



WHAT'S IN THE BOX? THE EFFECT OF NEGATIVE CORRECTIONS ON CHILDREN'S BELIEF IN MISINFORMATION



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INTRODUCTION

Research on misinformation correction has demonstrated a continued influence effect, which occurs when belief in false information persists even after correction (Johnson & Seifert, 1994). Although many effective corrective techniques exist to minimize belief in misinformation (e.g., retraction, refutation), none are able to eliminate belief in misinformation entirely. In fact, attempting to correct misinformation has been shown to have an adverse effect (i.e., reinforcing belief in misinformation), particularly when negative corrections, in which the statement is negated, are given to those not previously exposed to the information (Autry & Levine, 2012, 2014). Although misinformation correction studies seem to primarily focus on adults, many have demonstrated that misinformation effects extend to children as well, with preschool-aged children being especially susceptible (Bruck & Ceci, 1999).

The purpose of the current study is to extend the findings regarding negative corrections by testing whether unlicensed negation results in increased reliance on misinformation in preschool-aged children.

Utilizing an experimental task that manipulates exposure to misinformation and the presence of negative corrections, we hypothesized that when children are exposed to misinformation, negative corrections will reduce belief in misinformation relative to no correction. However, when not exposed to misinformation, negative corrections were expected to increase belief in misinformation, relative to no correction.

METHODS

Participants: A total of 47 children, 3 to 6 years old, participated in the experiment. The data of 12 participants were excluded due to incomplete trials, leaving 35 participants in the final analysis.

Materials: The experiment was displayed using an animated PowerPoint presentation which depicted eight colorful boxes, a teacher, and child characters in a classroom setting. Information regarding the contents of the boxes was presented auditorily.

Procedure: Each child completed eight trials in which a teacher character presented a colored box. Depending on the condition, a child character followed by providing misinformation regarding the contents of the box (e.g., there are marbles in the pink box) or no information. A second child character would then give a negative correction (e.g., there are not marbles in the pink box) or no correction. After the information was presented, the child was asked what they believed was inside and responses were coded based on affirmative mentions of the misinformation target word.



RESULTS

A 2x2 repeated measures ANOVA revealed:

1. A main effect of misinformation, $p < .001$, with greater affirmative mentions of misinformation when participants received misinformation compared to when they did not
2. A main effect of correction, $p = .041$, with greater mentions when participants received a negative correction compared to when they did not
3. An interaction between misinformation and correction, $p < .001$, in which the proportion of references to the misinformation target word was decreased when a correction was given in the misinformation conditions, but increased when negative corrections were given in the no misinformation conditions

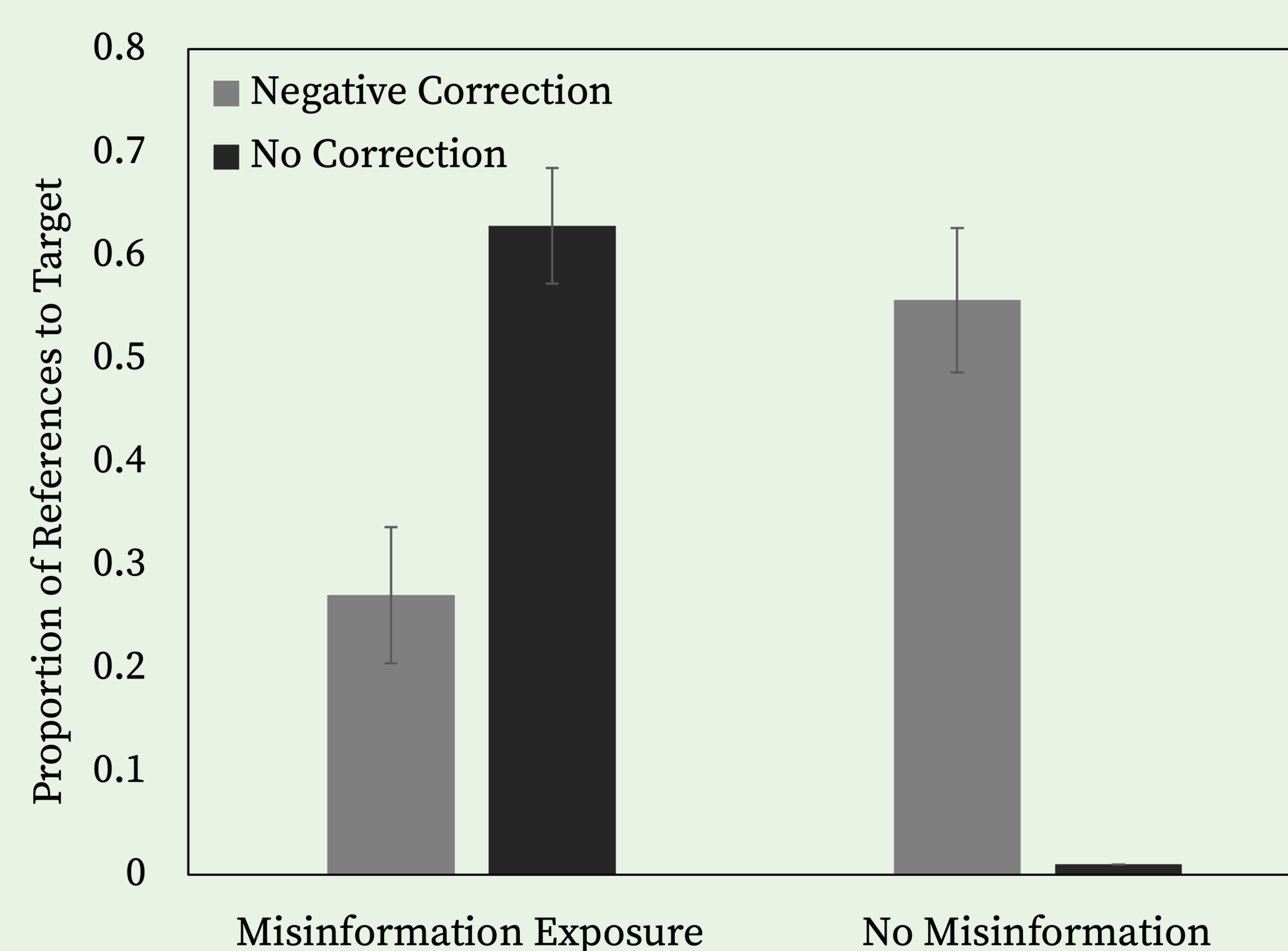


Figure 1. Mean proportion of references and standard error in the misinformation and no misinformation conditions.

DISCUSSION

When exposed to misinformation, preschoolers made fewer references to the misinformation when correction was provided, which suggests that negative corrections have the capacity to minimize belief in misinformation when given within context. However, when not exposed to misinformation, preschoolers made more references to the misinformation when negative corrections were provided, demonstrating that negative corrections may create or reinforce false beliefs when given out of context. These findings have significant implications for parents, schools, news media, and others interested in disseminating accurate information to audiences.