

Autism and Its Relation to Impaired Central Coherence

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Abstract. This experimental study was conducted to investigate whether autistic children have impaired central coherence as proposed by Frith and colleagues. Subjects were 30 children divided equally among autistic, normal and mentally retarded groups, matched at average intellectual level of 5 years old as measured by Raven's Coloured Progressive Matrices. Three sets of tests were administered to compare subjects' performance in two task dimensions which were stimuli connection and stimuli isolation. According to Frith, autistic children performed better in stimuli isolation tasks in comparison to stimuli connection tasks. However, the present findings contradicted Frith's postulation as autistic subjects generally demonstrated the tendency to perform better in stimuli connection as opposed to stimuli isolation tasks. Thus, contradicting previous findings regarding autism and impaired central coherence. The implications of the present study were discussed in several aspects including the heterogeneity issue in autism and the possible relations between impaired central coherence and mental retardation.

Key words: autism, central coherence, mental retardation, stimuli connection, stimuli isolation

Abstrak. Studi eksperimental ini dilakukan untuk meneliti apakah anak-anak autistik menyandang koherensi sentral yang terganggu sebagaimana dikemukakan oleh Frith dan kawan-kawan. Subjek adalah 30 anak yang dibagi secara merata menjadi kelompok autistik, normal, dan retardasi mental, disertarkan pada aras intelektual. Status berdasarkan pengukuran dengan *Raven's Coloured Progressive Matrices*. Tiga perangkat tes diujikan untuk membandingkan tampilan para subjek dalam dua dimensi tugas yaitu koneksi rangsangan dan isolasi rangsangan. Menurut Frith, anak-anak autistik tampil lebih baik pada tugas-tugas isolasi rangsangan dibandingkan tugas-tugas koneksi rangsangan. Namun, temuan studi ini berlawanan dengan postulat Frith yang menyatakan bahwa subjek autistik umumnya menunjukkan kecenderungan tampil lebih baik pada tugas-tugas koneksi rangsangan daripada tugas-tugas isolasi rangsangan. Jadi, bertentangan dengan temuan terdahulu mengangkat autisme dan koherensi sentral yang terganggu. Implikasi temuan ini dibahas dalam berbagai aspek termasuk keheterogenan isu dalam autisme dan kemungkinan hubungan antara koherensi sentral yang terganggu dan retardasi mental.

Kata kunci: autisme, koherensi sentral, retardasi mental, koneksi rangsangan, isolasi rangsangan

Autism which falls under the category of pervasive developmental disorders (American Psychiatric Association [APA], 2000; World Health Organization [WHO], 1992) can be defined by the presence of specific qualitative impairment in areas of communication and social interaction, as well as the manifestation of unusual, repetitive or stereotyped behaviors and

interests (Malvy, Barthélémy, Damie, Lenoir, Bodier, & Roux, 2004). Diagnosis of autistic disorder which is based on the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition - Text-Revised (DSM-IV-TR) (APA, 2000) emphasizes a triad of impairments which comprised of socialization, communication and imagination.