Sequential Modulation of Preference Judgments

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Background

- Preference judgments of an object can be made not only based on the features of the object itself but also on other factors including context (Leder et al., 2010).
- It has been suggested that brief contextual priming influences subsequent preference ratings. Meaningless symbols were rated as more appealing when they follow brief happy than angry faces (Wong & Root, 2003).

Purpose

- To test whether the preceding preference judgment behaves like a contextual prime and influences the subsequent preference judgment.
- To investigate whether art picture stimuli exert a contextual effect on preference judgments in Experiment 1 and whether the effect is generalized to face stimuli in Experiment 2.

Hypotheses

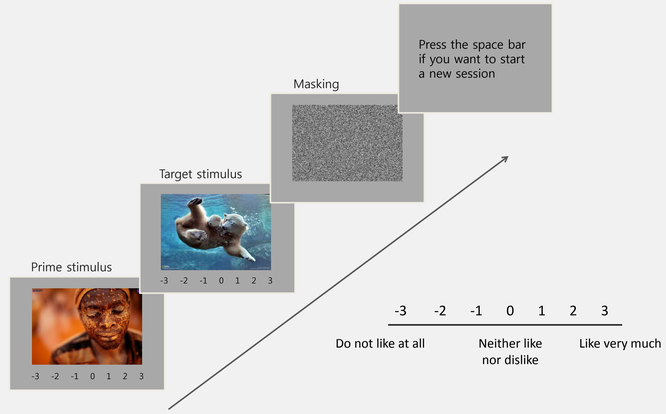
- Current preference judgment would be modulated by the preference of the previously seen stimulus.
- In line with previous findings on affective priming, a target neutral stimulus will be rated more preferably when it follows a preferred stimulus than when it follows a non-preferred stimulus.

Stimulus Selection Procedure

- Prior to conducting Experiments 1 and 2, stimulus selection procedures were performed respectively.
- 150 art pictures (Experiment 1) and 150 female faces (Experiment 2) were chosen for stimulus selection procedures.
- Two groups of participants (12 participants for each group) who did not participate in the main experiments rated randomly presented stimuli on a scale of -3 to 3 based on their immediate preference.
- 90 stimuli were selected based on the standardized scores (Z-score) of the rating data for each procedure.
  - Experiment 1: 30 preferred (M = 0.53), 30 non-preferred (M = - 0.91), and 30 neutral (M = 0) stimuli.
  - Experiment 2: 30 preferred (M = 0.92), 30 non-preferred (M = - 0.84), and 30 neutral (M = 0) stimuli.

Experimental Procedures

- A trial consisted of two stimuli: An extremely preferred or non-preferred stimulus was presented first (prime stimulus) and followed by a neutral stimulus (target stimulus).
- Participants were asked to rate the presented stimulus on a scale of -3 to 3 based on their immediate preference. Both prime and target stimulus were rated and participants were not aware of the stimulus selection manipulation.
- A paired sequence design:
  - A neutral target stimulus was presented twice after a preferred prime stimulus and a non-preferred prime stimulus, respectively in blocks 1 and 2, which enables a "within-target stimulus" statistic test avoiding the influence of inherent preference differences among neutral stimuli.
  - Each block consisted of the presentations of 15 preferred primes preceding 15 neutral targets and 15 non-preferred primes preceding 15 targets.
- Art picture stimuli were presented in Experiment 1 (N = 16), and female face stimuli were presented in Experiment 2 (N = 16).

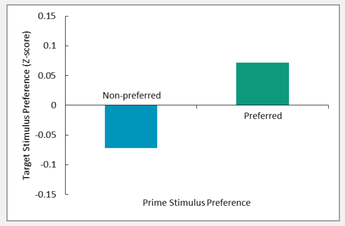


< Example of a trial sequence in Experiment 1 >

√ The trial sequence of Experiment 2 is identical to Experiment 1 except the type of experimental stimulus.

Experiment 1: Picture Rating Results

- Results



- Ratings for preferred and non-preferred primes were significantly different.
  - The means for prime stimuli

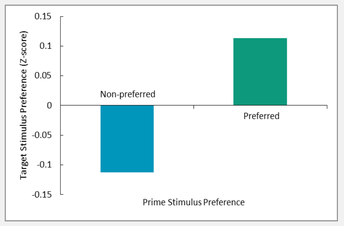
	Preferred	Non-preferred
Block 1	0.70	- 0.80
Block 2	0.55	- 0.45

  - Block 1: t(15) = 13.09, p < .0001.
  - Block 2: t(15) = 10.95, p < .0001.

- The main effect of prime stimulus preference was significant, $F(1, 15) = 16.83$, $p < .001$.
- The mean target stimulus preference rating was higher when the previous stimulus was a preferred one (M = 0.0718) than when it was a non-preferred one (M = - 0.0720).

Experiment 2: Face Rating Results

- Results



- Ratings for preferred and non-preferred primes were significantly different.
  - The means for prime stimuli

	Preferred	Non-preferred
Block 1	0.71	- 0.62
Block 2	0.57	- 0.67

  - Block 1: t(15) = 11.92, p < .0001.
  - Block 2: t(15) = 11.62, p < .0001.

- The main effect of prime stimulus preference was significant, $F(1,15) = 10.52$, $p < .01$.
- The mean target stimulus preference rating was higher when the previous stimulus was a preferred one (M = 0.1135) than when it was a non-preferred one (M = - 0.1125).

Conclusion & Implication

- When the same target stimulus was presented following a preferred prime stimulus, the preference ratings were higher than following a non-preferred prime stimulus.
- Merely appreciating and judging the previous art picture or face stimulus induced different states of preference in a subsequent preference judgment.
- When conducting preference experiments, researchers should be aware of the sequential effect of preference judgment.

References

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