▶ Also taught specific relations – based on culture and community.

Heavy Drinkers

Stigma and attitudes

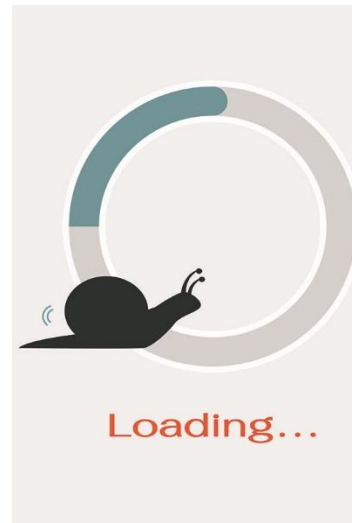
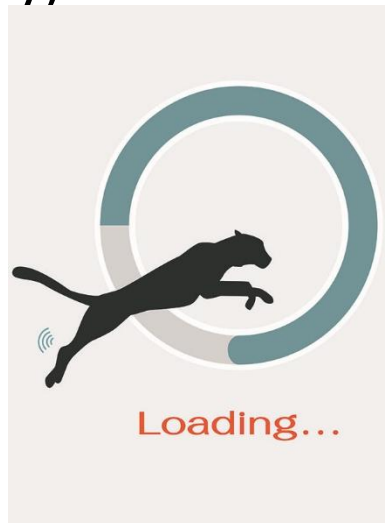
- ▶ Begins to explain how “attitudes” are developed.
- ▶ We don't need to be **explicitly** taught/told relationships between stimuli – our deriving of these relationships may lead to stigmatising attitudes/beliefs
- ▶ The ability to derive relationships is extraordinarily useful...but not always right...

The IRAP

- ▶ The **IRAP (Implicit Relational Assessment Procedure)** is a tool designed to measure our learned history of relating stimuli to each other.
- ▶ From a behavioural psychology perspective, we view this as a measure of “verbal relations in flight” & the **strength** of these relations
- ▶ From a social psychology perspective, it can be viewed as a measure of “attitudes”.

The IRAP

- ▶ IRAP is based on a theory of **learned histories**
- ▶ Presents participants with a 'rule' on how to respond
- ▶ If the rule is consistent with their learned histories – response times (latency) will be quicker (stronger)
- ▶ If the rule is inconsistent with their learned histories – response times (latency) will be slower



The Present Research

- ▶ Used the IRAP to assess relational weight biases and investigate the influence of these biases on self-reported physical activity.
- ▶ Effectively, what attitudes do people hold towards weight (thinness/obesity) and do our attitudes towards weight predict our exercise activity?

<p>Rule A Respond as if fat is bad and slim is good</p> <p>Rule B Respond as if fat is good and slim is bad</p>	
Label 1: Slim Silhouette	Label 2: Overweight Silhouette
Target: Positive	Target: Negative
Good	Bad
Pleasant	Unpleasant
Attractive	Unattractive
Successful	Unsuccessful
Active	Lazy
Motivated	Unmotivated
Response option 1: Same	Response option 2: Opposite

*Consistent [Rule A] trial
(slim/positive)*

A black rectangular panel with a white silhouette of a slim person at the top center. Below the silhouette, the word "Unpleasant" is written in white. At the bottom left, the text "Press 'd' for" is in green, with "SAME" in white below it. At the bottom right, the text "Press 'k' for" is in green, with "OPPOSITE" in white below it. A white checkmark is positioned between the two bottom options.

*Inconsistent [Rule B] trial
(slim/negative)*

A black rectangular panel with a white silhouette of a slim person at the top center. Below the silhouette, the word "Pleasant" is written in white. At the bottom left, the text "Press 'd' for" is in green, with "SAME" in white below it. At the bottom right, the text "Press 'k' for" is in green, with "OPPOSITE" in white below it. A white checkmark is positioned between the two bottom options.

*Consistent trial
(fat/negative)*

A black rectangular panel with a white silhouette of a fat person at the top center. Below the silhouette, the word "Unpleasant" is written in white. At the bottom left, the text "Press 'd' for" is in green, with "SAME" in white below it. At the bottom right, the text "Press 'k' for" is in green, with "OPPOSITE" in white below it. A white checkmark is positioned between the two bottom options.

*Inconsistent trial
(fat/positive)*

A black rectangular panel with a white silhouette of a fat person at the top center. Below the silhouette, the word "Pleasant" is written in white. At the bottom left, the text "Press 'd' for" is in green, with "SAME" in white below it. At the bottom right, the text "Press 'k' for" is in green, with "OPPOSITE" in white below it. A white checkmark is positioned between the two bottom options.

