

The Proteus Effect

Behavioral Modification via
Transformations of Digital Self-Representation
Nick Yee and Jeremy Bailenson



Digital Transformations

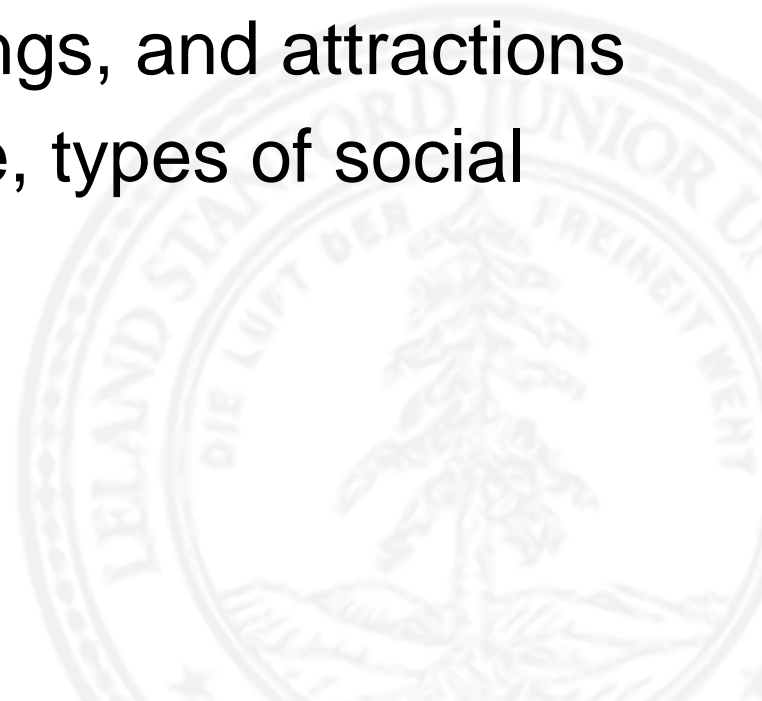


Second Life

“Using over 150 unique sliders, [users] can change everything from their foot size to their eye color to the cut of their shirt.”

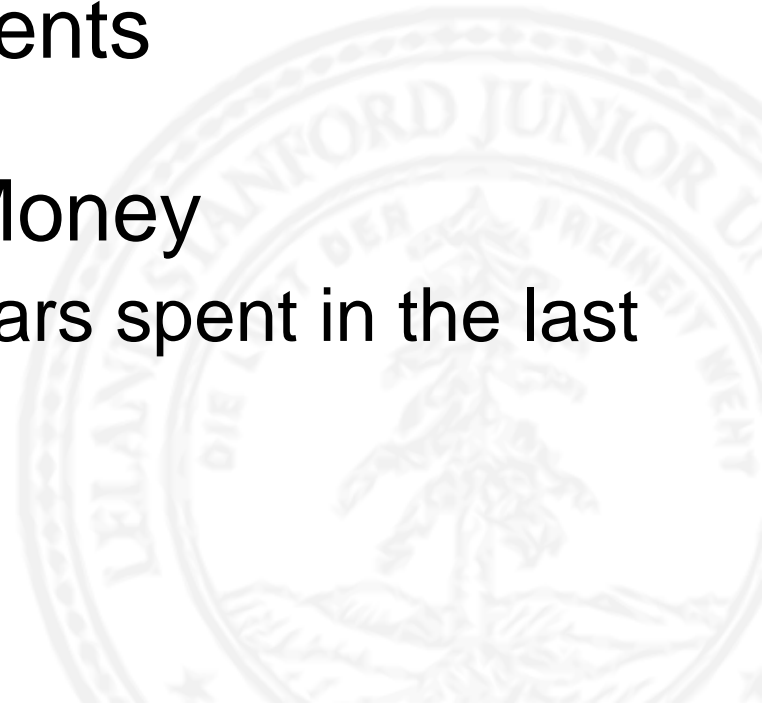
What is Second Life?

- “Second Life is a 3D online digital world imagined and created by its residents.”
- Highly customizable avatars
- Create unique objects, buildings, and attractions
- Variety of locations to explore, types of social interactions to encounter
- Virtual economy



Who uses Second Life?

- Average of 50,000 users at any time during the day
- Over 11 million total residents
- Virtual Economy = Real Money
 - Nearly \$1.4 million US dollars spent in the last 24 hours!





Hoffman Designs (Mature), Hoffman Designs - ISLAND NOW OPEN: Furniture & Prefab Homes, 2:04 PM, 141,298



History Say Shout Gesture

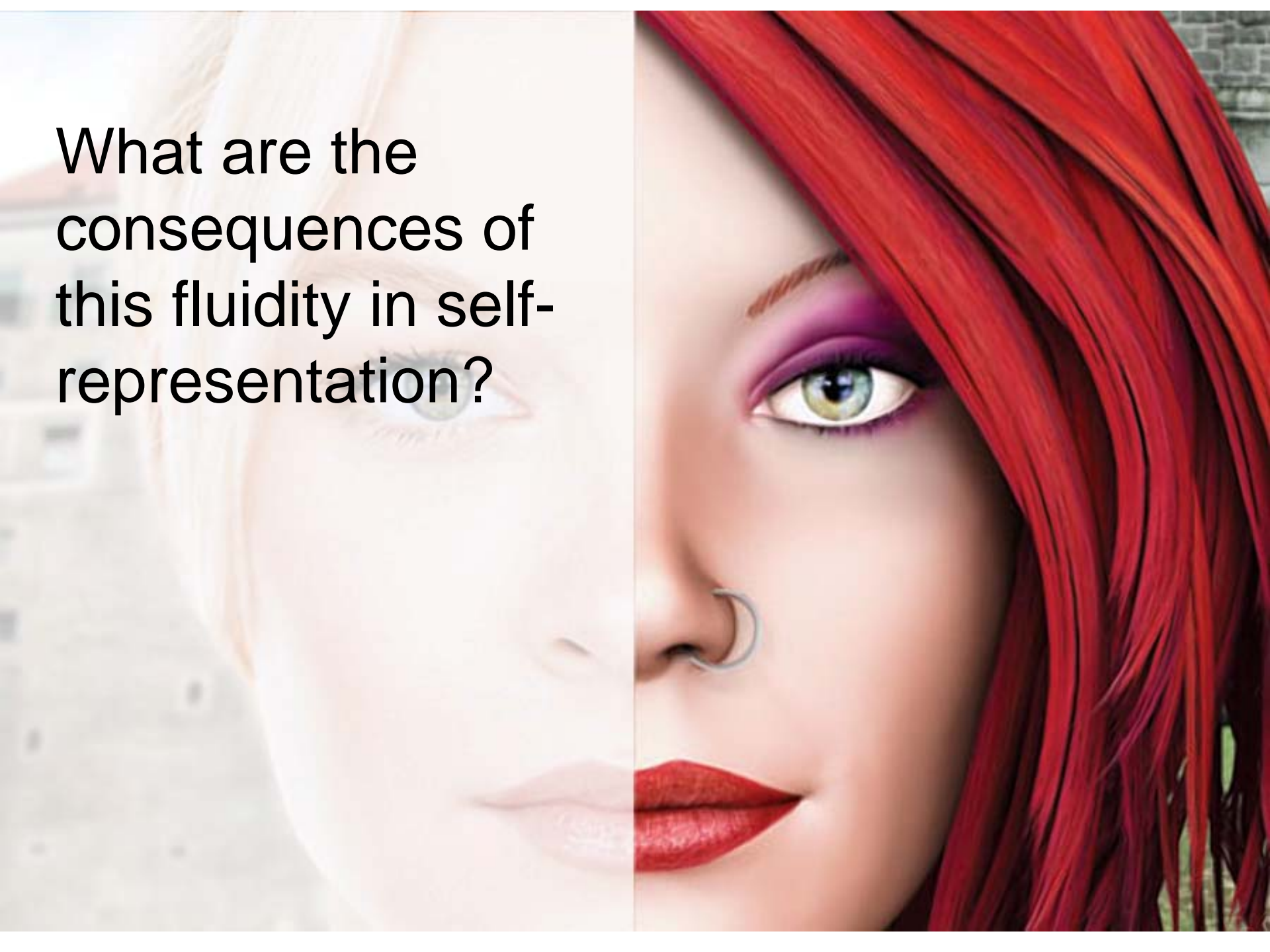
IM Chat Friends Fly Snapshot Events Find Mini-Map Map Inventory

