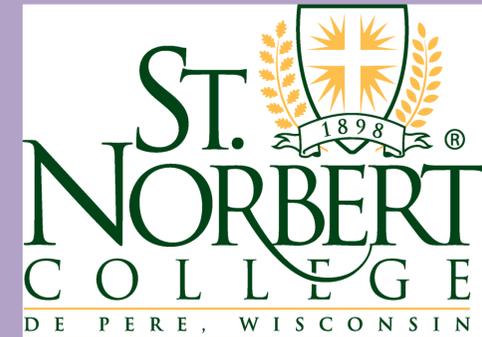


# The Facial Feedback Effect

Kalista Arendt and Emily Dehmer, St. Norbert College



## Abstract

Smiling is a universal facial expression that conveys happiness. People wonder if it is smiling that leads to happiness or happiness that leads to smiling. The facial feedback hypothesis suggests that smiling leads to happiness. A lot of controversy surrounds the facial feedback hypothesis because there have been numerous other studies whose results have disputed it. Therefore, it is important to check the validity of studies promoting the facial feedback hypothesis. The hypothesis under investigation was that smiling increases funniness ratings for cartoons. If supported, it would suggest that people could improve their mood by smiling. Participants ( $n = 37$ ) in the study were undergraduate college students (94.60% white, 75.68% female). Participants performed a variety of actions using a marker held in their mouths. They were instructed to either hold a marker in their teeth without touching it with their lip (hence, smiling) or to hold a marker in their lips (hence, not smiling). With the marker in their mouths, participants performed and rated the difficulty of a variety of tasks, and then rated four comics from Gary Larson's *The Far Side* for funniness. There were not any significant differences between funniness ratings by participants holding the marker with their teeth and by participants holding the marking with their lips. This research suggests that smiling does not lead to higher funniness ratings. Further research may try to find a different method to test the validity of the facial feedback hypothesis by presenting more up-to-date comics and manipulating facial expressions without participants' awareness. In a future study, to increase external validity and applicability, the participant makeup should be more consistent with that of the general population. There should be a broader population of participants, given the lack of ethnic and age diversity.

## Introduction

- Humans are emotional creatures.
- The facial feedback hypothesis states that the act of smiling releases "feel-good" neurotransmitters.
- Some researchers have found that people who smiled while reading comics found the comics funnier than people who did not smile while reading comics.
- Seventeen other researchers have explored this topic but found conflicting results.
- Hypothesis: Smiling increases reported humor ratings.



Teeth (smiling) condition



Lips (not smiling) condition

## Method

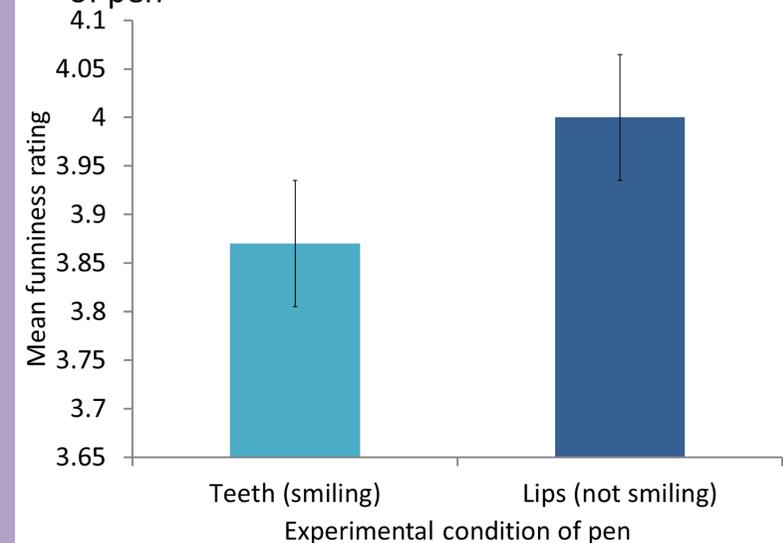
- A replication of the first study of *Inhibiting and Facilitating Conditions of the Human Smile: A Nonobtrusive Test of the Facial Feedback Effect Hypothesis* by Strack, Martin, and Stepper (1988) was carried out.
- Participants
  - 37 predominantly white female college undergraduate students
- Procedure
  - Participants were randomly assigned to one of two conditions.
  - About half of the participants were asked to put a marker in their lips and perform a series of tasks, including rating comics from Gary Larson's *The Far Side*.
  - The rest of the participants were asked to put a marker in their teeth and perform a series of tasks, including rating comics.
  - Participants rated the humor level of each of the four comics on a scale from zero to nine, zero being not funny and nine being very funny.

## Results

- Mean ratings of funniness and difficulty by position of pen are shown in Table 1 for both groups.
- The funniness ratings were not significantly different between participants in the two conditions.
  - Lips (no smile) condition,  $M(33) = 4.00$
  - Teeth (smile) condition,  $M(33) = 3.87$

Figure 1

Mean funniness by experimental condition of pen



## Discussion

- Participants in the teeth condition did not have significantly higher funniness ratings than participants in the lips condition.
- Given that seventeen other studies did not support Strack et al.'s hypothesis, it is not surprising that the hypothesis was not supported by these results.
- Further research is needed.
  - More current/recent comics should be used.
  - Participants should not be allowed in the study if they know the researchers.