DEVELOPMENT OF EXPLICIT AND IMPLICIT ATTITUDES THROUGH CHILDHOOD: THE CASE OF PREJUDICE TOWARD OVERWEIGHT PEERS

IRENE SOLBES[1], PURIFICACIÓN RODRÍGUEZ[1], CAROLINA CALLEJAS[2], & CRISTINA DOPICO[1]

1: UNIVERSIDAD COMPLUTENSE DE MADRID (UCM), SPAIN

2: UNIVERSIDAD AUTÓNOMA DE MADRID (UAM), SPAIN

EASP- SMALL GROUP MEETING

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INTRODUCTION: “Weight bias” research

- International Group on Obesity (2009): 155 million children suffer from overweight all over the world.
- Problem with economic and health related consequences + deviation from the beauty canon in Western societies.
- Childhood overweight and eating disorders in adolescence and adulthood are related in the long term → relation mediated by the social reaction of people (teasing, weight-related criticism, etc.).
- Empirical evidence accumulated over 40 years of research: overweight people suffer discrimination and prejudices in many areas of their lives (work, health system, education and interpersonal relations from very early in life) (Puhl & Brownell, 2001).

INTRODUCTION: Studies with children

- Research in this area: procedures and methods adapted from research on ethnic bias among children (in comparison, still scarce).
- Conclusions: overweight children run considerable risk of becoming victims of bias and stereotyping (Puhl & Latner, 2007).
- Weight bias begins early in childhood (Cramer & Steinwert, 1994): at the age of 3, children attributed negative traits to the figure of an overweight child, chose this figure as the one they did not want to look like, and rejected it as a possible playmate.
- Developmental pattern: results less conclusive than those from the field of racial prejudice (differences may due to the variability of procedures and measures used).
- Subjective report: overweight people inform suffering negative attitudes related with their body type during all their lives → implicit attitudes may maintain throughout life so studies are needed (several works with adult population: Brochu & Morrison, 2007; Teachman et al., 2003; any study with children).

OBJECTIVES

- General: to explore the presence of children´s explicit and implicit attitudes toward different body types (average-weight/overweight) and their links with participants´ personal body attitudes.

- Specific goals:

  - To examine the relations between these constructs through childhood.

  - To study the developmental pattern of these kind of attitudes.

  - To study gender differences in attitudes toward body type.

PARTICIPANTS

Grade	1st (6-7 y.o.)		3rd (8-9 y.o.)		5th (10-11 y.o.)	
Gender	**Boys**	**Girls**	**Boys**	**Girls**	**Boys**	**Girls**
N	20	20	20	20	20	20
Mean age	6;10 years	6;11 years	8;10 years	9 years	10;10 years	10;11 years
Total	**40**		**40**		**40**	

MEASURES

- We designed a computer program that simulated a game with several tasks and activities to collect the data:

1. Explicit Measures of Attitudes

Simple Preferences and Rejections Task

Sociometric Task

Adjective Attribution Task

2. Personal body Attitudes

3. Implicit Measure: IAT

EXPLICIT MEASURES OF ATTITUDES

- Introduction to the tasks:

"*I´m going to show you some photographs of boys and girls from another school. Imagine that these children are going to spend a few weeks at your school. I want you to look closely at their photographs and to answer some questions about them*".

EXPLICIT MEASURES OF ATTITUDES

- Purpose: to examine the attitudes elicited by a group of eight unknown school age children (boys and girls) who presented two body types (4 average-weight / 4 overweight).

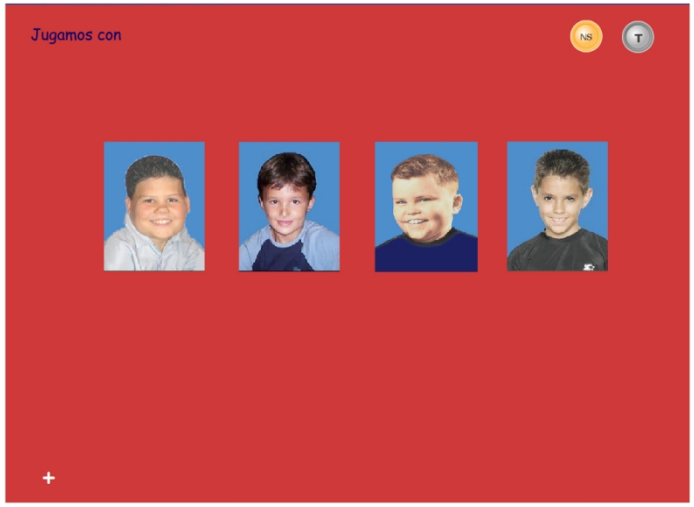
- The photographs were always presented randomly on the screen, for each participant and in each task, to avoid a possible spatial effect on the participant´s choices.