World of Warcraft

- And other MMORPGs: HUGE scale



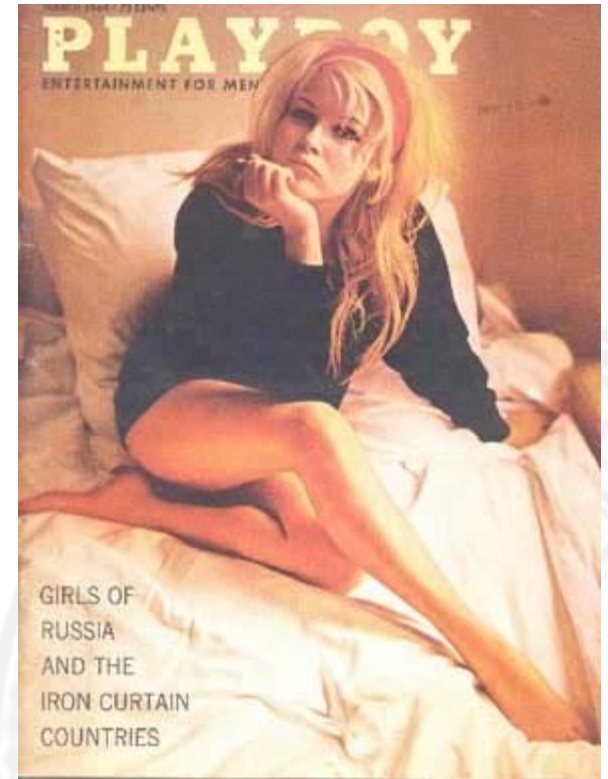
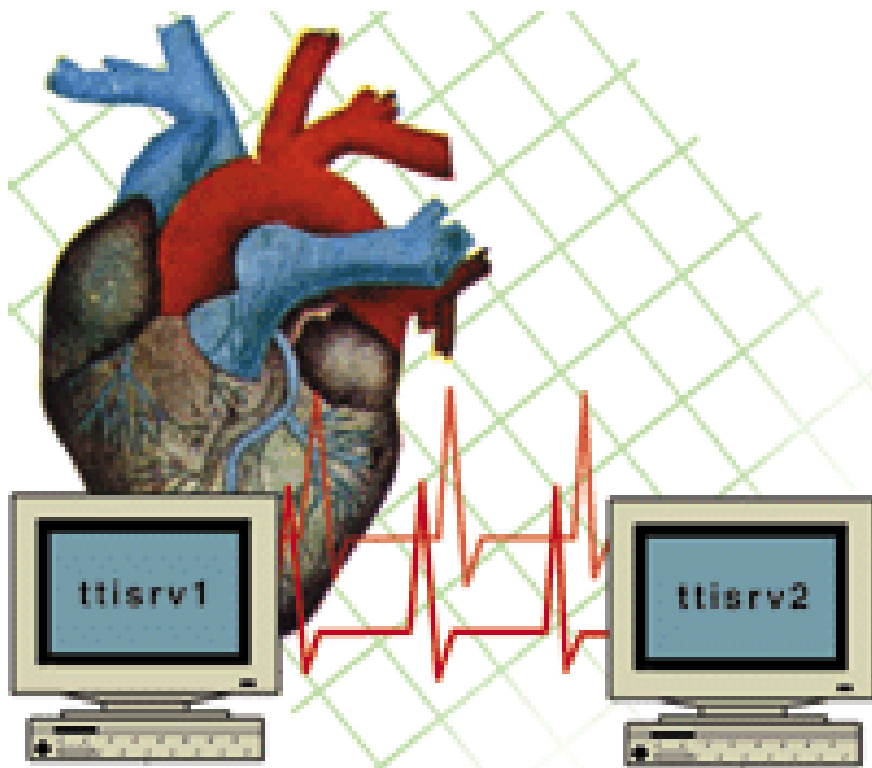
What are the consequences of this fluidity in self-representation?



Self Perception Theory



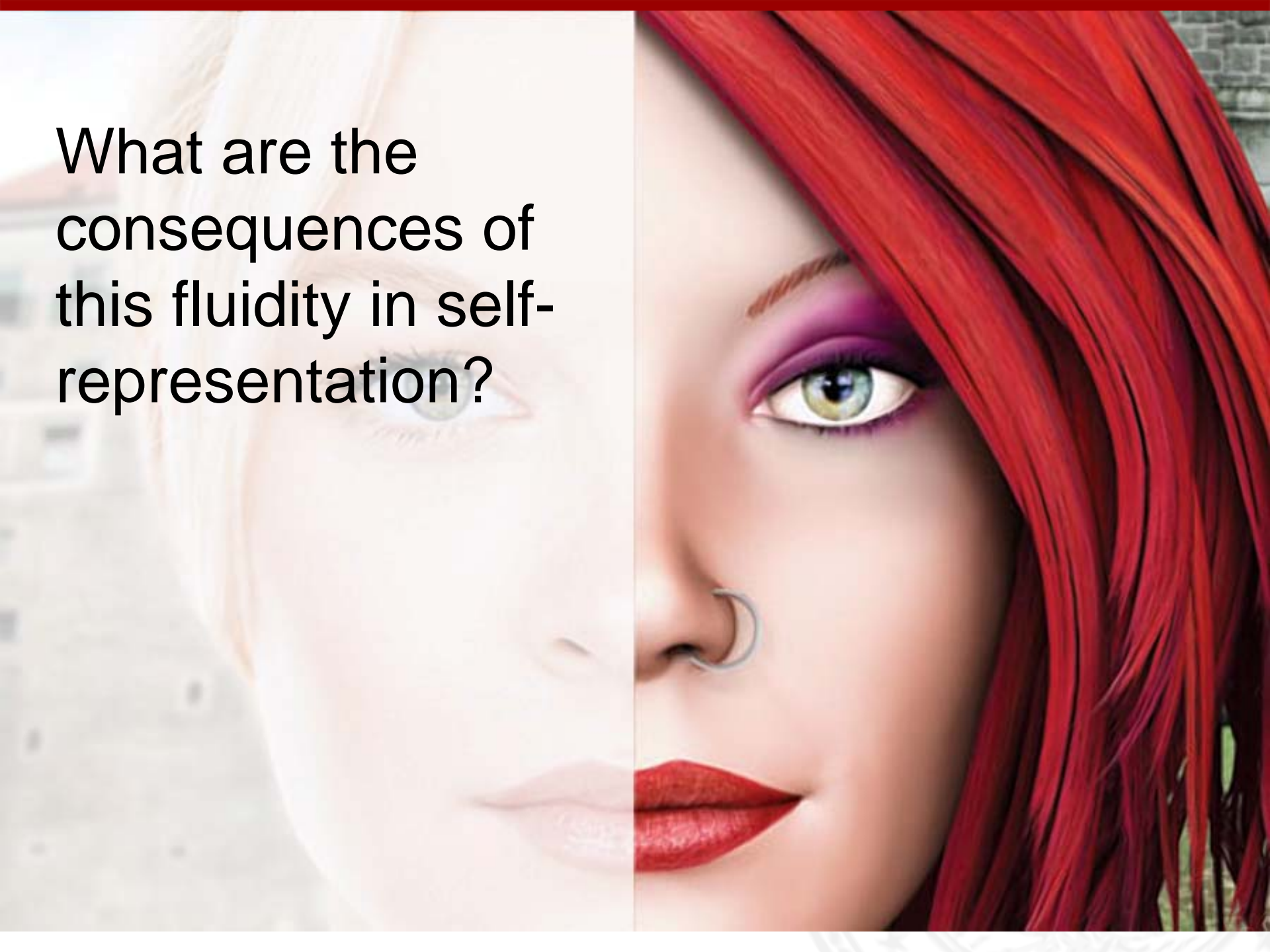
Self Perception Theory:



