

26
December 2022

Special Issue on

Emerging Trends in the Field of Empirical Research in Education
Tendenze emergenti nel campo della ricerca empirica in educazione

Part I

Gaetano Domenici

Editoriale / *Editorial*

Insidie e illusioni della «meritocrazia perfetta»

11

(Pitfalls and Illusions of a «Perfect Meritocracy»)

STUDI E CONTRIBUTI DI RICERCA

STUDIES AND RESEARCH CONTRIBUTIONS

Mujib Ubaidillah - Putut Marwoto - Wiyanto - Ani Rusilowati

Bambang Subali - Budi Naini Mindyarto - Wiwi Isnaeni

Development of Habits of Mind Instruments in the Context
of Basic Physics Practicum: EFA and Rasch Model

23

*(Sviluppo di strumenti per le abitudini mentali nel contesto della fisica
di base practicum: modello EFA e Rasch)*

- Daniela Fadda - Carole Salis - Giuliano Vivanet*
About the Efficacy of Virtual and Remote Laboratories
in STEM Education in Secondary School: A Second-Order
Systematic Review 51
*(Sull'efficacia dei laboratori virtuali e remoti nell'educazione STEM
per la scuola secondaria: una rassegna sistematica di secondo ordine)*
- Antara Dey - Nil Ratan Roy*
Construction and Validation of Emotional Intelligence Scale
for Secondary School Teachers 73
*(Costruzione e validazione della scala dell'intelligenza emotiva
per gli insegnanti delle scuole secondarie)*
- Cinzia Angelini - Massimo Margottini - Teresa Savoia*
Il percorso di formazione iniziale dell'insegnante di sostegno:
un'indagine esplorativa sui candidati al corso di specializzazione
presso l'Università Roma Tre 97
*(The Initial Training of Special Needs Teachers: An Exploratory Study
on the Candidates at Roma Tre University)*
- Valeria Biasi - Giusi Castellana - Conny De Vincenzo*
Valutazione dei livelli individuali di resilienza negli studenti
della scuola secondaria di primo grado: adattamento
e validazione del Questionario di Valutazione dell'Atteggiamento
Resiliente (QVAR) 119
*(Assessment of Individual Resilience Levels in Lower Secondary School
Students: Adaptation and Validation of the Resilient Attitude Assessment
Questionnaire – QVAR)*
- Antonio Calvani*
La ricerca didattica può diventare rilevante per la pratica?
Se sì, in che modo? 143
(Can Educational Research Become Relevant to Practice? If So, How?)
- Cristiano Corsini - Carla Gueli*
Dal voto alla valutazione per l'apprendimento 163
(From Grading to Assessment for Learning)

- Giovanni Perillo - Stefano Mastandrea*
Explicit and Implicit Biases in Students' Skin Colours 179
Aesthetic Preferences
(Pregiudizi espliciti e impliciti nelle preferenze estetiche di studenti per il colore della pelle)

NOTE DI RICERCA

RESEARCH NOTES

- Francesco Agrusti - Gianmarco Bonavolontà*
Educational Robotics for Special Needs Students: Teachers' 199
Perspectives on Pre-service Training
(Robotica educativa per studenti con bisogni speciali: il punto di vista degli insegnanti sulla formazione pre-servizio)

- Giusi Castellana - Snezana Mitrovic*
Validation of «Tell Me How You Read» Reading Strategies 219
Questionnaire for Upper-Secondary School Students
(Validazione del questionario sulle strategie di lettura «Dimmi come leggi» per gli studenti delle scuole secondarie superiori)

- Gaetano Domenici - Valeria Biasi - Federica Wolf
Conny De Vincenzo*
Valutare il cambiamento di competenze e atteggiamento 233
professionale a seguito del corso di formazione iniziale
per insegnanti di sostegno
(Assess the Change in Skills and Professional Attitude Following the Initial Training Course for Support Teachers)

- Roberta De Pero - Luca Mallia - Martina Capitani
Patrizia Scibinetti*
Motor Creativity and Self-Efficacy in Young Gymnasts: 249
Expertise Differences
(Creatività motoria e self-efficacy in giovani ginnaste: confronto tra differenti livelli di esperienza)

COMMENTI, RIFLESSIONI, PRESENTAZIONI,
RESOCONTI, DIBATTITI, INTERVISTE

COMMENTS, REFLECTIONS, PRESENTATIONS,
REPORTS, DEBATES, INTERVIEWS

Giuseppe Spadafora

La ricerca empirico-sperimentale educativa e la professionalità del docente per migliorare la scuola inclusiva 269

(The Experimental Empirical Educational Research and the Teacher's Professionalism to Improve the Inclusive School)

Journal of Educational, Cultural and Psychological Studies 279
Notiziario / News

Author Guidelines 281

Explicit and Implicit Biases in Students' Skin Colours Aesthetic Preferences

Giovanni Perillo¹ - Stefano Mastandrea²

¹ *Università degli Studi di Bari Aldo Moro - Department of Humanistic Research and Innovation (Italy)*