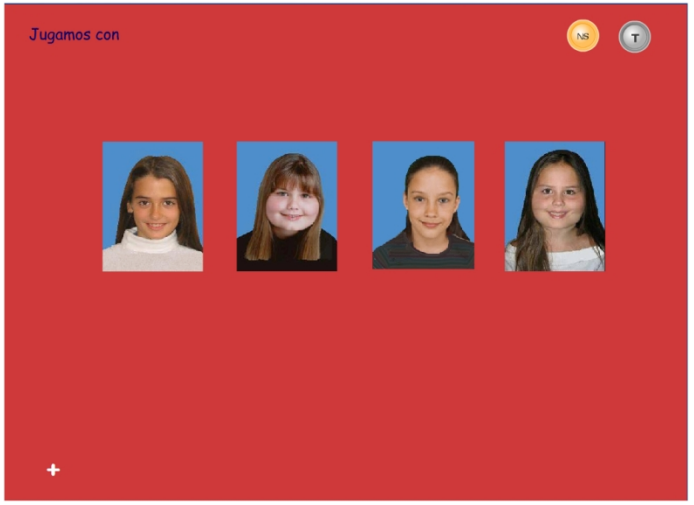
Simple Preferences and Rejections Task

- Participants were asked to state their affective preferences and rejections:

"*Look closely at the photos of these children and tell me: Which one of the four you see here do you like the most / the least?*"

2 trials for Preferences / 2 trials for Rejections



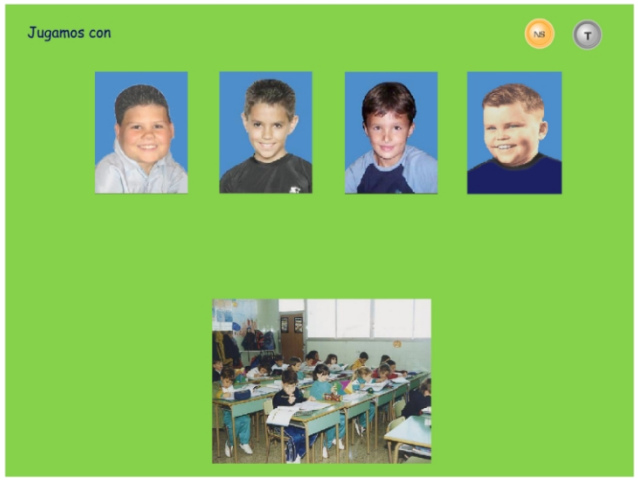


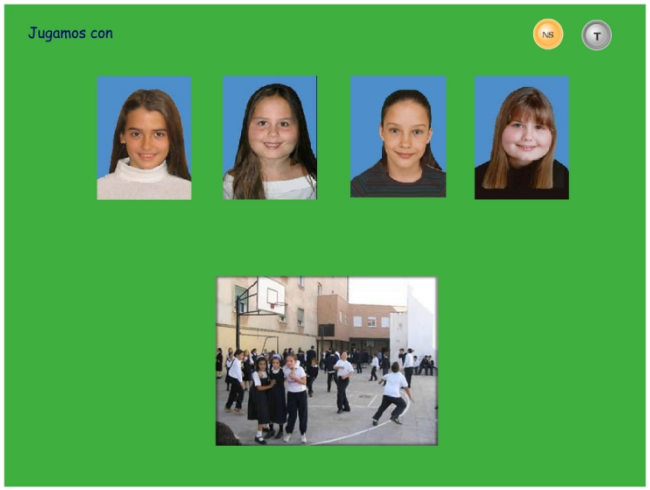
Sociometric Task

- Participants choose and reject possible partners to carry out various activities proposed in three significant contexts: working together in class, playing in the school-yard, and going to a birthday party in the child´s own home.

