



Twitter Posts, Gist, and the Perceived Risk of Using a Novel Recreational Drug

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Introduction

Individuals frequently encounter two types of information when evaluating the risk of using new recreational drugs: base-rate evidence describing the frequency of positive and negative outcomes, and anecdotal evidence describing positive and negative personal experiences. The present study evaluated the relative importance of both types of evidence when considered simultaneously. We predicted that the presentation of even one negative anecdote would have an effect on the key risk information (the 'gist') that subjects extracted from the statistical and anecdotal data. Self-generated twitter posts (tweets) and standard measures of perceived risk were used to test the latter prediction.

Methods

PARTICIPANTS:

210 university adults, ages 17 to 40 ($M = 19.93$); 62.1% female

MANIPULATION:

- **Condition I:** Base-rate information regarding the drug's effects
- **Condition II:** Base-rate information plus five negative and one positive anecdotal reports regarding the drug
- **Condition III:** Base-rate information plus three positive and three negative anecdotal reports
- **Condition IV:** Base-rate information plus five positive and one negative anecdotal report

TASK:

Twitter Post (140 characters or less)

"Having read information about Deplorax, create a tweet to your friends about the drug. Use the space below to create the tweet."

MEASURES:

Perceived Likelihood of Risk:

Sample item: "In your opinion, how likely are you to have a bad reaction the first time"; **Response scale:** 0% to 100% (in 10% increments)

Perceived Harmfulness

Sample item: "In your opinion, how much would you harm yourself if you... Use Deplorax ONCE OR TWICE just to see what it is like"; **Response scale:** (1) no harm to (5) very great harm.

Methods cont'd.

STIMULI:

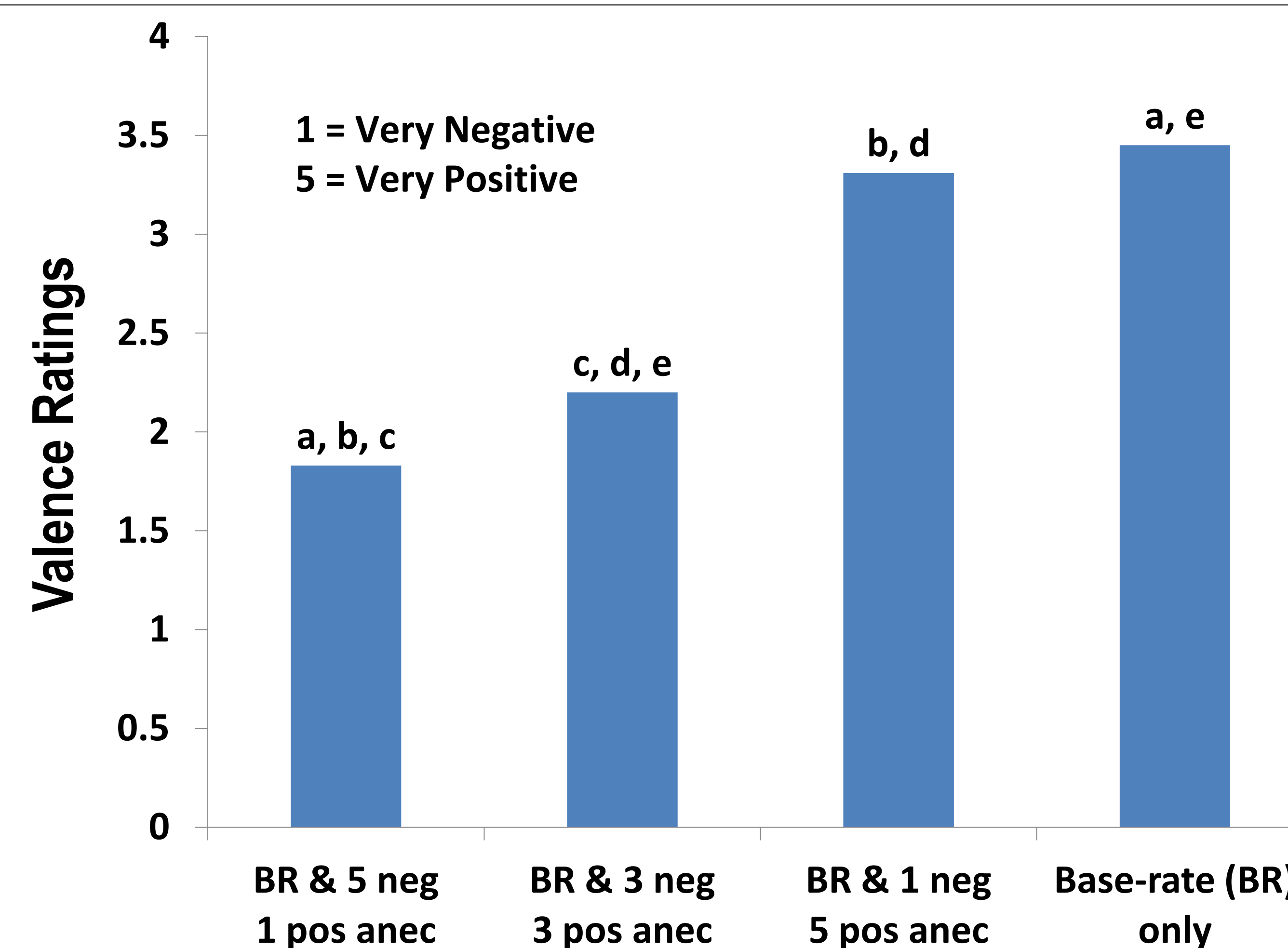
Base-rate: "Deplorax is a new, legal recreational drug A nationwide survey of 1,000 college students was conducted to investigate students' reactions to Deplorax...Nine hundred and fifty (that is 95%) of the college students in the national sample reported feelings of complete relaxation....while using Deplorax. Fifty (that is 5%) of the college students in the national sample reported experiencing a racing heartbeat, confusion, and paranoia while using Deplorax."