² *Università degli Studi Roma Tre - Department of Education (Italy)*

DOI: <https://dx.doi.org/10.7358/ecps-2022-026-pema>

giovanni.perillo@uniba.it

stefano.mastandrea@uniroma3.it

PREGIUDIZI ESPLICITI E IMPLICITI NELLE PREFERENZE ESTETICHE DI STUDENTI PER IL COLORE DELLA PELLE

ABSTRACT

Several tools have been employed to detect the emergence and development of racial stereotypes and prejudices among little children and adolescents. In our study, we confront some of these tools, and present the results of the Skin Colours Test. In its specificity, the Skin Colours Test proposes a change in the object of investigation (appreciation of the homogeneity or heterogeneity of colours) and aims to detect explicit and implicit stereotypes and prejudices of boys and girls regarding aesthetic choices (even neutral choices) concerning skin colours. Sample: one group of 129 (64 F) students ($M = 12.31$), almost all of Italian descent, and another group of 129 (62 F) students ($M = 12.36$), less than 30% of different descents. Method: three pictures, each made up of 16 skin colours, were shown and students were asked to vote on their aesthetic preference between homogeneity or heterogeneity of skin colours and to give reasons for these choices. Main results: the motivations for some choices that preferred skin colour heterogeneity (neutral choice) over homogeneity, brought out stereotypes and biases. In addition, we consider the contextual specificities that the Skin Colours Test detects as crucial in order to detect specific educational needs and structure targeted educational interventions.

Keywords: Aesthetic preferences; Bias; Colourism; Racism; Skin Colours Test.

1. INTRODUCTION

In their scientific literature analysis about ethnic prejudices, Clark *et al.*, (2017) mentioned studies that had shown tendencies of light-skinned boys and girls, from kindergarten to elementary school, to positively rate subjects or groups with their skin colour and to evaluate those who had dark skin tones negatively (Williams & Morland, 1976; Aboud, 1988; Katz & Kofkin, 1997; Bernstein *et al.*, 2000; Baron & Banaji, 2004; McGlothlin & Killen, 2006; Gibson *et al.*, 2015), especially when the former had no direct contact with the latter (Radke & Sutherland, 1949; George & Hoppe, 1979; Jarrett, 1981). However, several studies have shown that older girls and boys develop positive attitudes towards each other (Katz & Zalk, 1978; Cameron *et al.*, 2007; Verkuyten & De Wolf, 2007), having a greater capacity for «reconciliation», that is, the ability to recognize preferences other than one's own as equally valid and just, compared to younger girls and boys (Johnson & Aboud, 2017). But, older girls and boys are more exposed to the absorption of prevailing social attitudes (Ramsey, 1991), socio-political context influence their behaviour (Blumer, 1958; Bobo & Hutchings, 2003; Baron & Banaji, 2009).

According to Clark *et al.* (2017), the PRAM II (Preschool Racial Attitude Measure II) developed by Williams and Morland (1975), and the Katz-Zalk Projective Prejudice Test (KZPP) developed by Katz and Zalk (1976) have been two of the most commonly used tools for evaluating explicit ethnic attitudes over time. Using both methods, the administrator reads short stories characterized by positive or negative actions and adjectives. Human figures with light and dark skin (photographs, drawings) must be displayed periodically in the experimental sample.

One of the limitations in PRAM II and KZPP, as claimed by Clark *et al.* (2017), concerned the forced binary choice offered to the experimental sample. Neither of the two procedures allowed the sample to assign a particular attribute (adjective, connotation) to either stimulus-pictures or colours (and related ethnic groups to which the colours refer). According to the PRAM II procedure, one could only select the «neutral» category in one's response.

About (2003) and Doyle & Aboud (1995), in their *Multi-response Racial Attitude Measure* (MRA), also introduced the «both» option. However, Clark and Tate (2008) argued that, in cases of negative attribute assignments, voters could only be led towards the outgroup when there were no options that included the ingroup. In other words, the option would both attribute the negative attribute to the ingroup and want to exclude it from the attribution of negative attributes. There would be no choice but to place them in

the outgroup. Therefore, Clark and Tate (2008) stated that «neither» would have prevented forced assignment of negative attributes to the outgroup.

Other limitation concerned the reduction of skin colours, concerning ethnic groups considered in PRAM II's stimuli. In the field of ethnic attitudes among boys and girls, Clark *et al.* (2017) found few comparisons other than «White-Black» (Griffiths & Nesdale, 2006; Killen *et al.*, 2007; Gibson *et al.*, 2015), in the research field on the ethnic attitudes of boys and girls. The binary comparisons failed to grasp the complexity and nuance of attitudes, particularly in «multiethnic» settings (Bobo & Hutchings, 2003). As well as the PRAM II procedure, Clark *et al.*'s *Racial Attitudes Index* (RAI) (2017) also allows users to choose «White» or «Black» to evaluate the «pro-White/anti-Black» and «pro-Black/anti-White» positions. As Clark and colleagues hypothesize, what constitutes a novelty is the possibility of replacing PRAM II's «neutral» option with RAI's «both», «neither», and «I don't know» options. It was hypothesized that if more choices had been available, such as those offered by RAI, the choice classifications classified by PRAM II as «pro-White» and «pro-Black» may have exhibited a different outcome. As a result of Clark and colleagues' study, it was found that more boys and girls with light skin colour who were «pro-White» in PRAM II chose the «neither» response, compared to those with dark skin colouration who were also «pro-White» in PRAM II. In general, dark-skinned boys and girls preferred the «neither» category. People with dark skin tints were most likely to choose «pro-White/anti-Black» response options. The diversity of data that emerged from RAI compared to PRAM II allowed Clark *et al.* (2017) to demonstrate that ethnic prejudices can be classified differently depending on the methods used to detect and measure them. If a binary choice is forced, it could lead to choices that are permeated with ethnic prejudice. «I don't know» is also an important option. The choice of this option, according to the researchers, not only allows a subject to say that he has not enough information to assign a preference, but it also gives the possibility of reading the choice of the other options as based on sufficient information to be able to assign a clear preference. According to Clark *et al.* (2017), RAI has revealed the limits of binary forced-choice evaluation and the major nuances of ethnic prejudice.

