



What Color Is Your Shirt?

The Effects of Priming on Rock, Paper, Scissors

John Muncy
Marshall University



Introduction

Literature on priming suggests that our memory consists of a large network of associations. Through everyday experiences, individuals form associations that later facilitate recall. For example, we often pair items that are commonly presented together such as “cat” and “dog” or “bread” and “butter.” If one of these items is presented, it is likely that we will recall the other item. Thus, the first item “primes” the association between the two items. Priming may impact our behaviors, even if we are not consciously aware of its occurrence (Bargh, Chen, Burrows, 1996; Higgins, Rholes, & Jones, 1977; Holland, Hendriks, & Aarts, 2005). The purpose of the present research is to examine the potential impact of priming on a simple game of Rock, Paper, Scissors. Specifically, we were interested in whether participants could be primed to respond with a specific answer.

Hypothesis

Asking participants to think about the color of their shirt will prime them with fabric and the letter “S” and will lead them to respond with “scissors” during the game.

Method

Participants

Participants included 40 Marshall University students. To be eligible for the study, participants were at least 18 years of age.

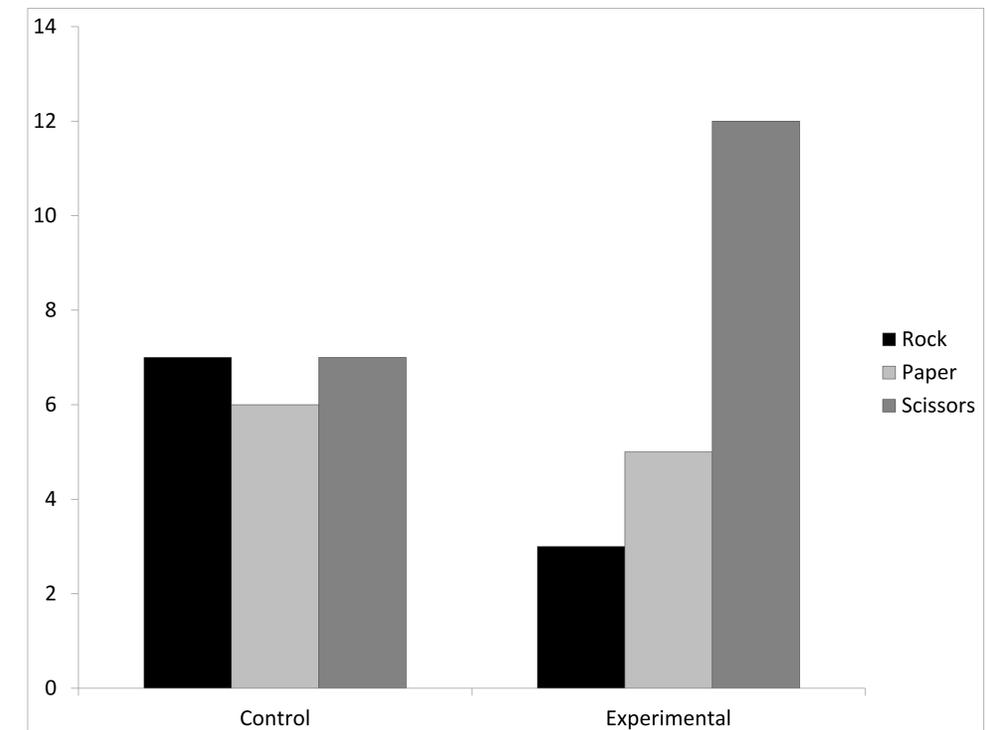
Procedure

Participants were randomly assigned to either a control or experimental group. Participants in the control group were asked if they would like to play a round of Rock, Paper, Scissors with the researcher, and they played a standard round after consenting. Participants in the experimental group were asked the same question; however, before these participants begin to play, they were also asked, “Before we begin, what color is your shirt?”

Results

First analysis: Participants were somewhat more likely to choose scissors as opposed to rock or paper when primed as opposed to when they were not primed, but the trend was not significant, $\chi^2(2, N=40) = 3.01, p = .22$.

Second analysis: Participants were more likely to choose scissors over all other options, grouped together, when primed as opposed to when they were not primed, a trend that approaches significance, $\chi^2(1, N = 40) = 2.51, p = .11$.



Discussion

While the findings were nearly statistically significant, confounds may be present. First, multiple participants were present during a few trials, and the researcher was not able to fully conceal the procedure. When one participant was in the control group and another in the experimental group, this still could have caused problems, possibly priming participants to choose a particular response. In the future, researchers should work to better conceal their methods and strive to obtain a larger sample size.

References

- Bargh, J.A., Chen, M., & Burrows, L. (1996). Automacity of social behavior: Direct effects of trait construct and stereotype activation on action. *Journal of Personality and Social Psychology, 71*(2), 230-244.
- Higgins, E.T., Rholes, W.S., & Jones, C.R. (1977). Category accessibility and impression formation. *Journal of Experimental Social Psychology, 13*(2), 141-154.
- Holland, R.W., Hendriks, M., & Aarts, H. (2005). Smells like clean spirit: Non-conscious effects of scent on cognition and behavior. *Psychological Science, 16*(9), 689-693.