

## The Influence of Pictorials on the Evaluations of Prescription Medication Instructions

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Nonverbal symbols such as pictorials are increasingly being recommended and used to convey warnings, risk communication, and safety-related information. When used to augment textual information, pictorials have been shown to capture attention while facilitating comprehension and memory. Pictorials may also be useful to persons who can not read printed verbal messages because of inadequate reading skills or unfamiliarity with the language used in the message. In addition, consumers generally believe pictorials are helpful and should be used as a means of conveying critical information.

One practical application of using pictorials to augment textual instructions can be found when depicting dosing and safety/warning information on pharmaceutical products. Research has consistently demonstrated that people want to be informed of the benefits and risks associated with pharmaceutical products, and pictorials are increasingly being used to communicate such information on medication container labels and other supplementary printed information.

To better understand consumer preference, prescription medication instructions (e.g., take with a glass of water, do not take at bedtime, etc.) which differed in textual and pictorial presentation format were evaluated. The instruction conditions were: (1) text-only, (2) pictorials-only, (3) fully redundant text and pictorials, (4) text with an incomplete set of corresponding pictorials (partial pictorials), and (5) no instructions (control). Results indicate that participants preferred the fully redundant text and pictorials format, rating it more effective, and easier to understand and remember. The data also show a strong preference for text-only compared to pictorials-only instructions. Furthermore, there was no difference between the text-only format and the partial pictorials format, indicating the belief that a complete absence of pictorials was just as effective as a limited set of pictorials. Dual coding appears to be advantageous only when fully redundant. The results identify implications involved with accompanying textual instructions with incomplete sets of pictorials.