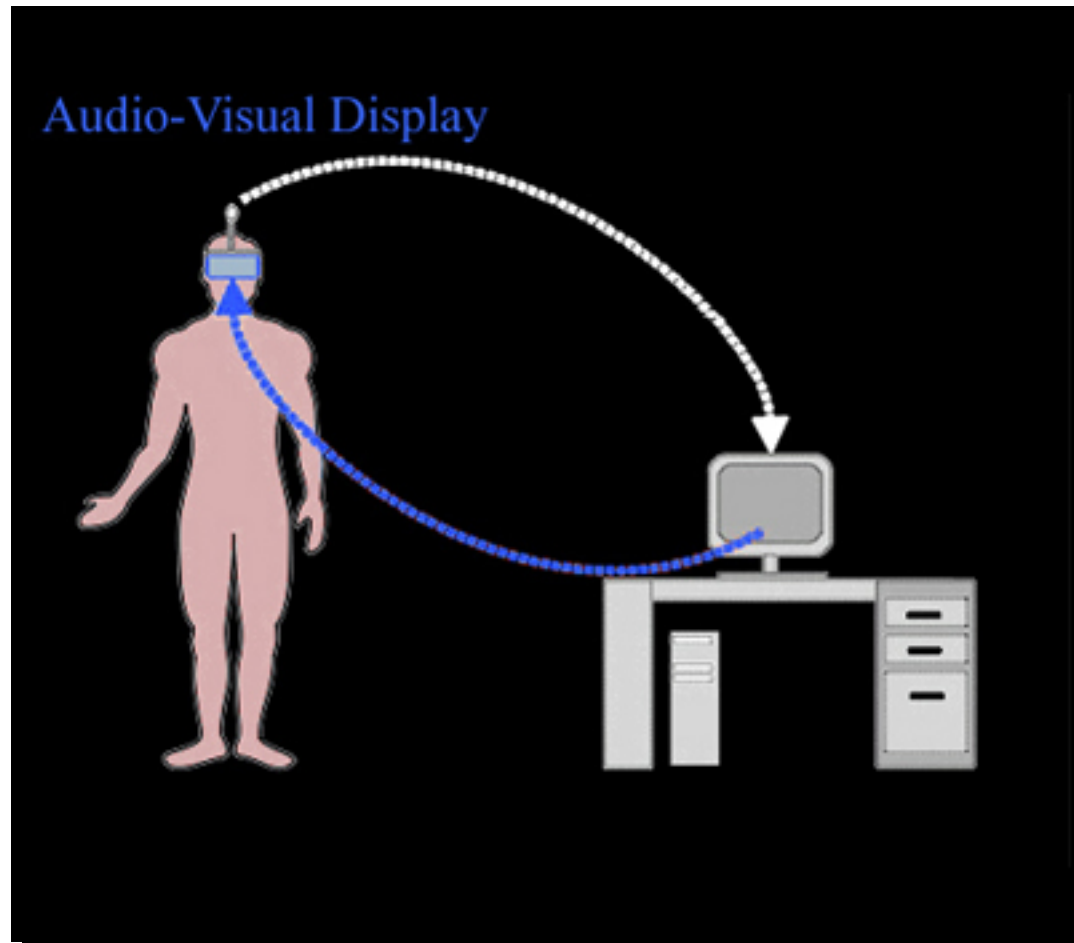
Deindividuation



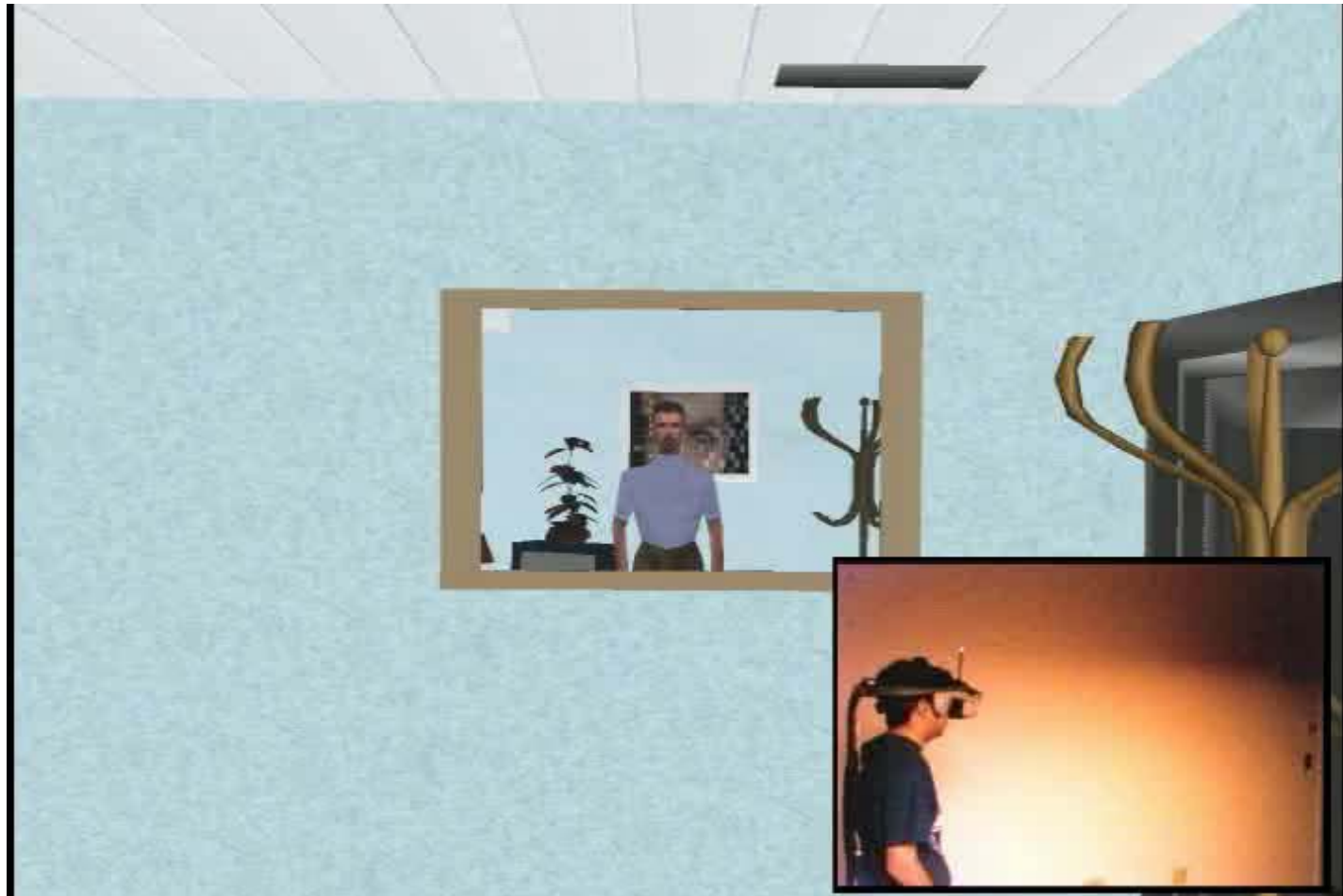
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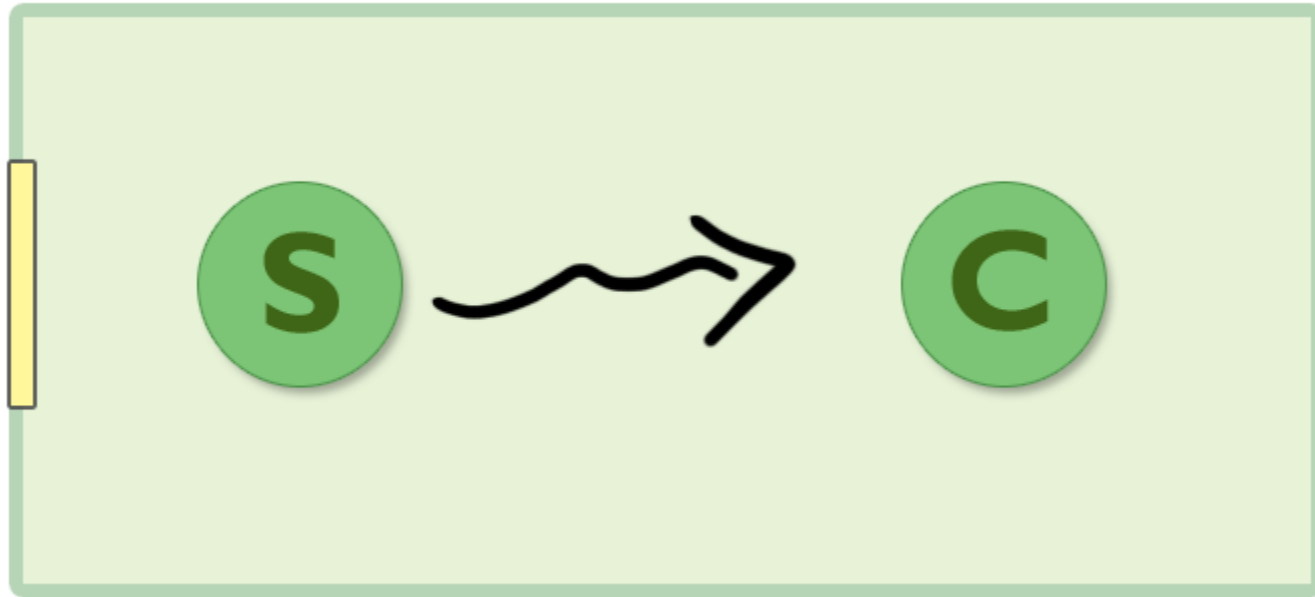
How does Virtual Reality Work?



The Virtual Mirror...