One purpose of our study is to detect prejudices in aesthetic preference between skin colours. The tool we present in this study, the *Skin Colours Test (sct)*, uses items with homogeneous light, dark homogeneous, and heterogeneous skin colours (which also has light and dark colours). In this way, the target groups, whose colours refer, are multiple while also retaining the possibility of a comparison between light and dark. The *sct* does not offer written-conceptual references of the various choice opportunities to

the sample subjects, as the choices are expressed directly by indicating one of the proposed designs. Therefore, choices such as «neutral» (PRAM II) or «both» and «neither» (RAI), in the case of the *sct*, consist of the preference for heterogeneity of colours, as the item with heterogeneous colours consists as much of light and dark colours, as of other skin colours. Furthermore, the presence of an item with heterogeneous colours can elicit identification projections also for different sensors, as well as for different targets. On the other hand, in the perspectives on the use of RAI, Clark and colleagues (2017) suggested precisely the possibility of including more perceivers and more targets (e.g., Asians, Latinos, «Blacks» and «Whites») for an analysis of more nuances on the ethnic identity of those who perceive (Clark & Tate, 2008). This could also allow for a greater understanding of any distancing or hostility towards the outgroup. In particular, if hostility emerges towards a particular colour-outgroup or, instead, is generalized towards all colours-outgroups. A response architecture of this kind could contemplate theoretical constructs other than those that the instruments calibrated on single sensors and single targets have generated (*ibid.*). All the more so as few measurement approaches have targeted such multi-group attitudinal comparisons (*ibid.*).

1.1. *Skin Colours Test*

An important point that defines the specificity of the *sct* lies in the stimuli used and in the procedure. For the *sct* stimuli, no photographs of faces or textures were included that would have provided clues to the observer about the nature of the colours. The sample subjects assign their aesthetic preferences to one of the three items (with homogeneous light, homogeneous dark, and heterogeneous skin colours). But it is only after assigning their aesthetic preferences to the colours that the subjects of the sample are informed that the chosen colours are drawn from human skin. At this point, the subjects assign their preference again, modifying or confirming the previous choice based on the new information received.

In the *sct* procedure, we did not compare a single subject (their photographic portrait) with another. Because our interest is not aimed at detecting «White» or «Black», pro or anti, as in PRAM II and RAI. Rather, in an increasingly multi-coloured and inter-coloured society, our interest is to detect the preference towards the homogeneity of a particular colour (one's own or others) or towards the heterogeneity of colours.

The preference for homogeneity could be an exclusive and excluding choice, which reproduces and strengthens hierarchical relationships of

power that permeate these preferences, as this choice can only be made by a particular group with the same skin colour (exclusive), and excludes groups that do not have that colour (excluding). However, we believe that not all preferences for homogeneity are made to exclude or reject the other «skin» colours. Many choices could be based only on aiding and abetting your colour (exclusivity). Furthermore, the change from an item with homogeneous colourings, if such colourings coincide with their skin colour, could be felt by a subject as a sort of defection from their group or colour, although aware that the item with heterogeneous colours also has light or dark colours inside. For this reason, we also considered it important to ask the subjects of the experimental sample to write down the reasons for their choices immediately after assigning their preferences.

We thought that the analysis of the motivation texts could bring out more information about the positioning of the voting subject and could tell us more about the nature of each subject's preferences. Furthermore, the analysis of the motivations could bring out positions that reproduce power relations even in presumed neutral choices, even when reproduced unconsciously.

This point is important. What the «neutral» options in the case of PRAM II, or «both» and «neither» in the case of RAI, offer, are the explicit alternatives to any discriminatory manifestations in the associations of attributes, connotations provided by the administrators to given pictures (photos and drawings of «white» and «black» subjects). Instead, we hypothesized that in the *sct*, the explicit preference for the «neutral» choice could be accompanied by a motivation of the same, which is permeated by stereotypes and implicit prejudices. In the case of the *sct*, the «neutral» choice consists of the preference for the heterogeneity of colours, as the item with heterogeneous colours consists of both light and dark colours and other skin colours. By stereotype or implicit prejudice in the motivations, we refer to that part of the text that does not immediately employ discriminatory terms, concepts, and discursive strategies, but which are interpreted as such, as they can indirectly refer to terms, concepts, and explicitly discriminatory discursive strategies (Lanciano *et al.*, 2013; Grenwald & Banaji, 2017).

Based on the analysis of the reasons for choice in the *sct*, one can gain insight into the relationship of dependence between social discourse and the context in which they are conceived (Mininni, 2013, p. 127), thus allowing individual differences to emerge in the prejudice, as major nuances that permeate the dynamic relationships between the participants with the influences of particular socio-cultural contexts.