Weight Bias

Weight IRAP

Demographic Questionnaire

Anti-Fat Attitudes Questionnaire (AFA)
(Crandall, 1994)

Godin Leisure-Time Exercise
Questionnaire (GLTEQ)

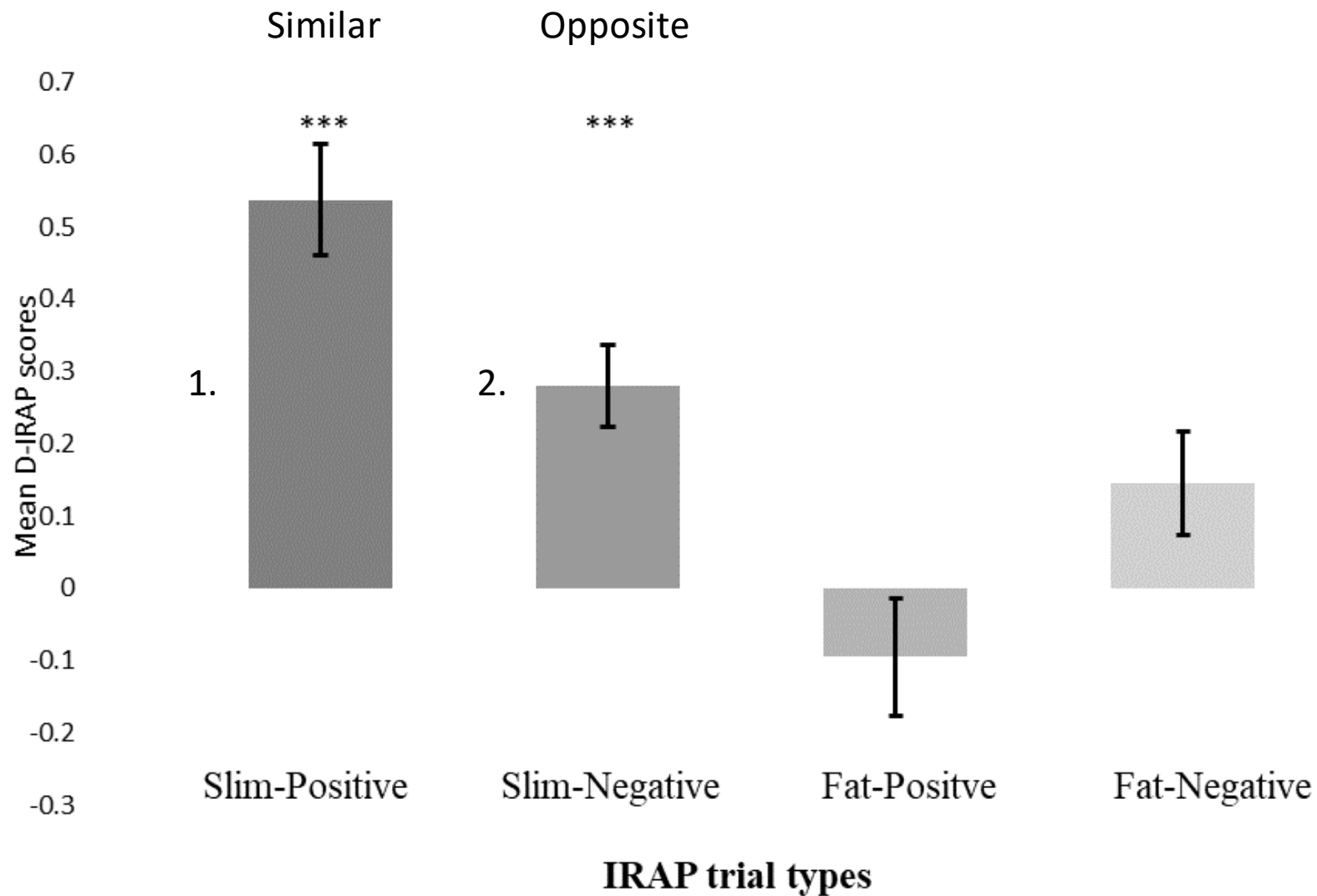
(Godin & Shephard, 1985)

Participants

33 Participants

19 female, 14 male

Age range of 20-58 years ($M=33.03$,
 $SD=10.17$)



1. Participants most quickly affirmed the relation between the slim silhouette and positive words
2. Participants rejected the relation between slim silhouette and negative words

