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PSYCHOPATHOLOGY AND EVOLUTION

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From an evolutionary point of view, one may wonder why psychopathological conditions exist at all. Why did natural selection not eliminate phenotypic traits that so clearly seem maladaptive? Modern evolutionary theorizing can offer explanations of the mechanisms that may cause psychopathology. Compromises in design, mismatch of ancestral environments of adaptation with current environmental conditions, and balanced polymorphisms are among most relevant.

Importantly, insights from evolutionary theory challenge contemporary conceptualizations of psychopathology as "pseudo"-categorical. In addition, recent research points to the fact that the diathesis-stress-model, which dominates psychiatric research, may be too simplistic. Instead, allelic variations of genes that increase the risk of developing a psychiatric disorder under unfavourable early environmental conditions may be associated with better than average outcomes under favourable conditions. This suggests that evolution has selected for plasticity, and that vulnerability to disorder is just one side of the coin. In addition, it is necessary to study whether certain patterns of behaviour, or syndromes, can be assigned functional significance, before discarding them as "brain pathology", and hence functionally meaningless. Finally, some examples will be given how evolutionary thinking can contribute to testable research questions into psychopathological syndromes.

Further, an overview of prospective studies using both or either basic symptom criteria and transition rates related to these will be given, and the potential benefit of combining ultra-high risk criteria, particularly attenuated psychotic symptoms, and basic symptom criteria will be discussed. Finally, their prevalence in psychosis patients, i.e. the sensitivity, as well as in general population samples will be described.

It is concluded that both COPER and COGDIS are able to identify subjects at a high risk of developing psychosis. Further, they appear to be sufficiently frequent prior to onset of the first psychotic episode as well as sufficiently rare in persons of general population to be considered as valuable for an early detection of psychosis. This way Gerd Huber's and Gisela Gross's long-standing and highly systematically conducted basic symptom research laid the foundation for an eminently future-oriented new direction of schizophrenia research.