Intelligence and creativity

Ferrando, M.¹, Prieto, M.D.¹, Ferrándiz, C.¹, Sánchez, C.²

¹Dept. of Developmental and Educational Psychology, University of Murcia
²Dept. of Research Methods and Diagnosis in Education, University of Murcia

Spain

mferran@um.es
Abstract

Introduction. Numerous authors have investigated the relationship which exists between creativity and intelligence, and diverse results were found. Thus, Guilford (1950) includes creativity within the intelligence construct, Sternberg (1988) alludes to creativity as encompassing the intelligence construct; Gardner (1995) indicates a close relationship between creativity and the domain where a certain intelligence is manifest; and for Getzels and Jackson (1962) and Torrance (1962), intelligence and creativity are independent. This paper has a double objective: on one hand, to establish the relationship between creativity and general intelligence; on the other hand, to study the relationship which exists between creativity and Multiple Intelligences (MI).

Method. First, we present a brief historical review of the concept of creativity. Second, we study the perspective of Multiple Intelligences and Multiple Creativity from Gardner. Third, we analyze data from the empirical study, performed with 294 pupils (3rd year of ECE and 1st and 2nd of Primary Education).

Results. Data indicate that there is no relationship between intelligence and creativity; the threshold theory proposed by Torrance for MI is upheld, in the sense that a certain intellectual level is necessary, though not sufficient, for creativity. The relationship between creativity and Multiple Intelligences (MI) is higher than between psychometry and creativity, with visual-spatial intelligence being most highly related to creativity, followed by naturalistic, bodily-kinesthetic and linguistic.

Discussion. Results indicate low relationships between creativity and intelligence. Nonetheless, the relationship between them changes according to how the intelligence construct is conceptualized. In general, we could say that there is a greater relationship between creativity and multiple intelligences. Likewise, the threshold theory is not upheld when IQ is related to creativity: pupils with a greater Intelligence Quotient are not the most creative. Nonetheless, from the multidimensional perspective, the threshold theory is corroborated for visual-spatial, naturalist and linguistic intelligence.

Keywords. intelligence, creativity, multiple intelligences, evaluation, psychometric intelligence evaluation.