General Procedure



Study 1 - Attractiveness

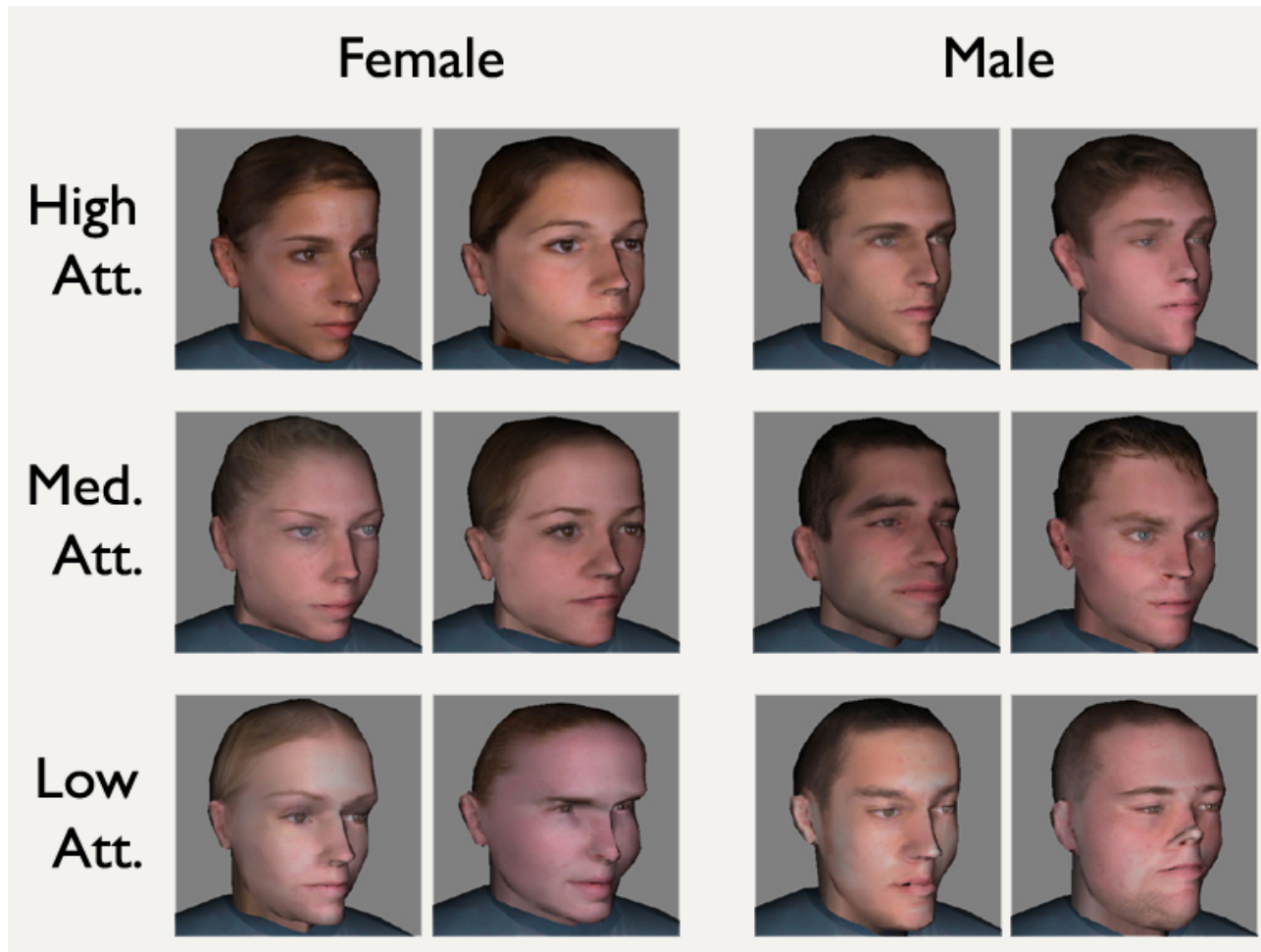
Attractiveness is correlated with:

- Friendliness
- Extraversion
- Self-Esteem

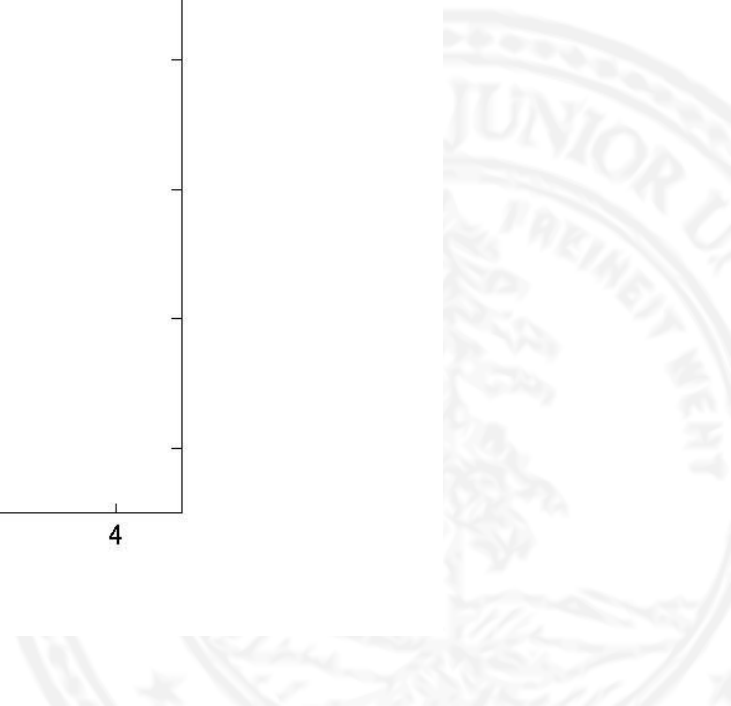
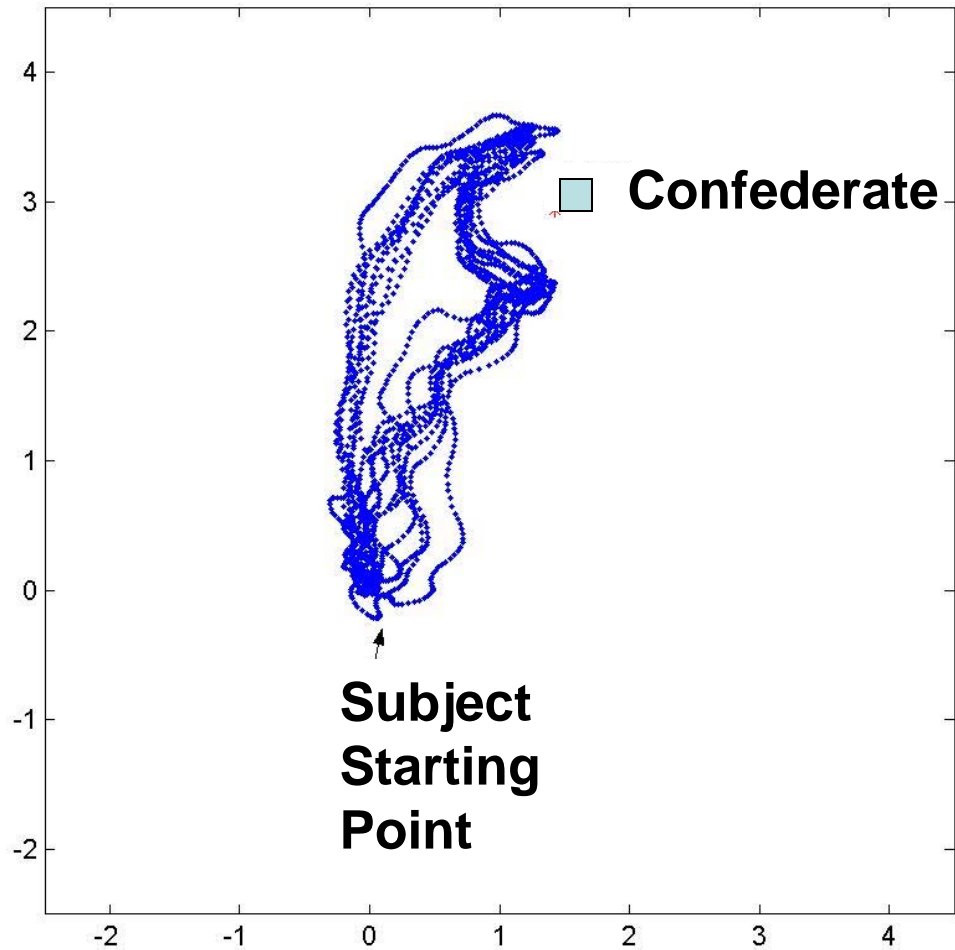
Can using an attractive avatar result in the same traits?