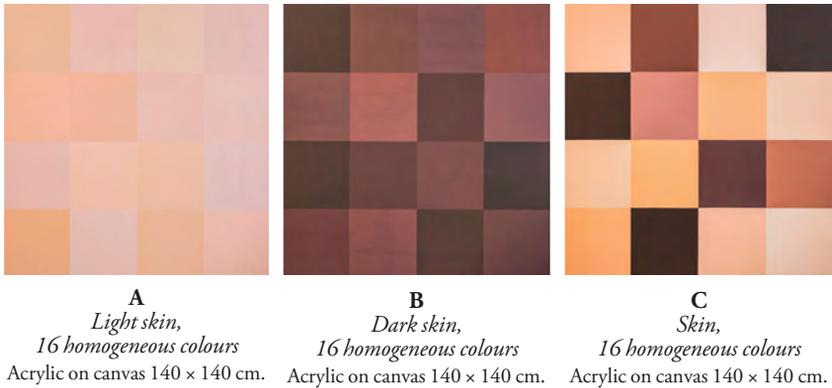
2. METHOD

2.1. *Participants*

One hundred and twenty-nine (64 F) students between 11 and 13 years old ($M = 12.31$) of the Comprehensive «Davanzati-Mastromatteo» Institute in Palo del Colle (Bari, Italy), of which one is an Italian-Canadian girl, one is a Tunisian girl, one is a girl from India and an Italian-Venezuelan boy. One hundred and twenty-nine (62 F) students aged 11 to 13 ($M = 12.36$) from the «Garibaldi» Comprehensive Institute of Cinisello Balsamo (Milan, Italy), of which: (23 F) a Philippian, 4 Romanians, a Salvadorian, 4 Egyptians, an Ecuadorian, 3 Senegalese, a Moldavian, 2 Moroccans, an Algerian, a Polish, a Chinese, an Italian-American, an Italian-Brasilian, an Italian-Peruvian, (14 F) a Moldavian, a Srilankan, 4 Egyptians, a Ukrainian, a Nigerian, an Albanese, 2 Romaninan, 2 Chinese and an Italian-Tunisian. The groups were recruited by presenting the research project in 2019, including purpose, duration, and procedures, to the School Principals of their respective schools. The School Principals informed the parents of the students about the research project in which their children would participate. Teachers from the respective schools administered the test without the authors' participation. The teachers, Italian women, received a short training from the author. During an upcoming *scet* administration, we will investigate the influence of gender and ethnicity on teachers (see Costa, Langher, & Pirchio, 2021).

2.2. *Materials*

Skin Colours Test created three paintings on canvas, each made up of 16 squares of the same size, each coloured with acrylic colours: one painting with light skin colours that are relatively homogenous, one painting with dark skin colours that are relatively homogeneous, and one painting with skin colours that are heterogeneous (Perillo, 2020). Due to the difficulty of moving the canvases, we printed the three paintings on plain matte paper, measuring each 30 × 30 cm for these first administrations. A rigid support (cardboard) was used to hold the prints (*Fig. 1*).



*Figure 1. – Item A = light colourations, Item B = dark colourations,
Item C = heterogeneous colourations.*

2.3. Procedure

The three prints were shown together by one teacher from each class. On a handout, students were asked to rate the aesthetically preferred picture (between A, B and C). The handout asked them to write a reason for their preference at the end of the assignment. During the second phase (Phase II), after this first phase (Phase I), the teachers explained to the students that «the colours in the three pictures are taken from the colours of different people's skin». A questionnaire on the handout asked students: «You have been given information about the colouring you have expressed a preference for. Do you confirm or change your previous choice?». As soon as a confirmation or assignment of a new preference has been given, students were asked to provide a reason for their choice on the handout. The tests were anonymous.

2.4. Hypothesis 1

Phase I does not anticipate a greater preference for light colours. As a result of Phase II's announcement that the colours are derived from human skin, we assume that the preferences expressed in Phase I will undergo indicative changes.

2.5. Results and discussion (Hypothesis 1)

During Phase I, students assigned their aesthetic preferences to one of the three items. Only in Phase II will it be announced that the colours used in Phase I are taken from human skin. As indicated in *Table 1*, the heterogeneity of colours of item C was aesthetically preferred over the homogeneity of items A and B in Phase I.

Table 1. – Aesthetic preferences Phase I and Phase II.

	PHASE I	PHASE II
A	16.66%	15.50%
B	22.48%	15.12%
C	60.85%	69.38%

Furthermore, a greater preference for light colours does not emerge, not even when the colours of Phase I become «skin» in Phase II. At the chi-square test, the differences between Phase I and Phase II are statistically significant for the entire sample: $\chi^2(2) = 6.419$, $p < .05$. Differences between Phase I and Phase II are unaffected by the composition of the two groups. Thus, the log-linear test shows that the city does not generally affect Phase I and Phase II differences ($G^2 = 6.012$, $gl = 6$, $p > .05$).

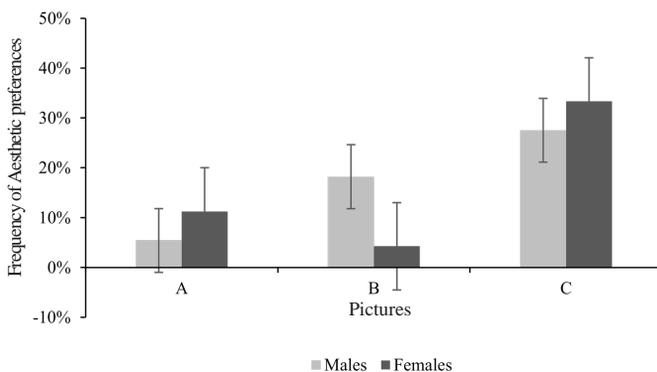


Figure 2. – Males and females' aesthetic preferences (Phase I), for A (light homogeneous colours), B (dark homogeneous colours), and C (heterogeneous colours); (error bars indicate standard errors of the means).

In *Figure 2*, it becomes apparent that males and females have different aesthetic preferences. The item with light colours (A) is more popular with women, while the item with dark colours (B) is more popular with men.