Positive Anecdote: "When I stumbled upon Deplorax on the Internet, I was curious to see if it lived up to the hype so I got Deplorax off the internet... I started feeling this warmth over my body, creeping over my back, then my legs start to buzz with energy. I had a very intense body high and I was nothing less than impressed... Music sounded amazing..."

Negative Anecdote: "...Almost immediately, I began to feel violently ill. My head began pounding, my vision distorted and I began experiencing extremely loud ringing in my ears. I stood for what seemed like an eternity listening to the increasingly loud ringing in my ears and my heartbeat.... I had no control over my thoughts and I felt as though I was slowly dying..."

Results

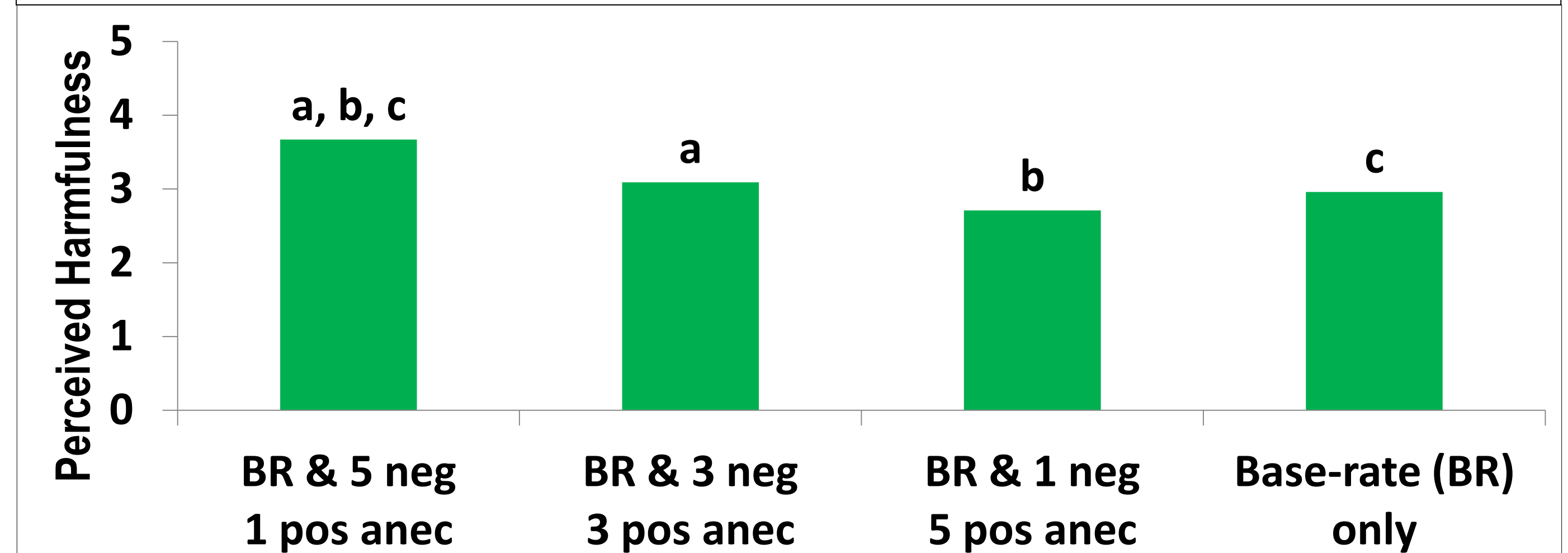
Figure 1. Valence of Self-generated Tweets ("gist") Regarding Deplorax