Study 1 - Pretest

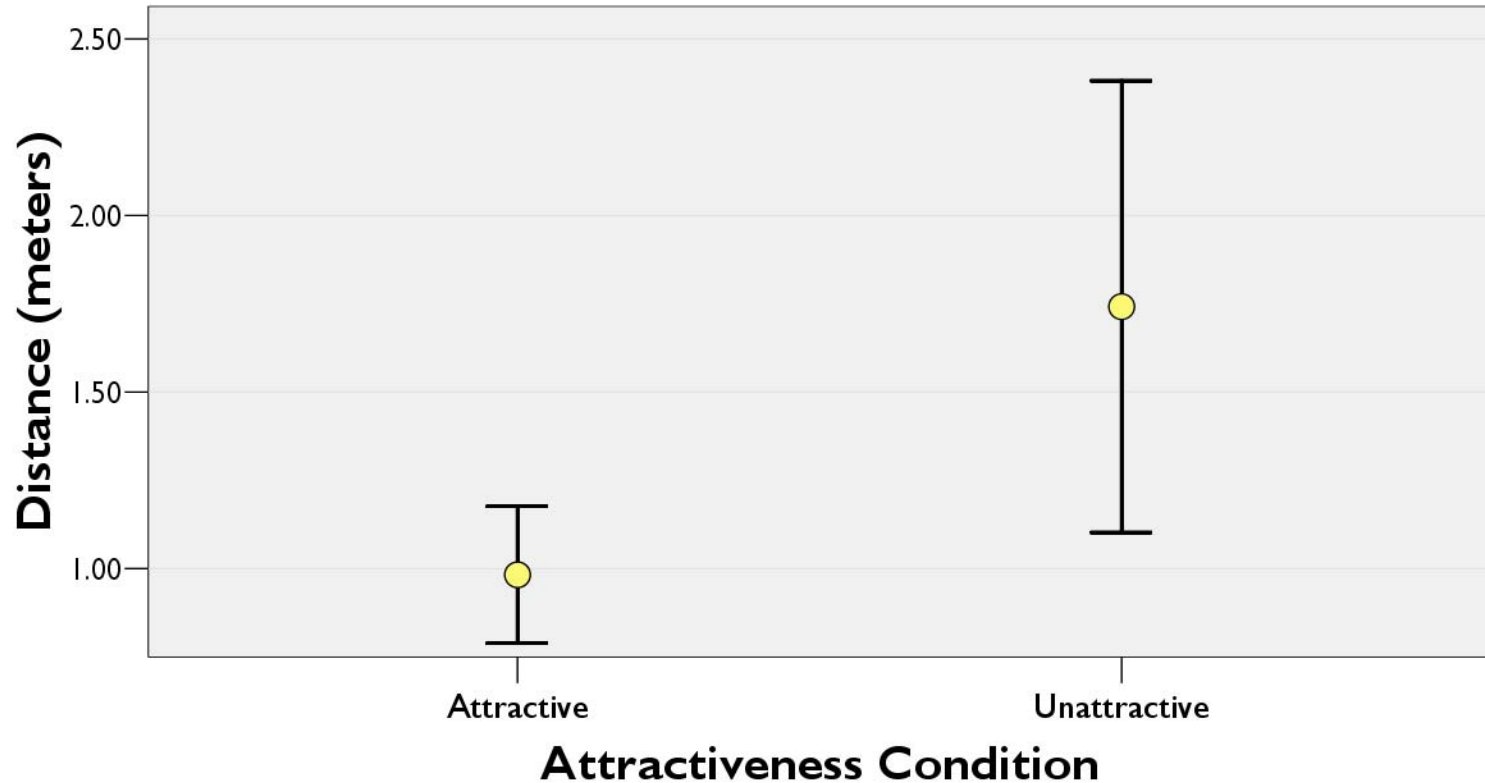


Measuring Interpersonal Distance



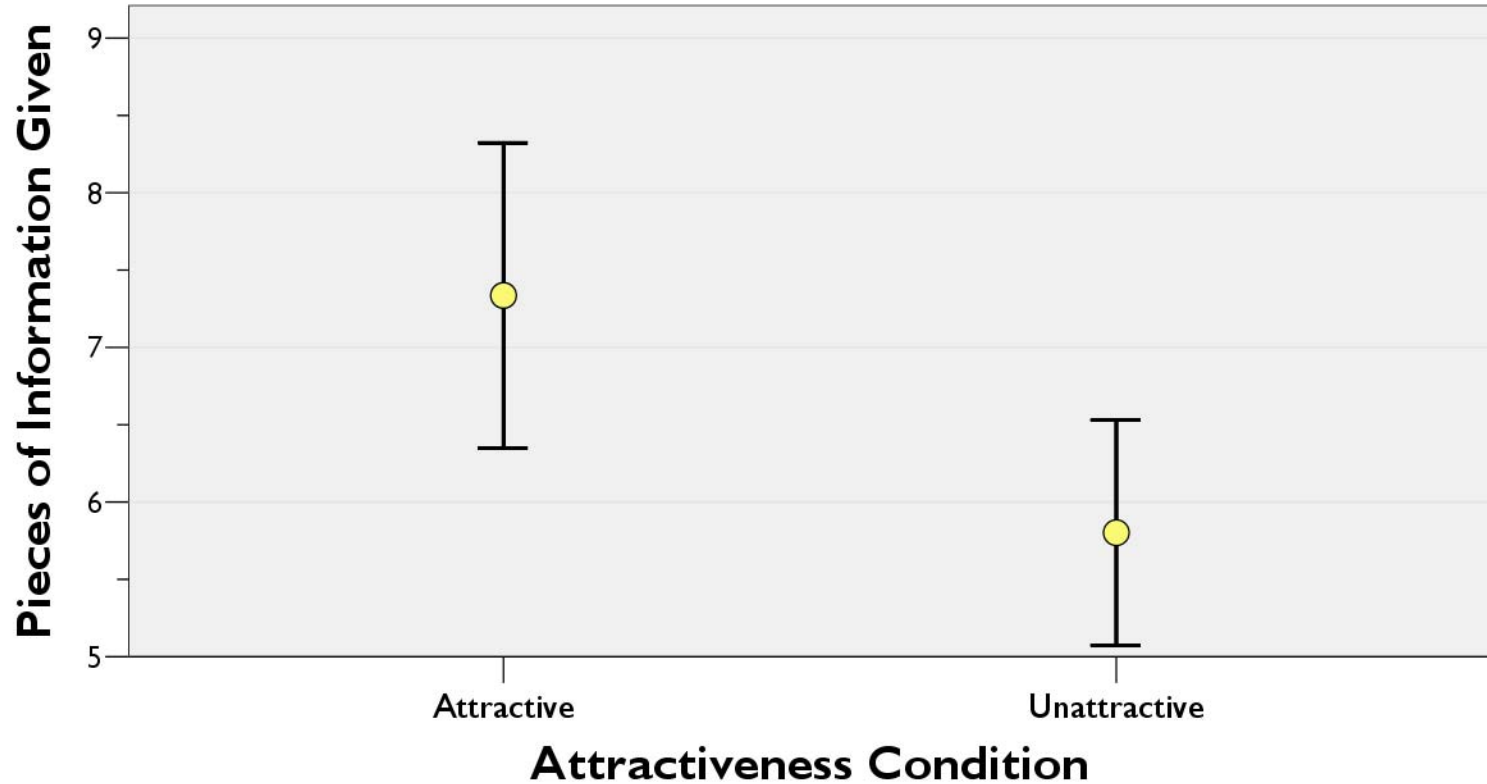
Study 1 – Personal Space

Distance From Confederate



Pilot 1 - Self-Disclosure

Personal Disclosure



Study 2 Height

Height is correlated with:

- Confidence
- Personal Income

Can we make someone more confident by giving them a taller avatar?