According to the chi-square test, the differences between males and females are statistically significant: $\chi^2(2) = 28.887$, $p < .001$. However, it is difficult to determine whether this gender preference between light and dark colours is generalizable, or whether the pink, a stereotypically feminine colouring, may have influenced respondents.

2.6. Hypothesis 2

Palo students will be more likely than Cinisello students to modify their preference for items B and C expressed in Phase I to favour the item with light colours (A) in Phase II.

2.7. Results and discussion (Hypothesis 2)

Students' choice of «confirm» or «modify» (Phase II) allowed us to record modifications when colours became «skin». Column A, in *Table 2*, shows the percentages of the modifications from items B and C to item A of the Palo group.

Table 2. – Contingency tables with frequencies of confirmations and modifications in Phase II, in the Palo group.

		PALO		
		Phase II		
Phase I	Item	A	B	C
	A	6%	0.8%	3.9%
	B	3.9%	16.3%	7%
	C	6.3%	0%	55%

Table 3. – Contingency tables with frequencies of confirmations and modifications in Phase II, in the Cinisello group.

		CINISELLO		
		Phase II		
Phase I	Item	A	B	C
	A	10%	0%	11.6%
	B	1.5%	12.4%	3.9%
	C	3.1%	0.8%	56.6%

Column A, in *Table 3*, shows the percentages of the modifications from items B and C to item A of the Cinisello group. According to *Tables 2* and *3*, there are fewer modifications towards item A in the Cinisello group than in the Palo group.

A statistically significant difference emerges in the comparison between Palo and Cinisello: difference of 36.4% in favour of Palo, with 95% confidence interval: 3.08%---69.8% (percentages are obtained by dividing the frequency of changing choices in favour of picture 1 by the total of changes that occurred; computation of the confidence interval is performed according to Fleiss, Levin, & Paik, 2003).

Studies have shown that people and groups can develop negative attitudes toward peers and others from other «ethnic groups» with whom they do not have direct contact (Radke & Sutherland, 1949; George & Hoppe, 1979; Jarrett, 1981). On the other hand, «contact» (Allport, 1954) may improve intergroup relations when similarity, beliefs, attitudes (Cook, 1969) and role identification (Aboud *et al.*, 1973) can be verified. Additionally, individual intercultural knowledge and openness promote a positive attitude from the individual level (Nesdale & Todd, 2000) to the group level (Hewstone & Brown, 1986). We conclude from our study that the low presence of Italians of different descendants in the Palo group probably contributed to the greater shift in aesthetic preferences towards items with light skin colours compared with the Cinisello group.

2.8. *Hypothesis 3. Stereotypes and implicit prejudices*

The item with heterogeneous colours is considered a neutral choice for the *Skin Colours Test*. However, we hypothesize that some students' motivations for justifying this neutral choice may reveal stereotypes and implicit prejudices. The analysis of texts follows the socio-cognitive orientation of Critical Discourse Studies (Van Dijk, 1999; 2009).

2.9. *Results and discussion (Hypothesis 3)*

The formal aspect of item C, the distribution of equal but distinct and adjacent spaces to the different colours, and the homologation inherent in the meaningfulness of the repeating squares have probably led to readings and assignments of values related to a «symbolic and social organization». A symbolic-value projection associated with the heterogeneity of the colours is evident in the motivations of some Palo students who chose item C.

For example: F 12 «because the union of all races of men gives me a sign of peace»; M 12 «because it means union and solidarity»; M 12 «because it represents the brotherhood between people».

Some other students of the Palo and Cinisello groups motivated their confirmations or changes, associating the heterogeneous colours (item C) with a vision of encounter, integration, equality between people with different skin colours.

For example: F 13 «because it indicates equality and integration»; M 12 «because this picture represents tolerance»; F 13 modifies and chooses C «because everyone is equal and there are no differences between people»; F 12 changes and chooses C because «I liked the idea of integrating people»; M 11 confirms C «because I don't want to have racist friends, dark or white we are the same»; F 12 confirms C «because there are no preferences based on skin colour».

Although these motivations express inclusive social perspectives, there emerges a wider use of impersonal references «everyone is», «they are not made», or personal references such as «I liked», «I don't want», and lesser use of inclusive pronouns (such as «us» and «our»; Richardson, 2007).

Another student of Palo confirms their preference for the heterogeneous colours picture (item C). Still, we believe an implicit prejudice emerges in this case: F 13 confirms «because it is important to be all united despite being of different colours».

Let us analyse the text: «[...] despite» has an adverse value. «[...] being (they are)» reconstructs the binary separation us-them. «[...] of different colour», different from whom? «[...] despite being of a different colour» is a trope that says of a handicap, a lack, in the group to which the student is addressing. But it is a dangerous lack, because it turns diversity into a state of inferiority. The models of interaction of the different cultures show an identity positioning and the link with the power relations in the process of recognition between the enunciators. In this sense, the student claims the importance of a union: «it is important to be all united», except recognizing that someone does not have the colour of her ingroup.

Balbo and Manconi (1992) argue that a rational organization of the social motivations of intolerance often promotes the «formation of opinions», the consequences of which are visible above all in the underestimation of specific categorical organizations compared to the overestimation of the dominant group. Some implicit biases may be indicative of the overestimation of the dominant group.

For example: F 13 chooses item B «for the tone of the colours, and because I like dark colours very much, and it gives me again». In Phase II, she changed her preference in favour of item A. She explains her moti-

vation for changing: «because it is clear and I like the shades used, also because it makes me clean».

