

# Maximizing Recall of Gruesome Images for Health Effects Advertising: An Experimental Investigation

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## **Abstract**

The objective of this case study was to experimentally manipulate the impact on arousal and recall of two characteristics frequently occurring in gruesome depictions of body parts in smoking cessation advertisements: the presence or absence of an external physical insult to the body part depicted; whether or not the image contains a clear figure/ground demarcation. Three hundred participants (46% male, 54% female; mean age 27.3 years,  $SD = 11.4$ ) participated in a two-stage online study wherein they viewed and responded to a series of gruesome 4-s video images. Seventy-two video clips were created to provide a sample of images across the two conditions: physical insult versus no insult and clear figure/ground demarcation versus merged or no clear figure/ground demarcation. In stage one, participants viewed a randomly ordered series of 36 video clips and rated how “confronting” they considered each to be. Seven days later (stage two), to test recall of each video image, participants viewed all 72 clips and were asked to identify those they had seen previously. Images containing a physical insult were consistently rated more confronting and were remembered more accurately than images with no physical insult. Images with a clear figure/ground demarcation were rated as no more confronting but were consistently recalled with greater accuracy than those with unclear figure/ground demarcation. Makers of gruesome health warning television advertisements should incorporate some form of physical insult and use a clear figure/ground demarcation to maximize image recall and subsequent potential advertising effectiveness.