Do You Want A Snack? Priming for Food-related Behaviors

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Introduction

Support for the notion that individuals’ behavior can be influenced by cues in their surroundings has been demonstrated throughout the psychology literature. For example, advertisements for healthy foods increased choices for fruit over sugary snacks, but these effects depended upon the participants’ hunger and education level (Forwood, Ahern, Hollands, Ng, & Marteau, 2015). In addition, watching advertisements for unhealthy snack foods has been shown to increase snacking behaviors in both children and adults (Harris, Bargh, & Brownell, 2009).

However, there has been controversy surrounding replicability for behavioral priming effects (see e.g., Sedivy, 2012). The current study seeks to examine the effects of subconsciously influences of visual food presentation on behavior in a rigorous and scientific manner.

The Current Study

• Phase 1: Preferences
  - Descriptive norm of student food preferences
  - Selection of high preference food items and high familiarity office items (control)
  - High quality, visually consistent photos of all items
  - Creation and validation of Cloze sentences with varying constraint for each target letter (e.g., “c___” for cookie)

• Phase 2: Masked presentation of item photos (during dot counting task)
  - Masked presentation of food and office photos during dot counting task
  - Later Cloze sentence completion and behavioral snack choice

Various Questionnaire Measures

• Food Preferences Form (PPF)
• Food Cravings Questionnaire (FCQ)
• Eating Attitudes Test (EAT)
• Beck Depression Inventory (BDI)
• State-Trait Anxiety Inventory; state portion (STAI)

Participants

• 92 undergraduate students, randomly assigned to priming group A or B for each target letter (e.g., chips [A group] or cookies [B group] for letter “C”)
  - Mean age = 18.75
  - 45 Male; 47 Female

Method

Procedure

• Masked presentation of item photos (during Dot Counting Task)

Procedure cont.

• Masked presentation of food/office item photos with 80 ms delay
• Dot Counting Task: 2000 ms presentation

Sentence constraint:

Sentence constraint: Very Low △ Low △ High

Results

Hypotheses

• High Constraint Sentences: High rates of completion with targets due to preexisting high constraint in sentences towards that specific item: Supported

• Low Constraint Sentences
  - No difference between Food and Office categories: Supported

Results cont.

Behavioral Choice: Individuals should choose a snack consistent with their Priming Group: Not supported
  - Many subjects declined both snacks.

Discussion

• Within the current study, our initial manipulation appears to not have been strong enough to influence existing patterns of behavior, suggesting that behavioral priming effects may not be replicable.

• Additionally, photo identification was lower than expected, resulting in a number of items being removed from analyses, likely impacting our results.

• Outcome measures may need to be closer in time to the priming task.

• Experiment 2 will include multiple exposures to the primed photographs.

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