Knowing that the colours chosen were drawn from human skin leads one to think that «new» (in the first choice) and «clean» (in the second choice) have different values precisely because they mean different things. Despite not being declared, «clean» refers to leather and implies strong prejudice (Lombardi-Diop, 2012).

F 11, Cinisello group, confirms the choice of item C: «because in any case, they have done nothing wrong. There is no difference between them and us».

This student denounces the danger of accusation that a specific group seems to suffer. It could indicate a social fact, but there are no references in the pupil's text, so we can only speculate. Furthermore, a paternalistic attitude may lead to speaking for the other, even if it's out of self-defence.

The student herself concludes her text by writing: «there is no difference between them and us», an oxymoron that claims an absence of difference, just as she re-proposes the binary opposition «us-them». The motivation for this student's choice has also brought out an implicit bias. F 13, Cinisello group, confirms the choice for item A «because it represents each person's skin».

It follows that unclear colours do not represent people's skin.

Palo was the only city to see increased preference for items with light colours (A). The reasons for confirmations and, in particular, for changes in favour of item A, are based on a more favourable evaluation of one's colour, underscoring the identification process with the social marker that is associated with categorical belonging to one's ingroup. It appears that by avoiding confirmations or changes in favour of item C, which also consists of light colours while not showing an immediate hostility towards other colours, there is a preference towards only light skin colours and homogeneity.

This preference only for light colours was also expressed in the reasons that accompany confirmations or changes towards item A.

For example: (F 13, F 13, M 13, F 13, M 13) «it is my skin colour», (M 13) «it represents the colour of my skin», (F 12, F 13) «because it is my skin», (M 12) «because I am used to seeing it», (M 13) «because I did not know they were the colours of the skin».

Negative evaluations of the outgroup are rare.

For example, M 12 confirms the choice for item A: «because I don't like black people».

3. EDUCATIONAL SPIN-OFFS

Skin Colours Test indicates that differences, plurality and heterogeneity are more appealing in the aesthetic dimension when revealed as skin colours. An «important feature of the *sct* from a pedagogical point of view is that it makes what is below the surface emerge without deceiving. Students are actually lured by an experimental activity and they literally get into the game because it is creative and fun. [...] their choices show the underlayer which, with an 'open hand' play, would not emerge» (Falcicchio & Perillo, 2019, p. 132). By passing from colours to skin colours, there was a stark contrast between different categorization and values associated with the same item (first positively rated, then negatively rated, or vice versa). From an educational perspective, these contrasts should be highlighted, for example, through Focus groups. Highlighting contrasts may hinder processing one's choices and fuel cognitive dissonance (Festinger, 1957). A cognitive dissonance could, for example, enhance conflict with oneself, with one's own certainties and beliefs, all the more so if the Focus group encompassed different voices and cultures (Engestrom, 1987).

There is also a need to raise awareness about the consequences of homogeneity and heterogeneity. Group homogeneity (same skin colour) levels inter-individual differences, which leads to social stereotypes (Tajfel, 1981). Inter-individual differences in the heterogeneity of skin colours and the heterogeneity of projections and connotations assigned to the three images-colours should be regarded as more reflective of the complexity and nuances of the individual subjects' attitudes and positioning, as precious differences that facilitate «areas of contact» (Kramsch, 1993): encounters, clashes, and fusions between individuals and ideas from different cultures.

Lastly, we consider context-specific factors that may emerge within *sct* since contextual factors contribute both to the emergence and to the reduction of prejudicial attitudes (Cameron *et al.*, 2001).

In a class of high school students, we first applied *sct* to understand whether prejudice decreases with age, increasing reconciliation potential (Johnson & Aboud, 2017). In addition, we presented a project to administer *sct* in non-Italian territories in order to detect any cross-cultural stereotypes and biases. To detect stereotypes and prejudices or educational automatisms related to student skin colour (Costa, Pirchio, & Glock, 2022), teachers should also take a specific *sct*.

There is one limitation of the *sct* administration, which is that reactions to skin colour are not detected according to gender.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Acknowledgements

We would like to thank Giuseppe Bove for valuable supervision of the statistics.

We wish to thank two anonymous reviewers for their helpful comments on a previous version of this paper.

REFERENCES

- About, F. (1988). *Children and prejudice*. New York: Basil Blackwell.
- About, F. (2003). The formation of ingroup favoritism and outgroup prejudice in young children: Are they distinct attitudes? *Developmental Psychology*, 39, 48-60. <http://dx.doi.org/10.1037/0012-1649.39.1.48>
- About, F., Taylor, D. M., & Doumani, R. G. (1973). The effect of contact on the use of role and ethnic stereotypes in person perception. *Journal of Social Psychology*, 89, 309-310.
- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Addison-Wesley.
- Balbo, L., & Manconi, L. (1992). *I razzismi reali*. Milano: Feltrinelli.
- Baron, A., & Banaji, M. (2004). The stability and change of implicit and explicit prejudice across development. Paper presented at the 34th Annual Meeting of the Jean Piaget Society, Toronto.
- Baron, A., & Banaji, M. (2009). Evidence of system justification in young children. *Social and Personality Psychology Compass*, 3, 1-9. <https://psycnet.apa.org/doi/10.1111/j.1751-9004.2009.00214.x>
- Barrett, M., & Davis, S. C. (2008). Applying social identity and self-categorization theories to children's racial, ethnic, national, and state identifications and attitudes. In S. M. Quintana & C. McKown (Eds.), *Handbook of race, racism, and the developing child* (pp. 72-110). Hoboken, NJ: John Wiley & Sons.
- Bernstein, J., Zimmerman, T., Werner-Wilson, R. J., & Vosburg, J. (2000). Preschool children's classification skills and multicultural education intervention to

