

Abstract

Holistic processing refers to the devotion of obligatory attention towards the whole of an object rather than its components only. It has been associated with perceptual expertise across a number of domains, including faces, cars, chessboards, musical notes and words. Despite being a potential common expertise marker, whether holistic processing in different domains share common underlying mechanisms remains relatively unknown. This study adopted the composite paradigm in order to examine the effect of cross-domain interference. Two behavioral experiments were conducted and the magnitude of reduction in the sizes of composite effect in expertise domains under other expertise domain contexts was analyzed. Overall, no significant interaction was detected between pairs of the domains (faces, Chinese characters and English words) tested, suggesting little overlap in their holistic processing mechanisms.

摘要

整體加工指的是注意力不僅停留於物件的部分，更會強制轉移到整個物件。整體加工與多個視覺領域的專門認知有關係，包括臉，汽車，棋盤，音符和文字等。儘管整體加工是專門認知的一個潛在共同標記，不同領域的整體處理是否有著共同的底層機制仍然未有定論。本研究採用了組合範式以檢查跨領域干擾的影響。本研究包括兩個行為實驗，以分析一個領域的組合效果於其他領域的背景影響下會有多大的減少。總體而言，每個被測的領域（人面，中文字和英文字）亦未檢測到顯著相互作用。本研究亦討論了結果的可靠性。結果指出整體加工的处理機制於被測領域當中應無任何重疊