

Message Framing Changes Perceptions of Both Generic and Name-Brand Medication

Emily K. Jason, Kelly S. Clemens, and Andrew L. Geers



The University of Toledo | Emily.Jason@rockets.utoledo.edu

BACKGROUND

- The rising cost of health care is a challenge for the modern system of medicine; this can be managed in one way by the use of cheaper generic medicines (Orszag & Emanuel, 2010).
- Generic medications are 20-80% cheaper than brand-name rivals, while being biologically equivalent (Dunne et al., 2013).
- Despite this, patients report levels of misconceptions about the effectiveness, safety, and side effects of generic medications cross-culturally (Babar et al., 2010).
- Increased acceptance of generics may be fostered by an alteration of how these drugs are presented.
- A framing effect is produced when information is presented in terms of a loss (negative frame) or a gain (positive frame), while being mathematically equivalent (Tversky & Kahneman, 1992).
- This study aims to examine the way medication perceptions can be altered by the framing effect.

METHOD

Participants:

- Community participants ($N = 500$; $M_{age} = 24.57$, $SD = 7.34$) were recruited through Prolific.

Measures:

- Dependent measures were medication ratings evaluating effectiveness, safety, willingness to use, and recommended use for others.
- Participants were also asked about perceived certainty of ratings.

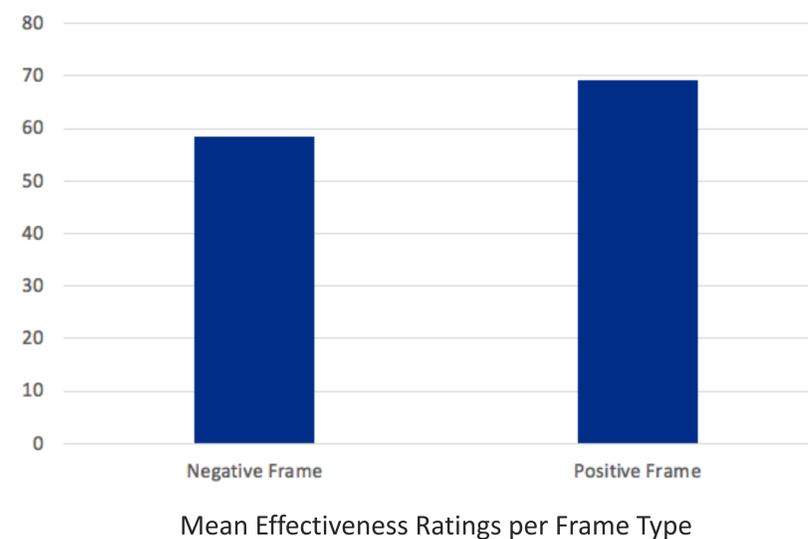
Procedure

- Participants viewed the framed statement and medication image first.
- Then, participants were asked to perform medication evaluation ratings.
- Next, participants described the certainty of their feelings about their evaluations.
- Finally, participants answered demographic questions.

METHOD

- The design of the study was medication type (generic or name-brand) by frame type (positive or negative).
- Statement tasks were presented in either a positive or a negative frame.
- Medications were presented as being either a name-brand or a generic allergy medication.
- The positive frame described a medication as being 74% effective, whereas the negative frame described a medication as being 26% ineffective.

RESULTS



- Evidence for the framing effect was found for both name-brand and generic medications.
- Participants in a negative frame had significantly lower medication effectiveness ratings ($M = 58.42$, $SD = 18.28$) than participants in a positive frame ($M = 69.24$, $SD = 14.05$).
- Additionally, a two-way factorial ANOVA demonstrated a significant framing effect on medicine effectiveness ratings, $F(1,497) = 87.51$, $p < .001$, $\eta^2_p = .15$.

DISCUSSION

- A framing effect was found such that frame type had a significant effect on participant medication ratings and willingness to use a product in the future.
- Despite mathematical equivalence, negative and positive frames were rated and perceived differently by participants.
- Socioeconomic status had no effect on the medication ratings regardless of medication type.
- This study did not aim to evaluate the mechanisms by which treatment ratings could be otherwise affected outside of framing effect.
- This study highlights the importance of message framing for low-risk treatments such as allergies.
- Future studies should continue to explore the specific conditions under which branded vs. generic medication status impacts treatment perceptions, including in high-risk treatments.
- The results of this study imply a certain conscientiousness required of healthcare providers to ensure patients are aware of the true medical effects of a medication and are not altered by the presentation of information.

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Abstract Submission

Message Framing Changes Perceptions of Both Generic and Name-Brand Medications

Jason, Emily K., Clemens, Kelly S., & Geers, Andrew L.

Department of Psychology

Message framing (i.e., a positive frame vs. a negative frame) can change treatment evaluations, perceptions of treatment effectiveness, and subsequent treatment choices. Additionally, generic medications, which are less familiar to patients, are frequently perceived as lower quality and less effective than name-brand medications, despite bioequivalence. Prior studies have yet to directly test the influence of message framing on generic versus name-brand medication perceptions. As framing effects can be more robust for novel stimuli, the framing effect may be of greater magnitude for generic medications than branded medications. Community participants ($N=500$; $M_{age}=24.57$, $SD=7.34$) read and evaluated either a generic or name-brand allergy medication, with the information presented in either a positive or negative frame. Results of a two-way factorial ANOVA demonstrated a significant framing effect on medicine effectiveness ratings, $F(1,497)=87.51$, $p<.001$, $\eta^2p=.15$. Negative-frame participants perceived the allergy medication as less effective ($M=58.42$, $SD=18.28$) than positive-frame participants ($M=69.24$, $SD=14.05$). Generic and name-brand designation had no effect on ratings, indicating the message framing alters perceptions of both types of medications. This study highlights the importance of message framing for low-risk treatments. Future studies should continue to explore the specific conditions under which branded vs. generic medication status impacts treatment perceptions.