- promote acceptance of ethnic diversity. *Journal of Research in Childhood Education*, 14, 181-192. <https://doi.org/10.1080/02568540009594762>
- Blumer, H. (1958). Race prejudice as a sense of group position. *Pacific Sociological Review*, 1, 3-7. <https://doi.org/10.2307/1388607>
- Bobo, L., & Hutchings, V. (2003). Perceptions of racial group competition: Extending Blumer's theory of group position to a multicultural social context. *American Sociological Review*, 61, 951-972. <https://oconnell.fas.harvard.edu/files/bobo/files/pracial.pdf>
- Cameron, J. A., Alvarez, J. M., Ruble, D. N., & Fuligni, A. J. (2001). Children's lay theories about ingroups and outgroups: Reconceptualizing research on prejudice. *Personality and Social Psychology Review*, 5(2), 118-128.
- Cameron, L., Rutland, B., & Brown, R. (2007). Promoting children's positive intergroup attitudes towards stigmatized groups: Extended contact and multiple classification skills training. *International Journal of Behavioral Development*, 31(5), 454-466. <https://doi.org/10.1177%2F0165025407081474>
- Clark, K., & Tate, C. (2008). Measuring racial prejudice in a multiracial world: New methods and new constructs. In M. Morrison & T. Morrison (Eds.), *The psychology of modern prejudice* (pp. 93-122). Hauppauge: Nova Science Publishers.
- Clark, K. D., Yovanoff, P., & Tate, C. U. (2017). Development and psychometric validation of a child Racial Attitudes Index (RAI). *Behavior Research Methods*, 49, 2044-2060. <https://doi.org/10.3758/s13428-016-0841-y>
- Cook, S. W. (1969). Desegregation: A psychological analysis. In W. J. Arnold & D. Levine (Eds.), *Nebraska symposium on motivation*. Lincoln: University of Nebraska Press.
- Costa, S., Langher, V., & Pirchio, S. (2021). Teachers' implicit attitudes toward ethnic minority students: A systematic review. *Frontiers in Psychology*, 12.
- Costa, S., Pirchio, S., & Glock, S. (2022). Teachers' and preservice teachers' implicit attitudes toward ethnic minority students and implicit expectations of their academic performance. *International Journal of Intercultural Relations*, 89, 56-62.
- Doyle, A. B., & Aboud, F. (1995). A longitudinal study of white children's racial prejudice as a social-cognitive development. *Merrill-Palmer Quarterly*, 41(2), 209-228. <https://www.jstor.org/stable/23090532>
- Engeström, Y. (1987). *Learning by expanding: An activity-theoretical approach to developmental research*. Helsinki: Orienta-Konsultit.
- Falcicchio, G., & Perillo, G. (2019). Skin Colors Test II: A teaching experience and aesthetic experience in middle school. *Educazione Interculturale. Teorie, Ricerche, Pratiche*, 17(2), 119-134.

- Festinger, L. (1957). *A theory of cognitive dissonance*. California: Stanford University Press.
- Fleiss, J. L., Levin, B., & Paik, M. C. (2003). *Statistical methods for rates and proportions* (3rd ed.). New York: Wiley.
- George, D. M., & Hoppe, R. A. (1979). Racial identification, preference, and self-concept. *Journal of Cross-Cultural Psychology, 10*, 85-100. <https://doi.org/10.1177%2F0022022179101006>
- Gibson, B., Robbins, E., & RoCHAT, P. (2015). White bias in 3- to 7-year-old children across cultures. *Journal of Cognition and Culture, 15*, 344-373. <https://doi.org/10.1163/15685373-12342155>
- Greenwald, A. G., & Banaij, M. R. (2017). The implicit revolution: Reconciling the relation between conscious and unconscious. *American Psychologist, 72*(9), 861-871. <https://doi.org/10.1037/amp0000238>
- Griffiths, J. A., & Nesdale, D. (2006). Ingroup and outgroup of ethnic majority and minority children. *International Journal of Intercultural Relations, 30*, 735-749. <https://doi.org/10.1016/j.ijintrel.2006.05.001>
- Hewstone, M., & Brown, R. (1986). Contact is not enough: An intergroup perspective on the 'contact hypothesis'. In M. Hewstone & R. Brown (Eds.), *Contact and conflict in intergroup encounters* (pp. 1-44). Oxford: Basil Blackwell.
- Jarrett, O. (1981). Racial attitudes of black and white children in integrated and segregated kindergartens. Paper presented at the *Biennial Meeting of the Society for Research in Child Development*, Boston.
- Johnson, P. J., & Aboud, F. E. (2017). Evaluation of an intervention using cross-race friend storybooks to reduce prejudice among majority race young children. *Early Childhood Research Quarterly, 40*, 110-122. <https://psycnet.apa.org/doi/10.1016/j.ecresq.2017.02.003>
- Katz, P. A., & Kofkin, J. A. (1997). Race, gender and young children. In S. S. Luthar, J. A. Burack, D. Cicchetti, & J. R. Weisz (Eds.), *Developmental psychology: Perspectives on adjustment, risk, and disorder* (pp. 51-74). New York: Cambridge University Press.
- Katz, P. A., & Zalk, S. (1976). The Katz-Zalk projective prejudice test: A measure of racial attitudes in children. *Journal Supplement Abstract Service, 6*, 37-38.
- Katz, P. A., & Zalk, S. (1978). Modification of children's racial attitudes. *Developmental Psychology, 14*, 447-461. <https://psycnet.apa.org/doi/10.1037/0012-1649.14.5.447>
- Killen, M., Henning, A., Kelly, M. C., Crystal, D., & Ruck, M. (2007). Evaluations of interracial peer encounters by majority and minority US children and adolescents. *International Journal of Behavioral Development, 31*, 491-500. <https://dx.doi.org/10.1177%2F0165025407081478>

