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## The Conceptual Organization of Emotion Concepts in Pre-adolescents: a 2-task Study

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#### **Introduction and Background**

Some studies on the emotional lexicon try to understand the nature of people's emotion concepts as they are expressed in natural language. We assume (e.g., Zammuner, 1998) that emotion terms designate one or more aspects of the experiences, by denoting (i) a specific feature or component of the emotion (e.g., valence), or its causes and consequences, or (ii) a pattern of such features. Furthermore, an important component of emotional experience conceptualization is situational knowledge. Congruently, we expect that emotion terms specify, to a varying degree, information about what situations elicit this or that emotion. The present study analyzed the type of knowledge preadolescents have concerning i) words that name emotions, ii) the relationship between emotion terms, and the situations that elicit emotions. The central aim of the study was to test whether preadolescents' categorization of emotions can be explained by the prototypical/family resemblance model of categorization (e.g., Rosch, 1975), as found for adults (e.g., Fehr & Russell, 1984), and for adolescents too, at least for the Italian language (e.g., Zammuner, 2001).

#### Method

297 junior high school children, aged 10 to 14, were asked to perform two tasks: a) free listing of emotion terms, i.e., participants were asked to write all the emotion words they could think of in 5 minutes time, and b) 32 situationemotion matching, i.e., identifying what emotion a character feels in an imaginary typical situation that was described by a sentence, e.g., "Paolo (You) tomorrow will go out with his class for a day trip. What will Paolo (You) feel?" Each imaginary situation was expected to elicit one of 9 emotions: 6 "basic" ones, happiness, love, fear, sadness, anger, surprise, and 3 "social emotions", shame, jealousy and guilt. Free listing (3151 words) and matching data (8555 emotion terms) were carefully analyzed with regard to: i) distinct emotion types, ii) specificity of produced terms, iii) nature of cited emotions (e.g., "basic", "social" emotions) on the basis of theoretical analyses of the produced terms.

#### **Results and Discussion**

Task *a*). The *free-listing* results showed that: a) the most frequently produced terms denoted so-called "basic" emotions; at least 40% of subjects listed *happiness*, *love*,

sadness, joy, fear and, at least 30%, anger; b) the great variety in the frequency of produced terms indicated 'graduality' in the extent to which a term constituted for subjects an exemplar of the emotion category; c) there was a big 'jump' between the frequency of the more frequent terms, denoting more central or prototypical exemplars of emotions, and that of the less frequent ones, denoting less central exemplars. We conceptualized the frequency of production as an index of subjective importance, and accordingly grouped emotion terms on the basis of "semantic similarity" obtaining 32 distinct classes of emotion concepts. Finally, d) subjects generated also words that refer to emotion-related "objects", i.e., antecedents, physiological reactions, cognitive conditions, personality features, action readiness.

Task b). The results of a set of correspondence analyses showed that emotion concepts and episodes are understood in terms of a framework characterized by the two dimensions of pleasure or valence (20.6 % of the variance) and de/activation (16 %). The third dimension (14.2 %) differentiated within the "social" emotions, with a contraposition between jealousy and envy on the hand, and shame and embarrassment on the other hand. Altogether, the results on the semantic structure of the emotion lexicon for pre-adolescents indicate that it is organized around a number of dimensions that, by specifying situational information, differentiate emotion concepts (the fuzzy categories) into clusters of emotions.

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