- Example: "*Which one would / wouldn´t you like to play with at the recess?*"

6 trials for Preferences / 6 trials for Rejections



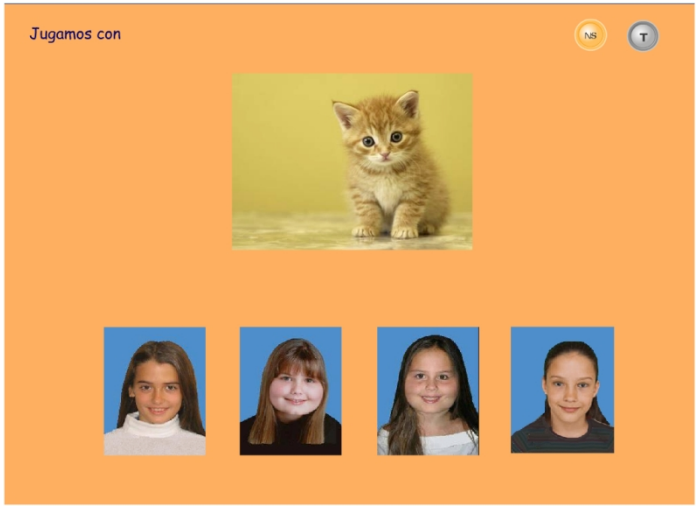


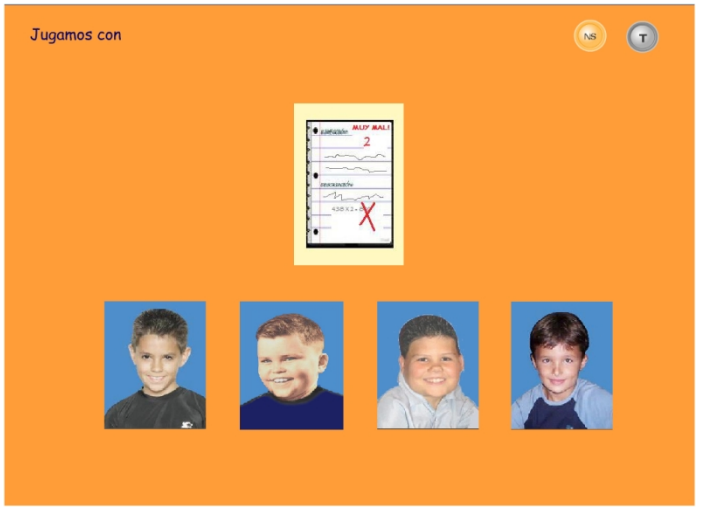
Adjective Attribution Task

- Six stories were presented to the children. In each story, there was a character that showed a positive (*nice*, *smart* or *clean*) or a negative attribute (*mean*, *stupid* or *dirty*).

- Participants had to choose the photo that could represent the character.

6 trials for Positive Adjectives / 6 trials for Negative Adjectives



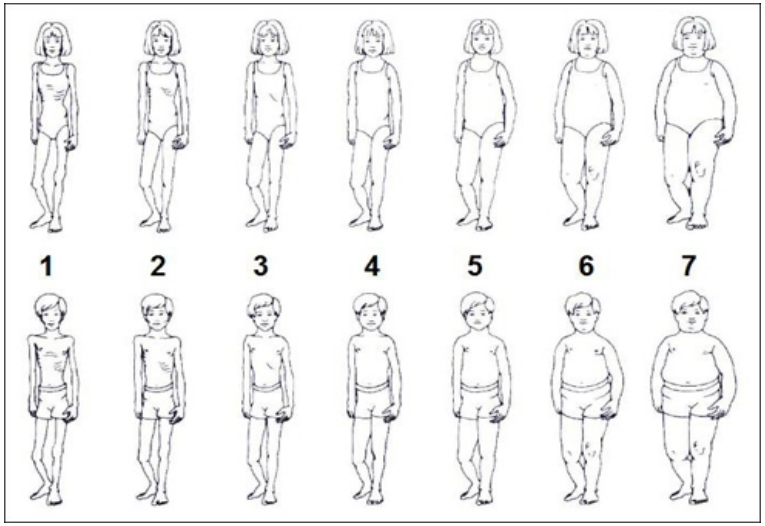


PERSONAL BODY ATTITUDES

- Objective: to determine children´s body size identification and their attitudes toward their own body type, participants were shown an array of seven drawings of figures ranging from severe underweight to sever overweight (adapted from Collins, 1994).

