## A Supplementary Test of Distraction in DTC Advertising Using an Implicit Measure, The Affect Misattribution Procedure

## **Executive Summary**

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## **Executive Summary**

FDA recently conducted a study on the effects of various distractions on consumers' understanding of risk and benefit information in direct-to-consumer (DTC) prescription drug television advertisements (ads; see DTC distraction study<sup>1</sup>). The DTC distraction study examined the effects of superimposed text, the emotional tone of visual information, and the consistency of the visuals with risk information during the summary of risk information (commonly called the major statement<sup>2</sup>) in a TV ad for a fictitious drug product. The study described in this report (the AMP study) was an additional study designed to supplement the DTC distraction study, using an implicit measurement approach (the Attitude Misattribution Procedure, or AMP) in addition to the more typical explicit measures used in the DTC distraction study to gauge the effects of visuals in DTC ads. In explicit measures, people report directly how they feel about something, whereas in implicit measures people complete a task that does not directly ask how they feel about something, but reveals their feelings in other ways. For example, when people rate an abstract picture (previously rated by other people as neutral) after seeing a pleasant picture, they are likely to rate the abstract picture as positive, even when warned not to let the pleasant picture affect their judgments of the abstract one (Payne, Cheng, Govorun, & Stewart, 2005).

The AMP study had four main research questions. The first research question (Q1) reflected the research questions of the DTC distraction study. Specifically, does the

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<sup>&</sup>lt;sup>1</sup> FDA. (2010). Experimental Evaluation of the Impact of Distraction on Consumer Understanding of Risk and Benefit Information in Direct-to-Consumer Prescription Drug Television Advertisements: Technical Research Report.

<sup>&</sup>lt;sup>2</sup> The summary of risks (major statement) is the portion of a prescription drug broadcast ad that contains a description of the product's most serious and most common risks in either the audio or audio and visual parts of the advertisement. See 21 CFR 202.1(e)(1).

emotional tone and consistency of the visuals presented during the major statement in a prescription drug TV ad influence outcomes such as how people feel about (1) the product (measured implicitly with the AMP and explicitly), (2) the perceived risk of the product, (3) the perceived safety of the product, and (4) how likely people are to seek more information about the product?

The remaining research questions were methodological in nature and concerned the usefulness of the AMP in studying research questions such as the one above with a general population online sample. The AMP is a cutting-edge procedure that has been used in academic psychological studies of strongly held attitudes. We used the AMP in a situation in which participants' attitudes were not previously held, but instead formed by watching a fictitious DTC drug ad. Our second research question (Q2) was, therefore, whether the AMP could be used when attitudes or emotions are formed by watching a TV ad moments before the AMP is administered. Our third research question (Q3) was whether the AMP could be administered successfully in a nonstudent, general population sample. And finally, our fourth research question (Q4) was whether the AMP could be administered successfully online.

To answer these questions, 306 participants over the age of 40 completed an online study. They were shown a 75-second ad for a fictitious high blood pressure medication. Participants were randomly assigned to see one of five versions of the ad from the DTC distraction study, which differed in the visuals presented during the major statement (that is, the visuals during the major statement were either a static logo, strongly positive emotionally, mildly positive emotionally, strongly consistent with the risk information, or strongly inconsistent with the risk information).

We did not find evidence that the emotional tone or consistency with the risk information of the visuals presented during the major statement influenced how people felt about the drug as measured by the AMP. We also did not find evidence that these visuals affected any of the explicit measures. These results mostly mirror those of the DTC distraction study. There was one difference between the AMP study and the DTC distraction study. Although the DTC distraction study participants in the strongly positive tone conditions felt more positively about the drug than those in the mildly positive tone conditions, we did not see this in the AMP study.

Our second research question (Q2) was whether the AMP can be applied to advertisements to address research questions like Q1. Unfortunately, because we did not see any differences among experimental conditions, we cannot give a definitive answer to this question. The fact that the implicit and explicit measures of how people felt about the product were closely related lends some support to the idea that the AMP may be used to answer questions of this kind.

Our final research questions were whether the AMP can be used with a general population sample and whether it can be administered online. We have some evidence that the AMP worked with our sample and online. Participants completed a short practice round of the AMP that was similar to previous studies that used the AMP (Payne et al., 2005), and the results of the practice round were similar to the results of these previous studies. However, more than half of the participants who started the study did not finish it, many of them stopping before they completed the AMP practice round, never even getting to the AMP test round. A substantial proportion of the people who quit the study, but then completed a follow-up survey, indicated that they quit the study

because of technical problems such as failure of the video to load or play properly. This is obviously a drawback to administering the AMP online. As technology improves, however, video loading time and other technological glitches may diminish. We did not find that participants in any one experimental condition quit the study more frequently than participants in any other condition, indicating that the experimental integrity of the design was most likely preserved.

The AMP study supplements the DTC distraction study by showing that, in addition to the explicit measures from the DTC distraction study, our manipulations of the visuals presented during the major statement did not have an effect on implicitly measured feelings about a drug. The AMP study also adds to understanding of methodological issues surrounding the use of the AMP. First, it appears that the AMP may be used in studies in which attitudes are formed during the study. In the AMP study, participants watched the ad only once; future research may benefit from showing the ad multiple times before administering the AMP to strengthen people's implicit attitudes about the product. Second, although there were technological problems with administering the AMP online, if these are overcome, it appears that people from the general population can complete the AMP online successfully. The AMP shows promise and with future refinements, its utility can be determined.