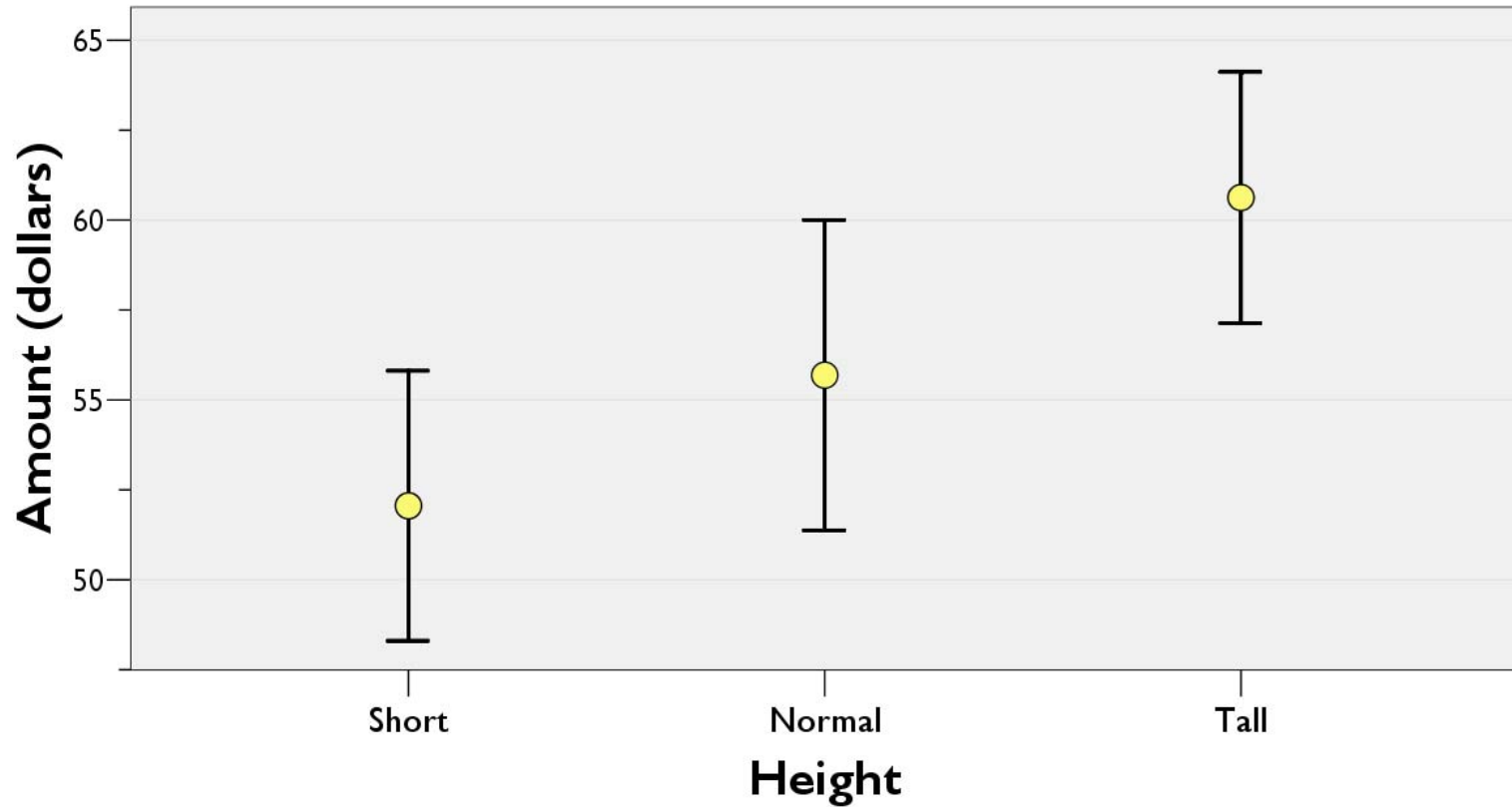
Study 2 Height – Ultimatum Game



- 1) Subject offers split
- 2) Confederate offers 50/50
- 3) Subject offers split
- 4) Confederate offers 75/25

