Experimental Evaluation of the Impact of Distraction on Consumer Understanding of Risk and Benefit Information in Direct-to-Consumer Prescription Drug Television Advertisements

Executive Summary

Division of Drug Marketing, Advertising and Communications
Office of Medical Policy, Center for Drug Evaluation and Research
Food and Drug Administration

and

Office of Planning
Office of the Commissioner
Food and Drug Administration

and

Office of the Assistant Secretary for Planning and Evaluation
Department of Health and Human Services

June, 2011

This research was funded in part by the Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services.
Executive Summary

FDA was interested in finding out to what extent people’s understanding of the risk information in direct-to-consumer (DTC) prescription drug advertising may be influenced by factors such as images, scene changes, words on the screen, and music that occur at the same time as an audio presentation of risk information. We chose to investigate three possible factors, not examined at length in past research, that could distract from or reinforce audio messages\(^1\): the presence or absence of superimposed text, the emotional (affective) tone of visual images, and the consistency of the visual images with the risk information. We tested whether these factors have a distracting or reinforcing effect on the understanding of the risk information needed for a patient to have an informed discussion with a health care professional.

Specifically, our research questions were:

- **Question 1:** Does superimposed text (SUPERs) that is consistent with the major statement facilitate risk comprehension?

- **Question 2:** Do visuals that vary in degree of positive tone influence viewers’ feelings toward the product?

- **Question 3:** Do visuals that vary in degree of positive tone influence risk comprehension?

- **Question 4:** Does the presence of risk-reinforcing SUPERs alter the effects of tonally positive visuals?

- **Question 5:** Do visuals that are inconsistent with the major statement interfere with risk comprehension?

---

\(^1\) Factors that have been studied at length include scene changes (e.g., Hoyer, Srivastava, & Jacoby, 1984) and music (e.g., Cassidy & MacDonald, 2007).
Question 6: Do visuals that are consistent with the major statement facilitate risk comprehension?

To answer these questions, we collected data from approximately 2,000 consumers over the age of 40 who answered an online survey. The sample contained equal numbers of men and women and equal numbers of people who had and had not been diagnosed with high blood pressure, the medical condition treated by the fictitious drug (Zintria) in the advertisement used in the study. About one-third of the sample reported having a high school diploma or less. Each consumer viewed one 75-second ad for Zintria amidst a pod of four ads and answered questions about it during the 20-minute experiment. The ad that each participant viewed varied in the visuals present during the major statement of the ad.

In summary, we found strong support for presenting risk information at the same time in text and in audio because doing so improves risk comprehension (Question 1). This finding is consistent with previous research\(^2\) and with standards maintained by the Federal Trade Commission.\(^3\) Sponsors could help ensure the effective communication of risk information in DTC ads by presenting the spoken risk concepts simultaneously in text. Furthermore, an increase in risk comprehension was not associated with any reduction in benefit comprehension. Because there does not appear to be a tradeoff between understanding the benefits and the risks, sponsors may feel more comfortable including prominent risk information in their ads.

---


Second, we found some support for the idea that the tone of visuals (i.e., degree of positive tone) used in DTC advertisements influences viewers’ feelings toward a product (Question 2). However, we found no support for the idea that the tone of visuals influences risk comprehension (Question 3). We believe this could have been because the way the study was implemented may have prevented the study participants from seeing a clear distinction between ads with different emotional tones.

Third, given that we found few effects resulting from variations in the tone of visuals, it was not surprising that risk-reinforcing superimposed text (SUPERS) did not alter the effect of tonally positive visuals (Question 4).

Finally, our fifth and sixth questions addressed the possible effects visuals about relevant risk or benefit information have when they are presented during the major statement (e.g., basic animations that suggest risks or benefits, bulleted text outlining the risks or benefits). The data did not support the hypotheses that informational visuals on the screen during the major statement would influence risk comprehension. We encourage further study on this issue.

This study made a clear contribution to our understanding of the role of visuals in DTC advertising. The study demonstrated that reinforcing audio-delivered risk information with consistent text during the major statement of an advertisement improves consumers’ risk comprehension and does not impede their comprehension of benefit. The results of this study will be helpful as FDA continues to encourage the truthful and nonmisleading presentation of prescription drug information.