Analyzing Data

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In scientific experiments as in architecture, it's all about design. Patrick Onghena studies methodology and statistics in order to help other investigators properly set up their studies and analyze their results. He is especially interested in optimizing single-case experimental design so that researchers can glean as much reliable information as possible from small data sets. His recommendations have influenced the field of methodology and have been used in several studies on pain, depression, chronic fatigue, language pathology, learning disorders, relational aggression, and education. Onghena's other area of expertise is meta-analysis, an increasingly vital tool for examining large volumes of data from many different studies that all address similar hypotheses. He has applied his meta-analytical skills to replicated single-case experiments and to a range of questions, like the possible pain-relieving effect of antidepressants and the effect of early prevention programs for families with young children at risk for physical child abuse and neglect.