Colour family drawings produced by children of Asian cultures. Measures and peculiarities.

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The Full-Colour Family Drawing Test was prepared by Biasi & Bonaiuto (2005) as a development of the black and white test (Korman, 1964). The new procedure was firstly used in some previous investigations and was now tested with children belonging to Asian immigrant families residing in Italy (from Bangladesh, China, Korea, Pakistan, Philippines and other countries). A total of 120 children of both genders, aged 7-10 years, took part and were distinguished as members of Harmonious, Intermediate or Very Conflictual Families. The first category includes parents who can guarantee affective support, maintaining harmonious interpersonal relations; the last category is instead characterized by a high degree of parental conflict, open violence within the family, difficult separation or divorce underway or imminent, poverty, and the presence of members with negative characteristics such as drug addiction, imprisonment, etc. The participants of Very Conflictual Families typically used "Alarming and Serious colours" in their drawings which were significantly less accurate, more irregular and deformed; those of Harmonious Families generally used "Reassuring and Playful Colours" and produced more accurate and proportioned drawings. Hues were evaluated according to the Natural Color System with the help of a Spectral Light Colorimetric Booth.

1. Hypothesis, Method and Procedure

According to previous studies by Bonaiuto and Collaborators, two contrasting colour categories have been detected: 1) "Alarming and Serious" Colours (Violet, Grey, Black, Olive-Green, Dark Blue, Red and Yellow stripes); 2) "Reassuring and Playful" Colours (Pink, Orange, Sky Blue, Light Green, Light Yellow, other pastel hues).

On this basis, Biasi and Bonaiuto (2005) consistently drafted the Full-Colour Family Drawing Test, as a development of the black and white test (Corman, 1964). With the new procedure, each participant sits with a white rectangular card, 24 well-sharpened coloured pencils, a black pencil, an eraser and a pencil sharpener. S/he receives the following verbal instruction: "Draw your family". These instructions are similar to the original ones used by Appel (1933), Porot (1952, 1965), Cain & Gomilla (1953), Fukada (1958), and others.

The child participants belonged to Asian immigrant families (from Bangladesh, China, Philippines, Pakistan and other countries) living in Rome. They were evaluated through a semi-structured interview with teachers and divided into three groups: Harmonious, Intermediate and Very Conflictual Families. The first category includes parents who can guarantee affective support, maintaining harmonious interpersonal relations. The opposite category is instead characterized by a high degree of parental conflict, expressions of open violence within the family, difficult separation or divorce either underway or imminent (Hulse, 1951; Spigelman, Lunds, Sweden Spigelman, & Englesson, 1992; Roe, Bridges, Dunn & O'Connor, 2006), the presence of members with negative characteristics (drug addiction, imprisonment, etc.), and poverty. The parents as subjects were also studied through personological instruments.

A total of 120 children, aged 7-10 years (both genders) were examined. Those of Very Conflictual Families generally used "Alarming

and Serious Colours" in their drawings (figs 1-5); those of Harmonious Families typically used "Reassuring and Playful Colours"(figs 6-10). Drawings of the first type were significantly less accurate, more irregular and deformed, with figure slimness as another typical indicator; those of the opposite category were clearly more accurate and proportionate; and used more space.
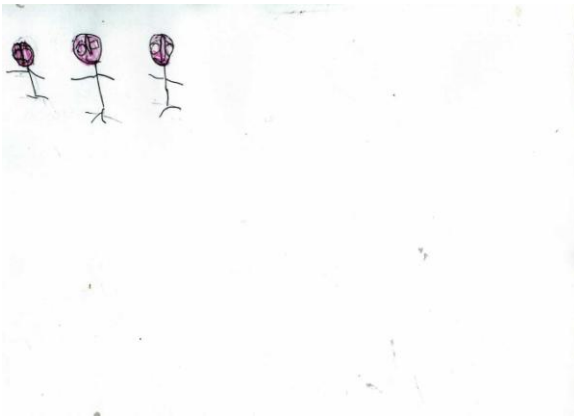

Fig.1 - Drawing with alarming and serious colours

Fig. 2 - Drawing with alarming and serious colours

Fig. 3 - Drawing with alarming and serious colours

Fig. 4 - Drawing with alarming and serious colours

Fig. 5 - Drawing with alarming and serious colours

Fig. 6 - Drawing with reassuring and playful colours

Fig. 7 - Drawing with reassuring and playful colours

Fig. 8 - Drawing with reassuring and playful colours

Fig. 9 - Drawing with reassuring and playful colours

Fig. 10 - Drawing with reassuring and playful colours

Hues were evaluated according to the Natural Colour System (NCS) and also with the help of a Spectra Light Colorimetric Booth (daylight).

2. Results and Discussion

Bonaiuto (1978) was the first to make a distinction between "Alarming and Serious" colours and "Reassuring and Playful" colours. Studies followed on the illustrations of fairytales and comics, firstly investigated in an occasional manner, and then in a rigorously systematic way (Biasi & Bonaiuto, 1997a, 2006a). On the whole, the "Alarming and Serious" colours turned out to be *violet, grey, black, dark blue* and *olive green*, possibly including *red and yellow stripes*, while the so-called "Reassuring and Playful" colours were mainly hues of *pink* as well as *orange, sky blue, light green, light yellow* and other *pastel colours*. The "Alarming and Serious" colours correspond to specific codes according to the Natural Colour System (NCS). For example: Olive-Green: 10 30-R60B. The "Reassuring and Playful" colours, also correspond to specific codes; for example, Orange: 05 85-Y60R. These labels are useful to clearly identify the hues; moreover, the emotional meaning of these hues is detected by using bipolar scales with contrasting adjectives, such as "Alarming" versus "Reassuring" etc.

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