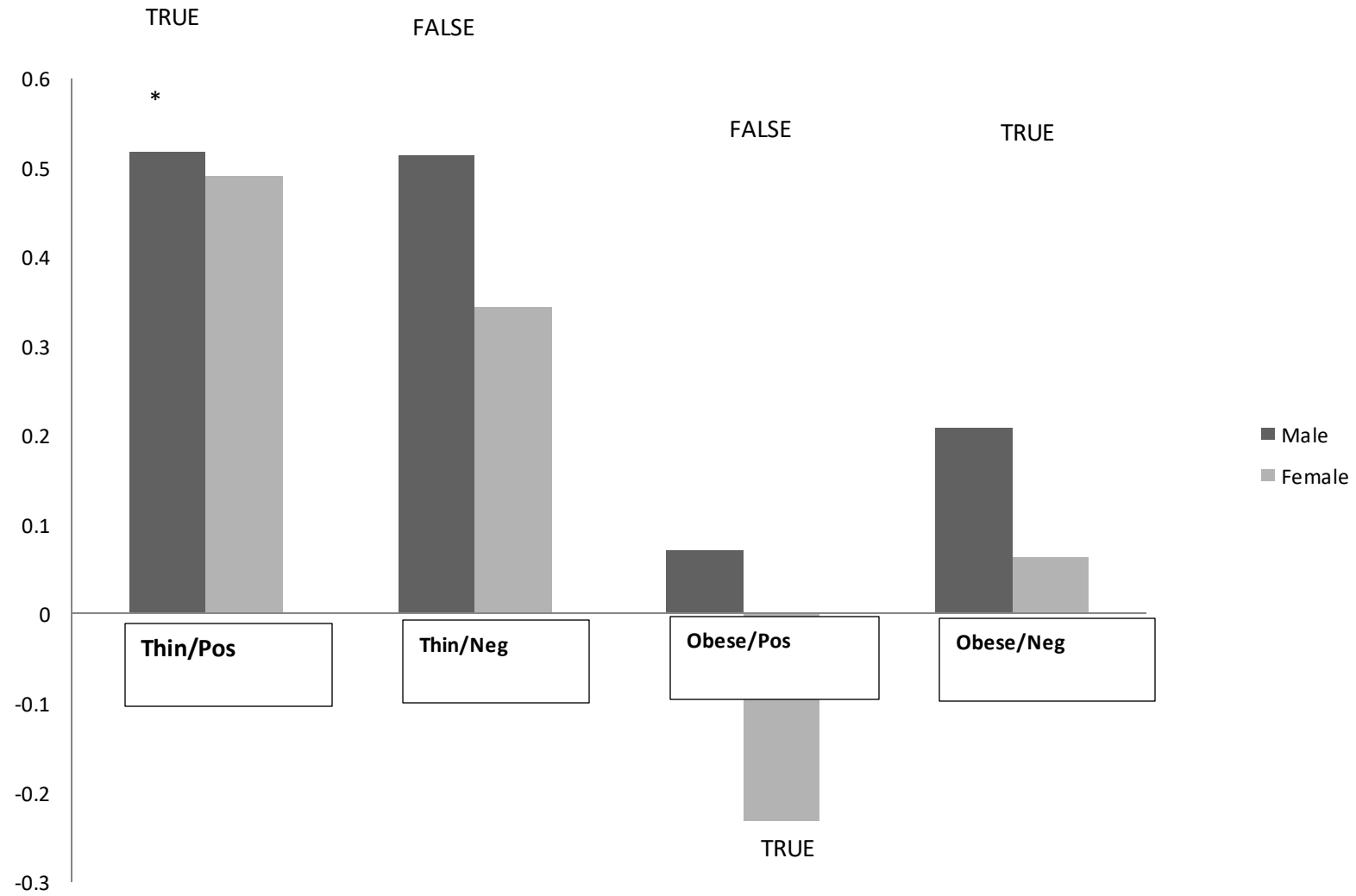
What does this mean?

- ▶ Participants in this sample appeared to demonstrate a “pro-slim” response bias, but did not demonstrate a significant “anti-fat” bias.
- ▶ If looking at the direction of the IRAP scores for the “fat” trials, appears to be in an “anti-fat” direction – but scores were not stat sig.
- ▶ Relationship to exercise?
- ▶ The two significant IRAP trial types explained 35.2% of variance in physical activity levels, as reported by the Godin ($F(2, 30) = 9.68; p = .001$).
- ▶ Slim-positive trial type was found to independently predict physical activity levels to a statistically significant level: slim-positive trial type ($\beta = .54, p = .001$)

What does this mean?

- ▶ The sample showed strong pro-thin attitudes
- ▶ Pro-thin attitudes were predictive of level of exercise.
- ▶ Not much on attitudes towards “fat/obese”
 - Some minor self-report attitudes
- ▶ INTERESTINGLY...
- ▶ These results are almost exactly identical to another piece of research... (O’Neill, Harte, Nolan, Kane & Kelly)

IRAP Results



Summary

- ▶ The IRAP is based on behavioural theory, and is a VERY malleable/adaptable tool
- ▶ Can be used to measure “attitudes” towards virtually anything and everything.
- ▶ Behavioural researchers look at the results from one perspective, social psych researcher look at the results from a different perspective.
- ▶ The present research found that participants displayed pro-slim attitudes, but not anti-fat ones.
- ▶ Pro-slim attitudes predicted exercise activity
- ▶ The present IRAP results are similar to other research
- ▶ Are anti-fat attitudes less prevalent? Or is it a methodological issue...?