Children’s Understanding of Genetics and Inheritance. Implications for Genetic Counselling

MADALINA RADU ¹
RAMONA MOLDOVAN ²

Abstract

The existence of heredity is so implicit that it is often difficult to imagine a time when we did not have any knowledge of it. The rationale of investigating the acquisition and content of genetic concepts is complex. In addition to theoretical implications, the practical applications of such studies in genetic counselling are essential. The main objective of our research was to explore children’s perception of heredity. We were particularly interested in seeing how children understand heredity and what their theories of various genetic mechanisms are. Data was gathered by conducting using semi-structured interviews with 20 children aged from 11 to 13 years old. The interview was based on 17 questions aimed at exploring their understanding and explanations of heredity. Responses to each question were later on analyzed using thematic analysis. Implications for genetic counselling are discussed.

Keywords
children, inheritance, genetic disorders, genetic counselling

Introductory remarks

The existence of heredity is so implicit that it is often difficult to imagine a time when we did not have any knowledge of it. The rationale of studying the acquisition and content of genetic concepts is complex. For start, we do know that children experience kinship and family resemblance at an early age (Richards, 1996); also, kinship terms are part of their vocabulary quite early (Hirschfield, 1989; Smith & Williams, 2007). However, older children and adolescents are confronted with difficulties when learning scientific da-

1. Gaudeamus Children’s Association 2003
2. Babes-Bolyai University, Department of Clinical Psychology and Psychotherapy; No. 37 Republicii St. 400015, Cluj-Napoca, Romania; Tel./Fax: + 40 264 434 141; Email: ramonamoldovan@psychology.ro