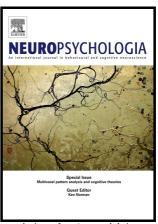
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Intuitive physics ability in systemizers relies on differential use of the internalizing system and long-term spatial representations

Tapani Riekki^{1*}, Juha Salmi^{1,2,3}, Annika M. Svedholm-Häkkinen¹ & Marjaana Lindeman¹

1Department of Psychology and Logopedics, Faculty of Medicine, University of Helsinki, Helsinki, Finland

²Department of Psychology, Faculty of Arts, Psychology, and Theology, Åbo Akademi University, Turku, Finland

³Advanced Magnetic Imaging Centre, Aalto Neuroimaging, Aalto University, Espoo, Finland

*Corresponding author: Department of Psychology, Faculty of Medicine, University of Helsinki, P.O. Box 9, 00014 University of Helsinki, Finland. Phone number: +358 440424281, E-mail: tjjriekki@gmail.com fax: +358 0294129542

Helsinki. P.O. Box 9, 00014 Finland.

Abstract

According to the Empathizing-Systemizing theory (E-S Theory), individual differences in how people understand the physical world (systemizing) and the social world (empathizing), are two continuums in the general population with several implications, from vocational interests to skills in the social and physical domains. The underlying mechanisms of intuitive physics performance among individuals with a strong systemizing and weak empathizing (systemizers) are, however, unknown. Our results affirm higher intuitive physics skills in healthy adult systemizers (N=36), and further reveal the brain mechanisms that are characteristic for those individuals in carrying out such tasks. When the participants performed intuitive physics tasks during functional magnetic resonance imaging, combined higher systemizing and lower

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