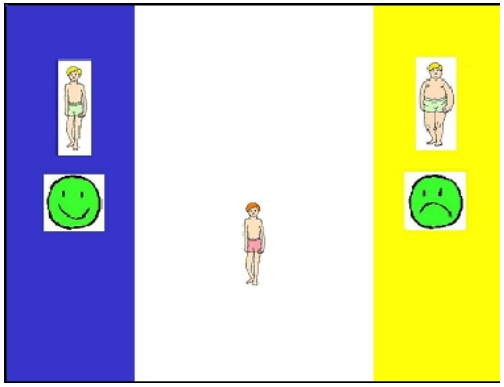
- Questions:

- Self-Identification: "*Which one do you look like*?"
- Ideal-Identification: "*Which would you most like to look like*?"
- Averted Identification: "*Which do you not want to look like*?"
- Body dissatisfaction score = discrepancy between self-identification and ideal identification.



IMPLICIT MEASURES OF ATTITUDES

- Implicit Association Test (IAT) (Greenwald, McGhee y Schwartz, 1998): child-oriented version adapted from Baron & Banaji (2006).



- IAT measures the association between:

  - a target concept (average-weight/ overweight children),

  - an attribute dimension (positive/negative attributes).

- Procedure: 5 blocks of trials, items must be classified using two computer keys.

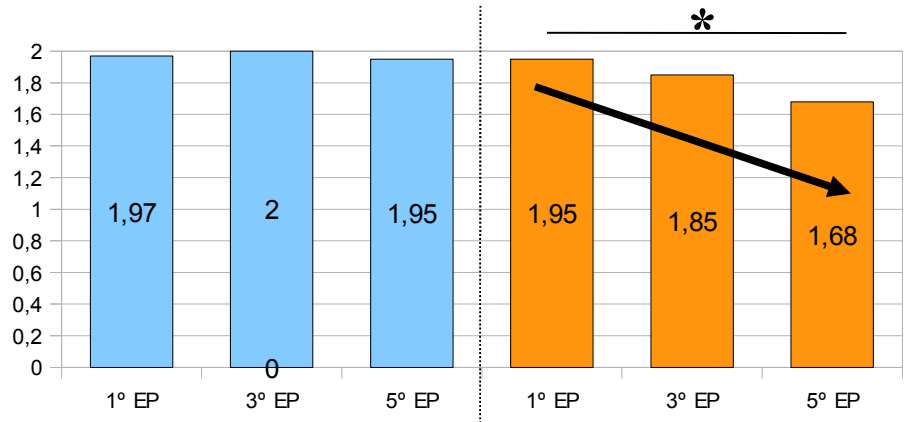
- Assumption: the greater association between categories, participants will respond faster and more accurately to the categorization "congruent" block of trials.

- Measures: errors and response latencies in milliseconds.

RESULTS – EXPLICIT MEASURES

	 AVERAGE WEIGHT	 OVERWEIGHT
Simple Preferences (*"Which one do you like the most?"*)	1,97	0,03
Simple Rejecions (*"Which one do you like the least?"*)	0,17	1,83
Sociometric Preferences (*"Which one would you like to play with?"*)	5,59	0,41
Sociometric Rejections (*"Which one wouldn´t you like to play with?"*)	0,83	5,17
Positive Adjectives (*"Which one do you think is the nice girl?"*)	2,22	0,78
Negative Adjectives (*"Which one do you think is the mean girl?"*)	1,08	1,92

