Statistical learning and reading abilities: A perspective of individual differences

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Statistical learning is typically considered to be a domain-general mechanism by which cognitive systems discover the underlying regularities in the environment. Our approach construes SL as involving a set of domain-general neurobiological mechanisms for learning, representation, and processing that detect and encode a wide range of distributional properties within different types of input, language included. Although the power of statistical learning (SL) in explaining a wide range of linguistic functions is gaining increasing support, relatively little research has focused on this theoretical construct from the perspective of individual differences. We argue that individual differences provide key evidence for understanding the mechanisms of SL and their relations to language learning and reading acquisition. We offer a novel methodological direction which offers precise and testable predictions that can be empirically evaluated.