

Face expertise vs prosopagnosia: About the development and absence of expertise

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Faces provide essential information about the identity, expression, gaze, health and mood of a person—most people show so-called “face expertise”. Recent face processing models assume highly interconnected neural structures between different temporal, occipital and frontal brain areas with several feedback loops. A selective deficit in the recognition of familiar faces is known as prosopagnosia, which can be found both in acquired and congenital form. Just a decade ago, a hereditary sub-type of congenital prosopagnosia with a very high prevalence rate of 2.5% has been identified. Our recent research shows that hereditary prosopagnosia is a clearly circumscribed face processing deficit characterized by a great homogeneity of clinical symptoms including a) a pronounced decrease of configural processing, b) a drastic reduction of visual imagery abilities, c) a loss of the ability for assessing the distinctiveness of a face, and d) an alteration of the face-specific M170 component in MEG. Somewhat paradoxically, judgments of the attractiveness of a face, its sex, and its emotional expression are largely preserved. The theoretical implications of these deficient and preserved abilities will be discussed.



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He studied Psychology (Dipl.-Psych.), followed by Philosophy (M.A.), both at University of Trier, Germany. After receiving his PhD from the Freie Universität Berlin and his “Habilitation” (venia docendi) at the University of Vienna, Austria, he worked at the University of Technology Delft (The Netherlands), and the universities of Warsaw (Poland) and Pavia (Italy). Currently he holds a full professorship at University of Bamberg (Germany) leading the Department of General Psychology and Methodology and the “Forschungsgruppe EPAEG”—an international research group devoted to enhancing the knowledge, methodology and enthusiasm in the fields of

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