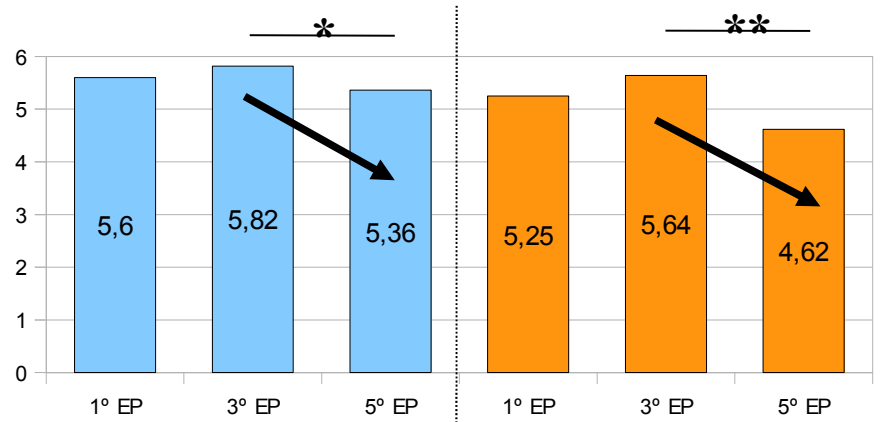
Simple Preferences and Rejections



Simple Preferences AVERAGE-WEIGHT

Simple Rejections OVERWEIGHT

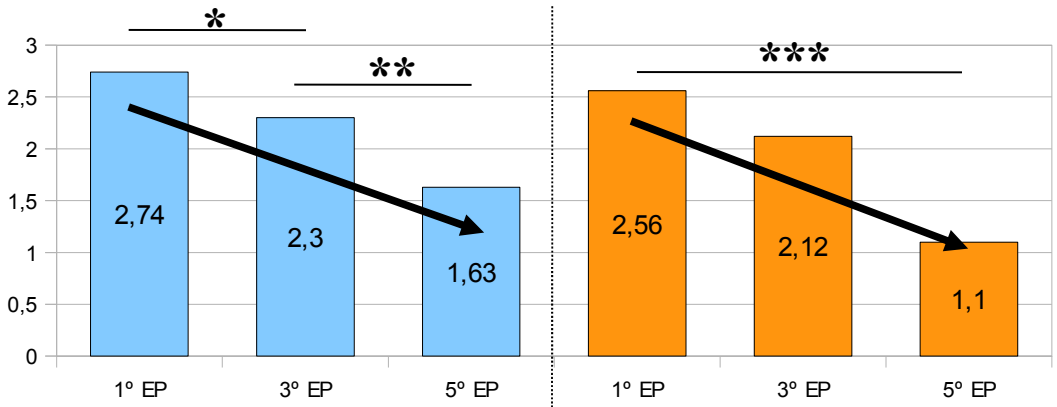
Sociometric Preferences and Rejections



Sociometric Preferences AVERAGE-WEIGHT

