

Title

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Introduction

The inherent spatial nature of abstract concepts like power have excited great interest in recent years. Power, as a reflection of social status, is usually regarded as the ability to influence others by controlling limited resources. Previous studies have found that people typically respond faster to powerful words (e.g., boss) presented on the top space but to powerless words (e.g., intern) presented on the bottom space. This was referred as the spatial power association response cods. In previous studies people had always been instructed to perform bi-directional responses to powerful or powerless words by pressing the corresponding buttons on the top or bottom positions. This raises a question on whether the spatial power association observed in previous work could originate from requirements of explicit spatial directional processing. Recent studies extended a novel methodological development from numerical cognition to power concepts eliminated task-relevant spatial processing, however, terms “High” and “Low” were explicit parts of the response rules, thus introducing indirectly an explicit spatial bias into power trials. Hence, it is still unclear that how power directly activate space without explicit any cues and whether the process is nonconscious.

Methods

- Adopted our recently extended non-spatial Go/no-go task on power-space association, the current study will investigate the power concepts activated the spatial top-bottom image schema in an automated manner. Participants performed a Go/no-go task in which a randomly selected word (powerful human/animal or powerless human/animal) or a verbal label (high/low) was presented on the center of screen in each trial. Participants were instructed to press the space bar only in go trials where a word or a color label matched the response rule displayed at the beginning of each block. This design excluded the possibility of explicit bi-directional task processing among stimuli, response and instruction and expected that participants judged the color of HIGH or LOW labels (red or green) rather than recognizing these two labels.

Results

- The result showed no any congruity effect ($t(22) = 0.21$, $p = 0.84$, Cohen's $d = 0.04$)

Discussion

- the present study indicate that the power-space association originates from the implicit spatial nature and would be observed only when one of the two components of the association (power or space) is activated explicitly.