Note. Significant group differences are indicated by identical subscripts; BR = Base-rate.

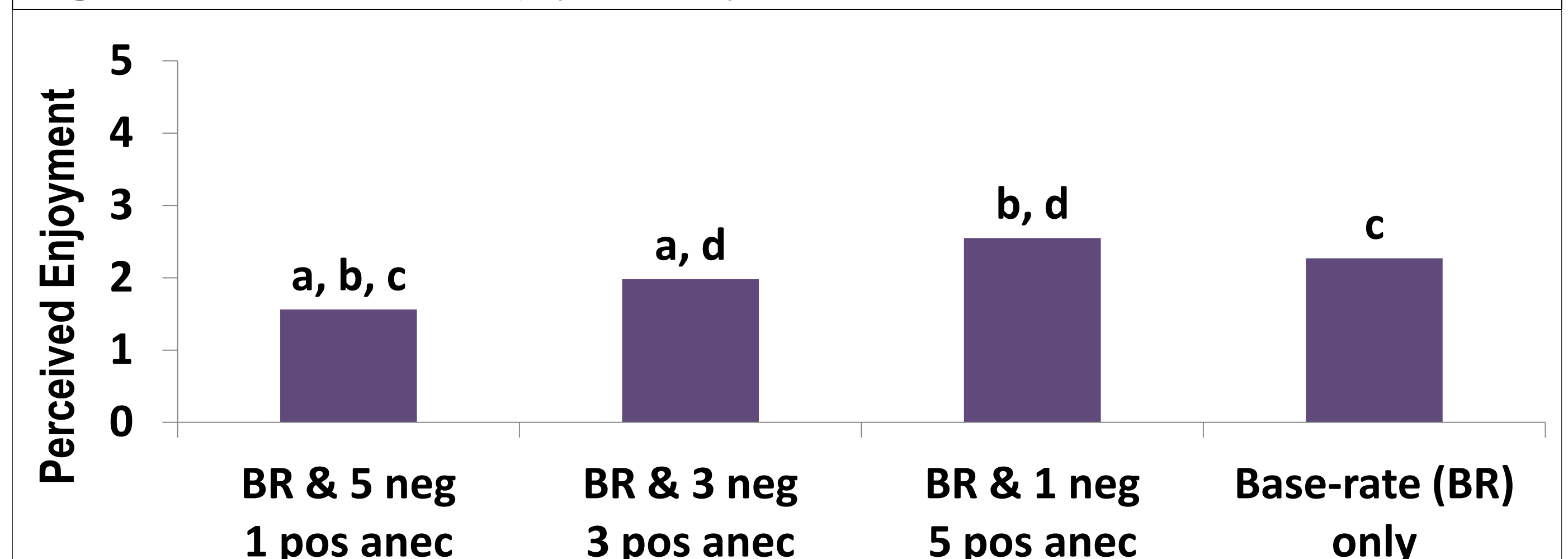
Results cont'd.