Sociometric Rejections OVERWEIGHT

Adjectives Attribution

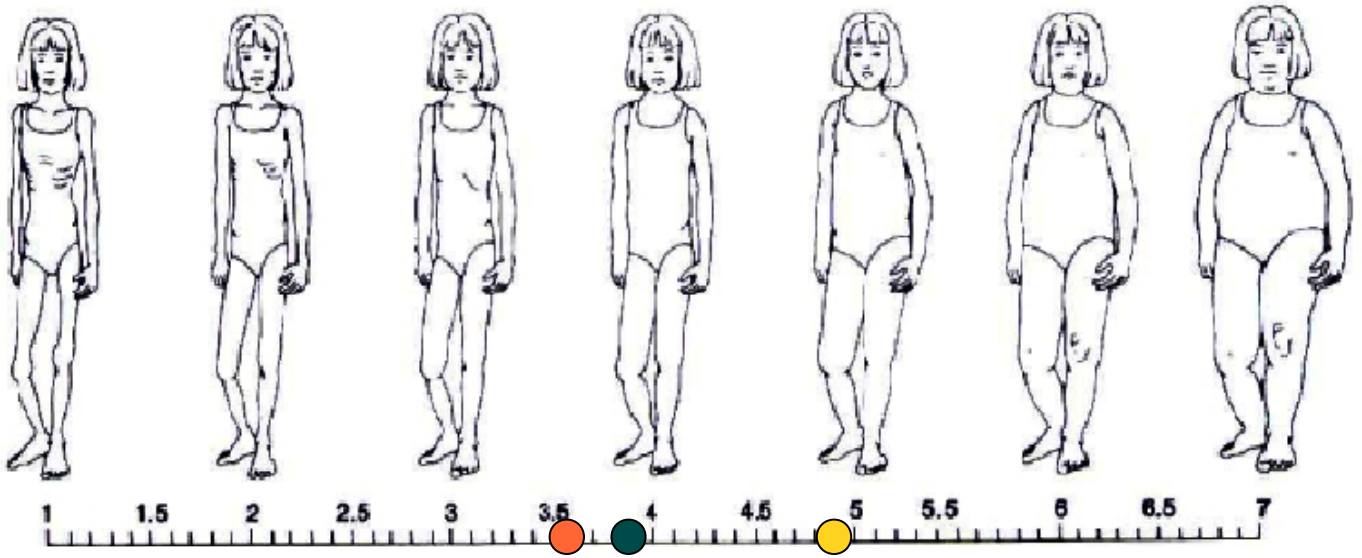


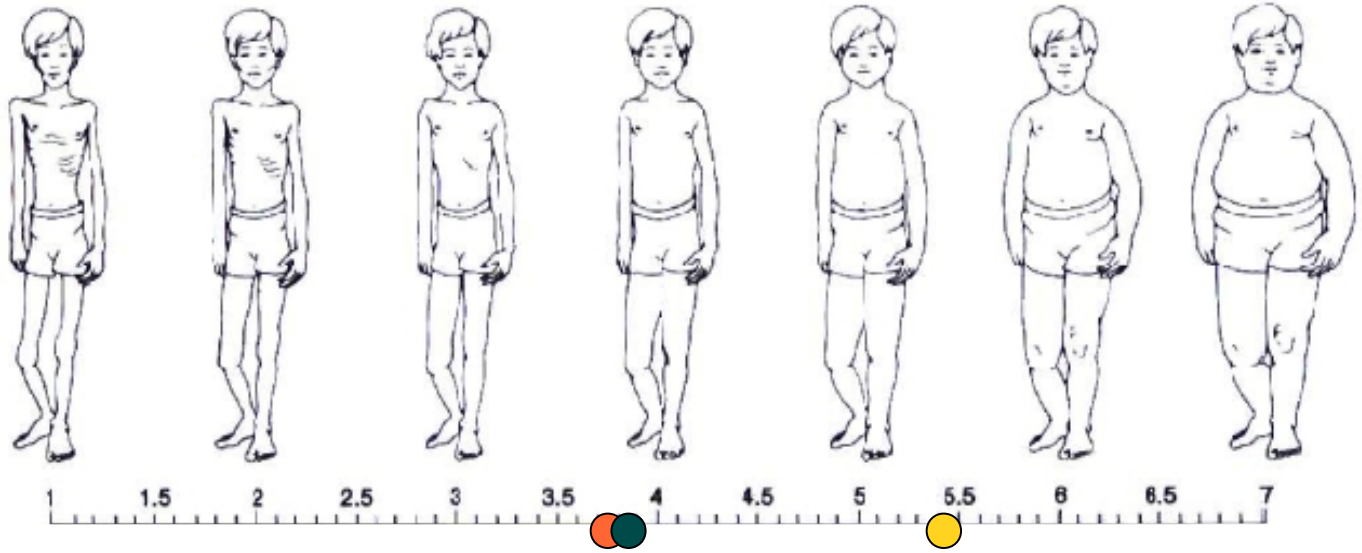
Positive Adjectives AVERAGE-WEIGHT

Negative Adjectives OVERWEIGHT

* $p < .05$; ** $p < .01$; *** $p < .001$

