

ABSTRACT

Abstract of thesis entitled:

The Context Effect of Emotion words on Emotional Face Processing

Submitted by YANG, Lizhuang

for the degree of Doctor of Philosophy in Psychology

at The Chinese University of Hong Kong in August 2012

Emotion perception of facial expressions is modulated by affective contexts. Emotion words, that are used to refer to discrete emotion categories, might also serve as a kind of context of emotion perception. The current study systematically explored the degree of automaticity and time course of context effect of emotion words with a modified priming paradigm. Experiment 1 demonstrated that emotion congruency between emotion words and emotional faces could modulate participants' task performance on gender judgment task, which did not require an explicit emotion judgment. In Experiment 2 and Experiment 3, the processing level of emotion words was manipulated by task instruction on emotion words. The context effect of emotion words was only found when participants deliberately memorized an emotion word (Experiment 2). This effect disappeared when participants memorized the color of emotion word (Experiment 3). With a more simple orientation judgment task, Experiment 4 demonstrated a congruency effect for happy faces only. Processing level of emotion words also modulated this effect. Reliable congruency effect for happy faces was only found when word identities were explicitly processed (Experiment 5 and 7) but not in a superficial word color task (Experiment 6 and 8). Experiment 9 explored the time course of context effect

of emotion words on face gender judgment with EEG recording. The mean amplitude of N170 was enhanced in incongruent condition compared with congruent condition. In summary, (1) the integration of emotion words and emotional faces was modulated by task demands on faces and processing level of emotion words; (2) the integration of emotion words and emotional faces might happen at the perceptual stage of face processing.

ABSTRACT IN CHINESE

中文摘要

从面孔表情中感知情绪受到情绪背景的调节。用来指代各种情绪状态的情绪词汇或许是一类情绪知觉的背景。本研究采用改进后的启动范式系统探索了情绪词汇的情景效应的自动化程度和时间进程。实验 1 发现情绪词汇和情绪面孔之间的情绪一致性可以调节实验参与者性别判断任务的成绩。实验 2 和实验 3 采用任务指导语操纵了对于情绪词汇的加工水平。情绪词汇的情景效应仅在实验参与者主动记忆情绪词汇时被发现（实验 2），而在实验参与者仅仅记忆词汇颜色时没有被发现（实验 3）。采用更为简单的朝向判断任务，实验 4 发现该情景效应仅仅表现在高兴面孔中。该情景效应同样受到情绪词汇加工水平的调节。对于高兴面孔的情景效应仅仅在实验参与者主动记忆情绪词汇的条件下被发现（实验 5 和实验 7）。在实验参与者记忆词汇颜色时未被发现（实验 6 和实验 8）。实验 9 采用脑电方法探索了面孔性别判断任务中情绪词汇的情景效应的的时间进程。相比一致条件，N170 的平均波幅在不一致条件下有更高的波幅。总之，（1）情绪词汇和情绪面孔的整合受到面孔加工任务和情

绪词汇加工水平的调节；(2) 情绪词汇和情绪面孔的整合或许发生在面孔加工的知觉阶段。