**自我优势效应在知觉匹配任务中的可靠性：来自多个数据集的证据**

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**摘 要** 自我优势效应（SPE）指在认知任务中，人们对于与自我相关的刺激反应更迅速，准确率更高的现象。在过去十年中，知觉匹配任务（SPMT）被广泛运用于研究SPE的认知机制。更重要的是，SPMT所测量的 SPE也被当作测量个体差异的指标，用于个体差异和临床研究。作为一项简单的按键任务，SPMT消除了熟悉效应，并提供了两个直接用于量化SPE的结果变量：反应时和准确率。已有的文献中还报道了从反应时和准确率派生的其他四种结果变量计算SPE：信号检测理论下的灵敏度*d'*、通过直接将反应时间和准确性相除计算的效率指数（Efficiency）、使用漂移-扩散模型估计得出的漂移率（*v*）和起始点（*z*）。此外，自我优势效应的计算可以采用不同的基线条件，包括亲密他人（Close）、陌生人（Stranger）、名人（Celebrity）和非人条件（NonPerson）。然而，以不同基线条件和不同结果变量计算出来的SPE指标的信度尚未得到系统的探究，因此将SPMT用于测量个体差异的稳定性尚属未知。本研究采用来自11篇论文中的18个独立数据集（N = 857），并使用分半信度（Split-half Reliability）和组内相关系数（ICC）探究以上4个基线条件和6个结果变量计算出的24个SPE指标的可靠性。结果显示，以亲密他人和陌生人条件为基线的反应时指标（yiClose = 0.58; yiStranger = 0.60）和效率指标（yiClose = 0.52; yiStranger = 0.58）的分半信度相对较高，但仍低于心理测量学所要求的信度水平。其他20个指标的估计分半信度在0.5及以下。ICC分析得到类似的结果，在衡量个体差异的信度指标ICC2中,仅亲密他人和陌生人条件为基础的反应时指标（ICC2Close = 0.53; ICC2Stranger = 0.58）和效率指标（ICC2Close = 0.52; ICC2Stranger = 0.34）相对较高，同样远低于心理测量学所要求的水平。用于衡量群体水平的ICC2k指标则发现，以亲密他人和陌生人条件为基础的反应时指标（ICC2kClose = 0.87; ICC2kStranger = 0.89）和效率指标（ICC2kClose = 0.86; ICC2kStrange = 0.76）达到较高信度，其余的10个ICC2k指标大约为0.5，甚至更低。本研究结果表明，基于反应时和效率评估的SPE仅在群体水平上可靠，用于测量个体差异时则仍需进一步探索。这些结果对于更深入地理解SPMT的可靠性及其未来应用场景具有一定的启示意义。

**关键词** 自我优势效应，知觉匹配任务，信度，多重分析

**Reliability of Self-Prioritization Effect as Measured by the Perceptual Matching Task: Evidence from Multiple Datasets**

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***Abstract:*** The self-prioritization effect (SPE) refers to the effect that performance on cognitive tasks is better when stimuli are related to the self than when they are not. In the last decade, the self-perceptual matching task (SPMT) has emerged as a mainstream paradigm for studying the cognitive mechanisms underlying the SPE. Additionally, the SPE measured by the SPMT has been utilized as an indicator of individual differences in research, including clinical studies. As a simple button-pressing task, SPMT eliminates familiarity effects and yields two outcome variables for quantifying SPE: reaction time and accuracy. Existing literature has also reported four additional outcome variables derived from reaction times and accuracy, including sensitivity *d’* under signal-detection theory, the efficiency index through a direct division between reaction times and accuracy, drift rate (*v*) and starting point (*z*) estimated using the drift-diffusion models. Moreover, the calculation of the SPE measures can employ different baseline conditions, including include “Close”, “Stranger”, “Celebrity”, and “Nonperson” conditions. However, the reliability of SPE measures computed using different baseline conditions and outcome variables has not been systematically examined, leaving the stability of using the SPMT for measuring individual differences unknown. To fill the gap, we conducted a pre-registered study wherein we re-analyzed 18 datasets from 11 papers (N = 15) using the split-half reliability and intraclass correlation coefficient (ICC). The results revealed that the split-half reliabilities of RT measures (yiClose = 0.58; yiStranger = 0.60) and Efficiency measures, when close other and stranger used as the baseline condition (yiClose = 0.52; yiStranger = 0.58), are relatively high but still lower than that required in psychometrics. The estimated split-half reliabilities for all other indices are approximately 0.5 or even lower. Similar results were obtained in ICC analysis, where ICC2 reliability indices for individual differences in the reaction time measures (ICC2Close = 0.53; ICC2Stranger = 0.58) and efficiency measures (ICC2Close = 0.52; ICC2Stranger = 0.34) are relatively high when using close other or stranger as baseline conditions, but still considerably lower than the desired level in psychometrics. The remaining 20 ICC2 indices were 0.5 or below. However, for the ICC2k, which measures the stability of SPE on group level, the reaction time measures (ICC2kClose = 0.87; ICC2kStranger = 0.89) and efficiency measures (ICC2kClose = 0.86; ICC2kStranger = 0.76) are relatively high when using close other or stranger as baseline conditions, while the remaining 10 ICC2k indices are about 0.5 or even lower. These findings suggest that SPE measures based the reaction time and efficiency are reliable only at the group level, while further exploration is needed for measuring individual differences. These results provide insights into the reliability of the SPMT and its future applications.

***Keywords*:** Self-Prioritization Effect (SPE), Self-Perceptual Matching Task (SPMT), Reliability, Multiverse