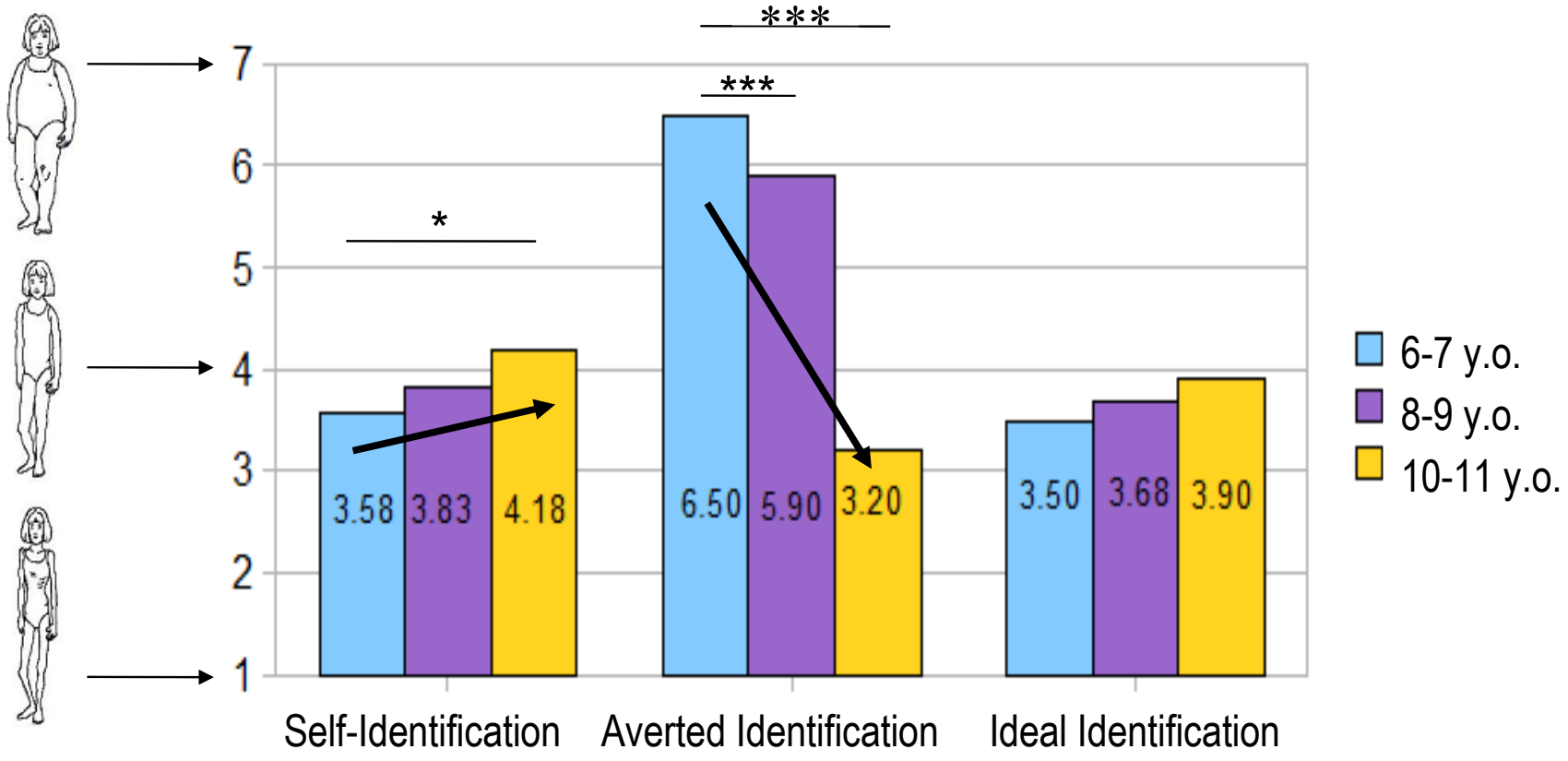
RESULTS – PERSONAL BODY ATTITUDES





- **Self-Identification** *(Which one do you look like?)*
- **Ideal Identification** *(Which would you most like to look like?)*
- **Averted Identification** *(Which do you not want to look like?)*