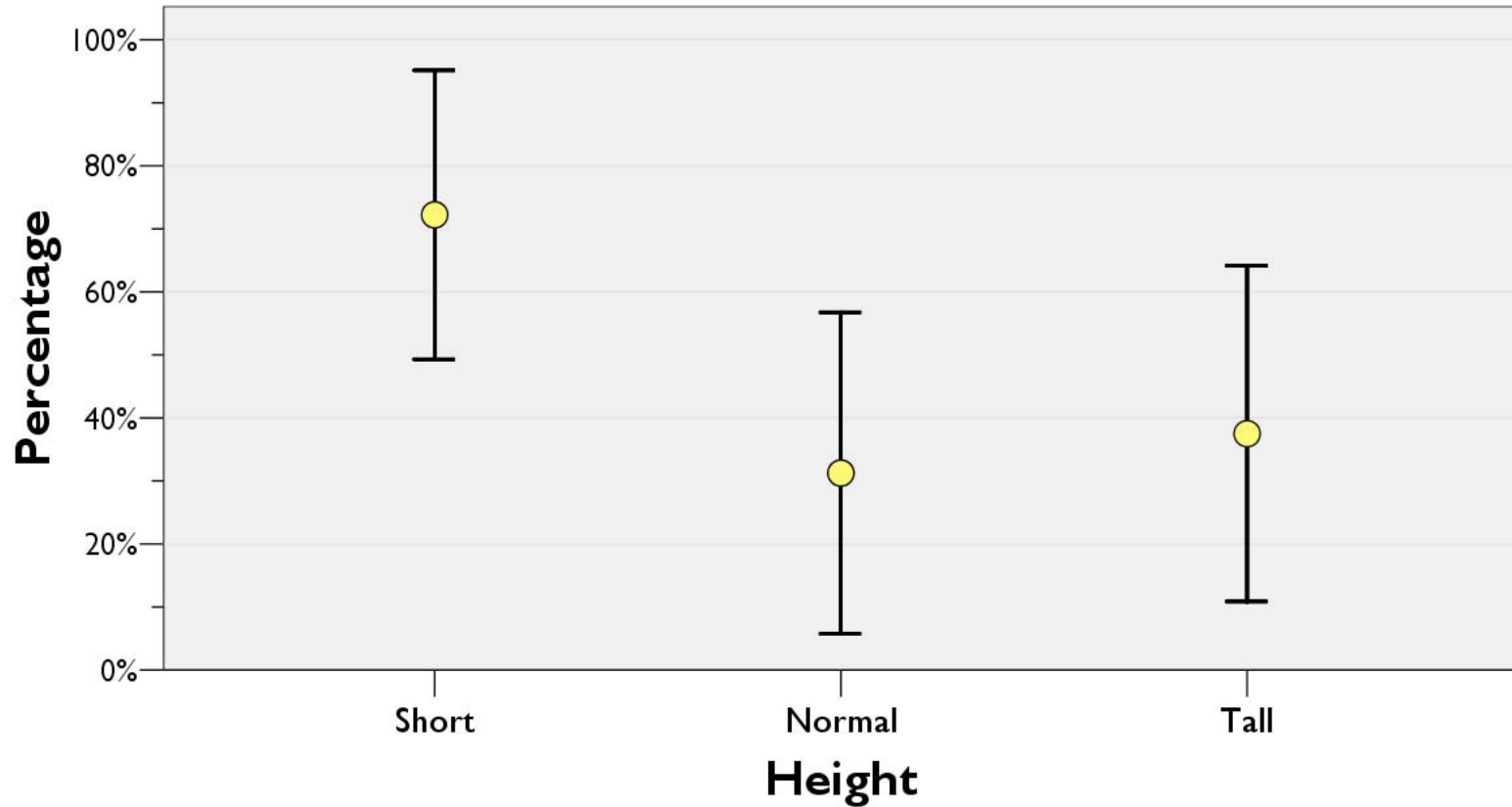
Study 2 - 2nd Split

Split For Self



Study 2 - Reaction to Unfair Split

Acceptance of Unfair Offer

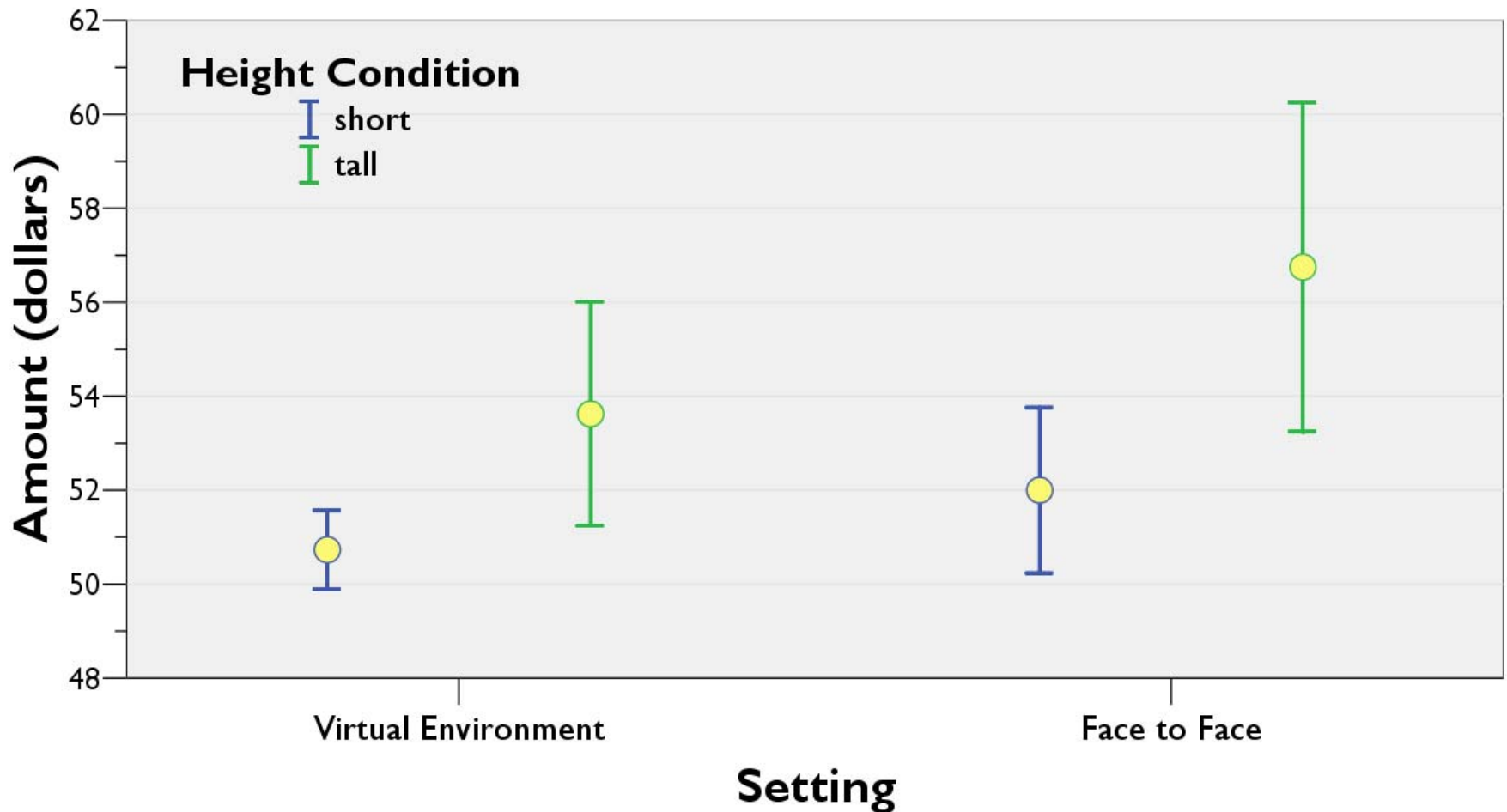




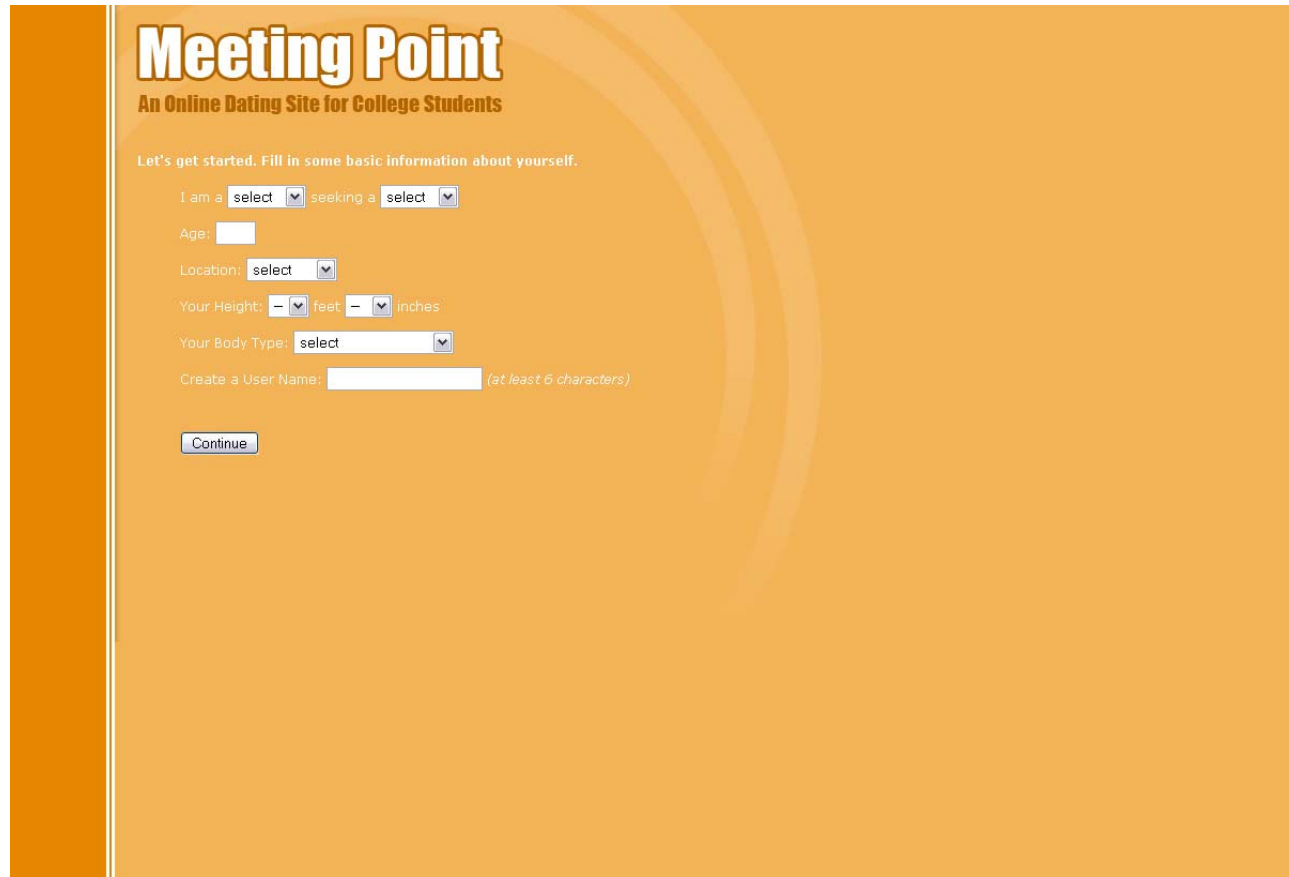
What happens when users log out?

Study 4 – Height Transfer to F2F

Split For Self



Study 5 – Attractiveness Transfer



Meeting Point
An Online Dating Site for College Students

Let's get started. Fill in some basic information about yourself.

I am a seeking a

Age:

Location:

Your Height: feet inches

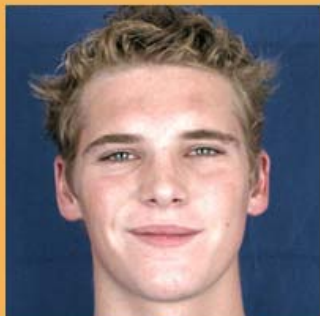
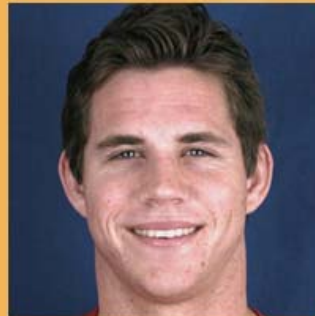
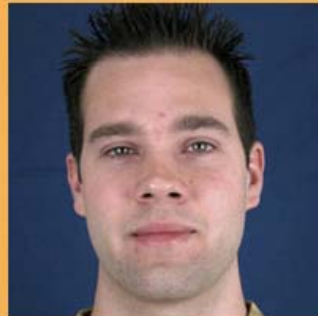
Your Body Type:

Create a User Name: (at least 6 characters)