- Kramsch, C. (1993). *Context and culture in language teaching*. Oxford: Oxford University Press.
- Lanciano, T., Curci, A., Mastandrea, S., & Sartori, G. (2013). Do automatic mental associations detect a flashbulb memory? *Memory*, *21*(4), 482-493. <https://doi.org/10.1080/09658211.2012.740050>
- Lombardi-Diop, C. (2012). Igiene, pulizia, bellezza e razza. La 'bianchezza' nella cultura italiana dal Fascismo al dopoguerra. In T. Petrovich Njegosh & A. Scacchi (a cura di), *Parlare di razza. La lingua del colore tra Italia e Stati Uniti* (pp. 78-96). Verona: Ombre corte.
- McGlothlin, H., & Killen, M. (2006). Intergroup attitudes of European American children in homogenous schools. *Child Development*, *77*(5), 1375-1386. <https://doi.org/10.1111/j.1467-8624.2006.00941.x>
- Mininni, G. (2013). *Psicologia culturale discorsiva*. Milano: FrancoAngeli.
- Nesdale, D., & Todd, P. (2000). Effect of contact on intercultural acceptance: A field study. *International Journal of Intercultural Relations*, *24*, 341-360.
- Perillo, G. (2020). *Art of Displacement*. London: Transnational Press London.
- Radke, M., & Sutherland, J. (1949). Children's concepts about minority and majority American groups. *Journal of Educational Psychology*, *40*, 449-468. <https://psycnet.apa.org/doi/10.1037/h0057106>
- Ramsey, P. G. (1991). The salience of race in young children growing up in an all-white community. *Journal of Educational Psychology*, *83*, 28-34. <https://psycnet.apa.org/doi/10.1037/0022-0663.83.1.28>
- Richardson, J. E. (2007). *Analysing newspapers: An approach from critical discourse analysis*. Basingstoke: Palgrave Macmillan.
- Tajfel, H. (1981). *Humans groups and social categories*. Cambridge: Cambridge University Press.
- Van Dijk, T. A. (1999). Discourse and racism. *Discourse & Society*, *10*(2), 147-148. <https://doi.org/10.1177%2F0957926599010002001>
- Van Dijk, T. A. (2009). *Society and discourse: How social contexts influence text and talk*. Cambridge: Cambridge University Press.
- Verkuyten, M., & De Wolf, A. (2007). The development of in-group favoritism: Between social reality and group identity. *Developmental Psychology*, *43*, 901-922. <https://doi.org/10.1037/0012-1649.43.4.901>
- Williams, J. E., & Morland, J. K. (1975). *Preschool racial attitudes measure II and color meaning test: General information and manuals of directions*. Winston-Salem, NC: Wake Forest University.
- Williams, J. E., & Morland, J. K. (1976). *Race, color and the young child*. Chapel Hill, NC: University of North Carolina Press.

RIASSUNTO

Diversi strumenti sono stati impiegati per rilevare la comparsa e lo sviluppo di stereotipi e pregiudizi razzisti tra bambini e bambine, ragazzi e ragazze. Nel nostro studio ci confrontiamo con alcuni di questi strumenti, e presentiamo i risultati dello Skin Colours Test. Nella sua specificità lo Skin Colours Test propone un cambio nell'oggetto di indagine (apprezzamento dell'omogeneità o dell'eterogeneità dei colori) e mira a rilevare stereotipi e pregiudizi espliciti e impliciti nelle scelte (anche neutrali) estetiche riguardanti i colori della pelle. Campione: un gruppo di 129 (64 F) studenti (età media = 12,31), quasi tutti di origine italiana; un secondo gruppo di 129 (62 F) studenti (età media = 12,36), meno del 30% di diverse origini. Metodo: sono state mostrate tre immagini, ciascuna composta da 16 colori della pelle, ed è stato chiesto agli studenti di votare la loro preferenza estetica tra omogeneità o eterogeneità dei colori della pelle e di motivare tali scelte. Risultati principali: le motivazioni di alcune scelte per l'eterogeneità dei colori della pelle (scelta neutrale) hanno fatto emergere stereotipi e pregiudizi. Inoltre, consideriamo importanti le specificità contestuali che sono emerse nello Skin Colours Test, al fine di individuare bisogni formativi specifici e strutturare interventi educativi mirati.

Parole-chiave: Colorismo; Preferenze estetiche; Pregiudizi; Razzismo; Skin Colours Test.

Copyright (©) 2022 Giovanni Perillo, Stefano Mastandrea

Editorial format and graphical layout: copyright (©) LED Edizioni Universitarie



This work is licensed under a Creative Commons

Attribution-NonCommercial-NoDerivatives 4.0 International License.

How to cite this paper: Perillo, G., & Mastandrea, S. (2022). Explicit and implicit biases in students' skin colours aesthetic preferences [Pregiudizi espliciti e impliciti nelle preferenze estetiche di studenti per il colore della pelle]. *Journal of Educational, Cultural and Psychological Studies (ECPS)*, 26, 179-196. doi: <https://dx.doi.org/10.7358/ecps-2022-026-pema>