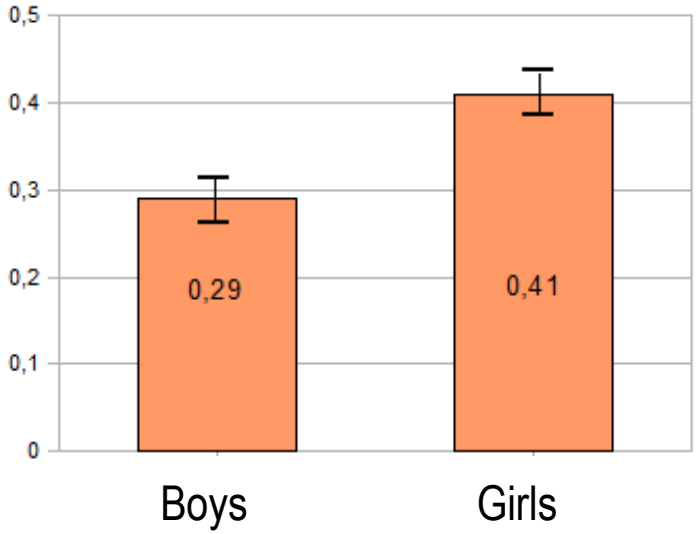
RESULTS – PERSONAL BODY ATTITUDES

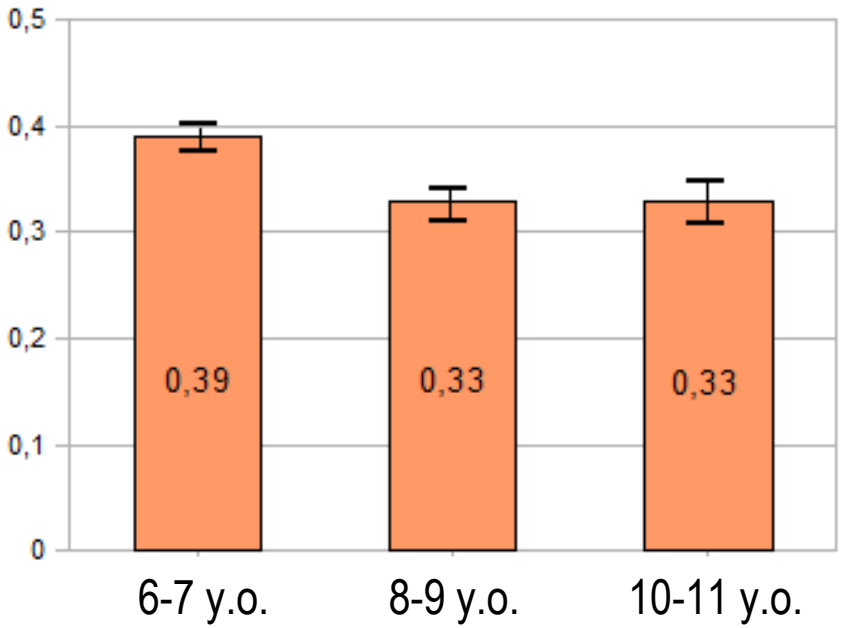


* $p < .05$; ** $p < .01$; *** $p < .001$

RESULTS – IAT

- The average IAT effect was significant (d = 0.35) → relative positive association between average-weight and positive attributes and overweight and negative attributes.
- Girls obtained higher scores than boys although these differences only reached a velue close to significance (p = .068).
- Age differences were non-significant.





RESULTS – RELATIONSHIP BETWEEN VARIABLES

	1	2	3	4	5	6	7	8	9	10	11
1. Simple preferences AF			0.41**	0.46***							
2. Simple rejections OF			0.53***	0.51***		0.27***		0.20*			
3. Sociometric preferences AF				0.55***		0.25**			–0.19*		
4. Sociometric rejections OF					0.23*	0.41***		0.29***			
5. Positive attributes AF						0.68***		0.34***			
6. Negative attributes OF							–0.21*	0.44***			
7. Self-identification								–0.33***	0.33***	0.62***	
8. Averted identification									–0.23**		
9. Ideal identification										–0.52***	
10. Body dissatisfaction											
11. IAT score											

AF = Average-weight figures, OF = overweight figures.
*p < 0.05; **p < 0.01; ***p < 0.001.

RESULTS – RELATIONSHIP BETWEEN VARIABLES

- High correlations among the different explicit measures of anti-fat bias.

- At a global level, implicit negative bias toward overweight children (IAT score) were not related to any of the other variables considered. However:

  - In the youngest group: IAT score correlated with positive adjectives attributed to average-weight children and negative adjectives attributed to overweight children (both: $r = 0{,}33$; $p < .05$).

  - In the older children: IAT score correlated negatively with self-identification ($r = -0{,}50$, $p < .01$) and body dissatisfaction ($r = -0{,}34$, $p < .05$).

- Children who identified themselves with bigger body sizes showed lower levels of negative stereotypes toward overweight children (= ingroup favoritism?).

- Children who chose thinner silhouettes like “ideal bodies” showed higher preferences toward average weight children.

CONCLUSIONS

- Our participants hold considerable negative attitudes toward overweight peers, both at the explicit and the implicit level.

→ Children who grow up in the Western societies idealize thinness from an early age and denigrate overweight: overweight children were chosen by a majority as the least liked, rejected as partners for playing, working or attending to a party, and they receive adjectives like mean, stupid or dirty.

- As children grow older, participants seem to reduce the open expression of their prejudices -> possible relations with their increasing assimilation of positive social values and, maybe, their capacity to differentiate what may be the consequence of overweight from what is not (e.g.: physical difficulties / intelligence, goodness or hygiene).

CONCLUSIONS

- IAT scores show that subtle and automatic associations may last for years.
- Asymmetric developmental pattern of both types of attitudes: decrease in prejudice in explicit measures versus the stability of such prejudice in implicit measures → similar results on studies about ethnic prejudice (Baron & Banaji, 2006; Dunhan, Baron & Banaji, 2008).
- Overweight rates have greatly increased in last years, as well as negative perceptions about this people (Latner & Stunkard, 2003) → urgent necessity of expanding studies about on this field in order to design effective and adapted interventions.

Thank you

irenesolbes@psi.ucm.es