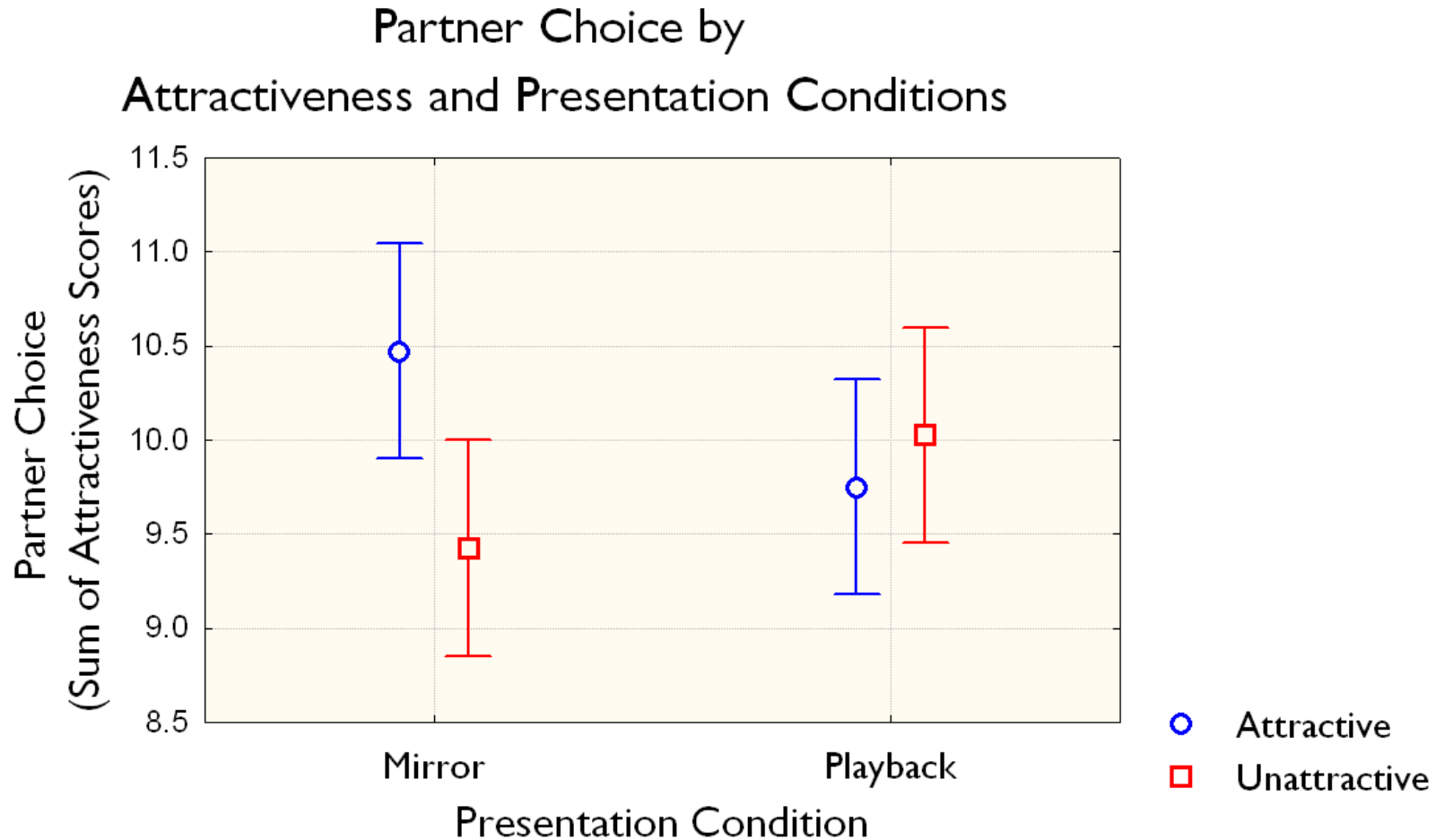
The screenshot shows a registration form for 'Meeting Point', an online dating site for college students. The form is set against a blue background with a faint circular pattern. It includes fields for gender, age, location, height, body type, and a user name, along with a 'Continue' button. A faint watermark of a university seal is visible in the bottom right corner of the page.

Below is a photo panel of students we've picked from our database. Pick the two people who you are most interested in and who you think would most likely be interested in you. We'll include your photo in their photo panel to see if there's a match.

Since this is a study of interpersonal compatibility rather than a real dating site, you won't actually be meeting any of these people.

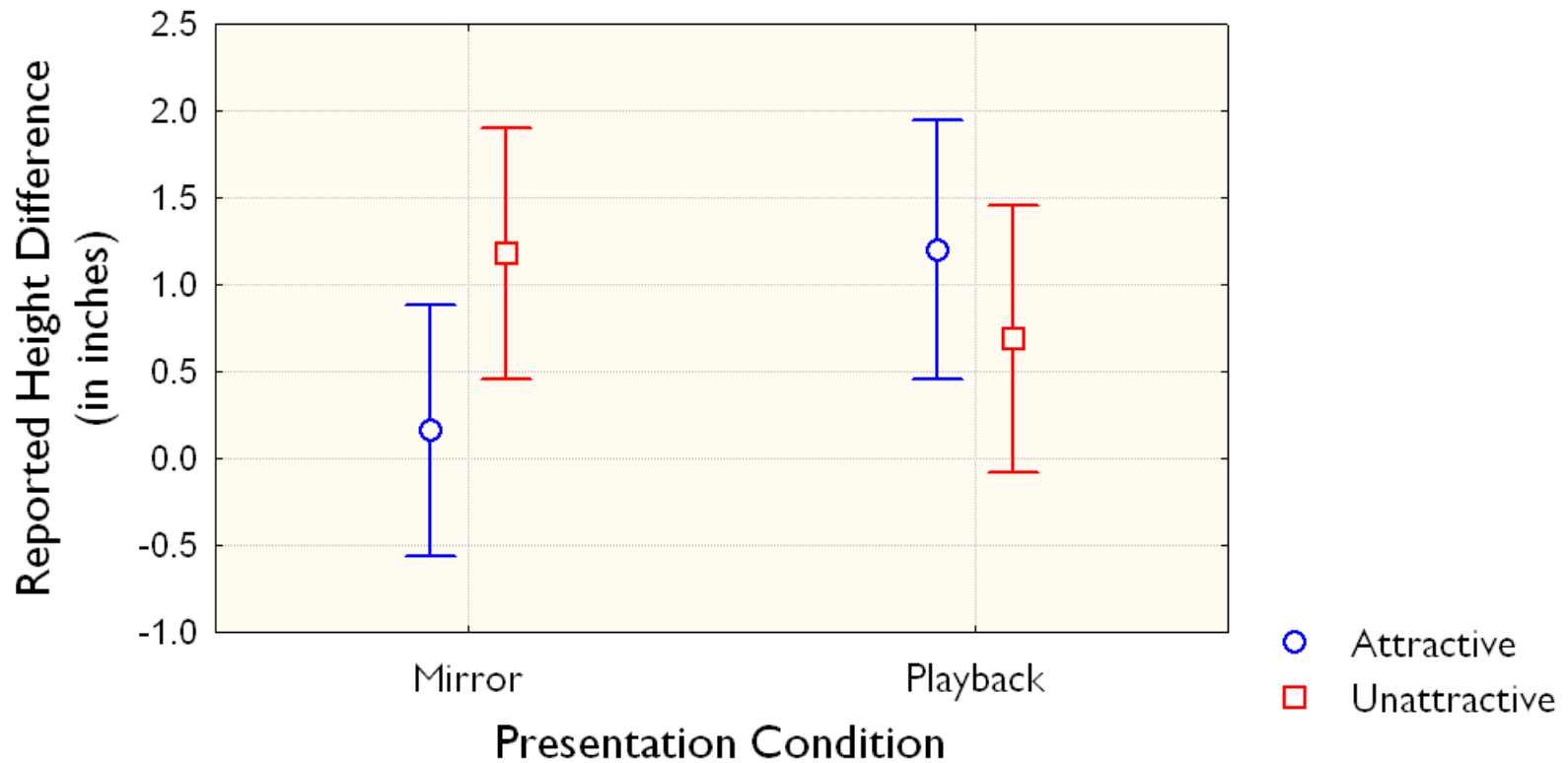


Study Five - Partner Choice



Study Five- Lying About Height

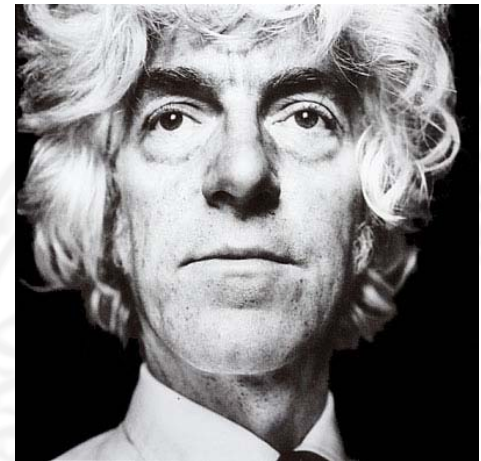
Reported Height Difference by
Attractiveness and Presentation Conditions



$$F[1, 68] = 4.26, p = .04, \eta^2 = .06$$

Study 6 - Age

When we imagine pains in the further future, we imagine them less vividly, or believe confusedly that they will somehow be less real, or less painful”



Parfit

Study 6 - Age



Morphed photo



Age Morphed photo



Study 6 - Age

Would you rather have \$10 right now or \$20 dollars a year from now?



Right now!!

vs.



In a year!!



Study 7 – The BIG ONE Second Life

- 90 Students
- 8 hour per week in Second Life (\$ & Friends)
- Four Avatar conditions
- We are monitoring:
 - Behavior online (economic and social success)
 - Behavior offline (exercise, eating, socializing)
 - Changes in attitudes over time (e.g., gender)



Study 7 – The BIG ONE Second Life



Study 7 – The BIG ONE Second Life



Study 7 – The BIG ONE Second Life

Results:

?