Figure 2. Perceived Harmfulness by Condition



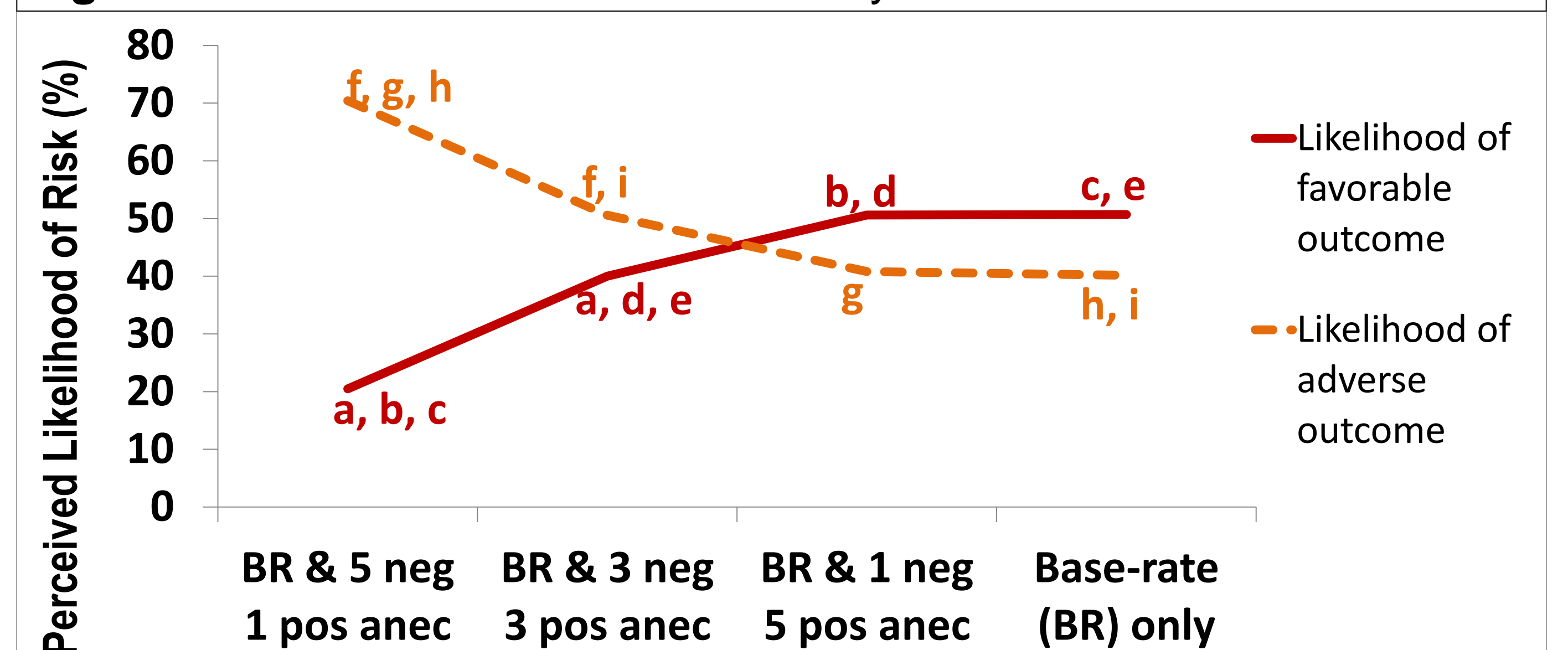
Note. Significant group differences are indicated by identical subscripts.

Figure 3. Perceived Enjoyment by Condition



Note. Significant group differences are indicated by identical subscripts.

Figure 4. Perceived Likelihood of Risk by Condition



Note. Significant group differences are indicated by identical subscripts.

Discussion

The current findings partially supported our predictions. Negative anecdotal evidence weighed more heavily in the assessment of risk than justified by base-rate evidence. In contrast, positive anecdotal evidence had no impact on risk assessments. These findings suggest that including negative anecdotes in social marketing campaigns that target drug use should increase campaign efficacy.

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