



THE GOLDHABER WARNINGS REPORT



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ARE PICTORIALS IN WARNING LABELS REALLY EFFECTIVE?

We are all familiar with the old saying that “a picture is worth 1000 words.” But is this true with warnings and safety communications? The justification for the inclusion of a pictorial (or pictogram) in a U.S. warning label is typically that it will provide greater understanding of the warning for those who do not speak English at all or for those whose literacy may be low, estimated at about 1/3 of the U.S. population. It is also believed that pictorials may provide reinforcement in understanding to the verbal language in the warning, even for those with good to excellent command of the English language. Few would argue with the assertion that for a warning to be effective, it first must be noticed. According to warnings expert, Ken Laughery, “noticing a warning is a prerequisite (a necessary but not sufficient condition) for warning effectiveness.” He reports that the beneficial effect of salience features of a warning, such as the use of pictorials, “is predicated upon the psychological principle that human attention can be controlled by a stimulus in the environment.”

Despite the logic in the above argument for the use of pictorials, a careful review of the warnings literature published in the last 30 years reveals a different conclusion as to the real effectiveness of pictorials in warnings. For example, a 1989 study by Mayer and Laux found that the range of recognizing 16 common safety pictorials was from 0 to 100%. A 1997 study by Wilkinson designed to test whether pictorials demonstrating the correct (safe) behaviors for handling pesticides found that while pictorials made it “easier” for respondents to get the warning information, they did not significantly improve either their perceptions of the dangers of the pesticides or their actual engagement in appropriate behaviors. Davies reported similar findings in a study done in the UK in 1996. Davies found comprehension of 13 product-related pictograms to be very poor and that parents’ purchase decisions of these products had little to do with the warning labels’ design (including the presence of pictorials) but more related to how hazardous they perceived the product to be, independent of the label or its design.

Certainly, the above literature and many other similar studies should give pause to those who claim that simply adding a pictorial to a warning will improve its effectiveness. It may be, as Wogalter and his colleagues have stated, that a short training program may enhance a person’s ability to understand a pictorial intended for a warning label. Given the practicality of implementing such a program, especially among consumers, any warning containing a pictorial should minimally be tested on at least 50-100 persons (in the target audience for the product) and should not be used unless there is at least 90% comprehension of the pictorial.

Feel free to pass this newsletter on to any of your friends and colleagues and from all of us at GRA, a very Happy and Prosperous 2010.