

APPLICATIONS OF WARNING RESEARCH: CONSUMER, INDUSTRY AND FORENSIC ISSUES

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This panel session involves several speakers who will discuss several aspects concerning the relationship between warning research and application. The participants in this session will attempt to explore areas that future warning research could address. Panel members will consider consumer, industry and forensic perspectives in discussing directions of future study.

INTRODUCTION

There has been dramatic growth in warnings research in the last few decades. The research has used numerous methodologies to determine factors that influence warning effectiveness. The design factors delineated in warnings research include perceptual (color, size) and content (e.g., consequence information) characteristics. Research has also explored non-design aspects such as location and context. Moreover, research has uncovered moderating effects of person factors such as motivation (cost of compliance) and beliefs (e.g., hazard perceptions). Future research on the topic of warnings could go in a whole host of directions. One main issue for panel discussion will concern how existing and future warnings research can benefit safety.

Indeed, the main reason for warnings and conducting research on warnings is to increase safety. However, warnings are usually not the best solution for controlling hazards. Designing out or guarding against the hazard are better methods, in part because warnings are not totally reliable. Nevertheless, some hazards can never be completely designed out. For example, it would be difficult, if not impossible, to totally design out the possibility of electrical shock from a voltage transformer. While it may be possible to guard against most exposures to electrical shocks, guards are not always reliable and can sometimes be contravened. Thus warnings may be needed as a back up method for guards. Warnings should not be used as a substitute for good engineering design that can effectively remove or guard against hazards. Hazard and

risk analyses should be used to determine where and how weak links in product design which could lead to personal injury and property damage may be addressed.

While the main reason for conducting warning research is to increase safety, for the findings to have impact on safety, they must be incorporated in real-world applications. As the field begins to mature, researchers may want to take steps to advance the use of appropriate warnings in diverse applications. The panel members will explore this topic with an open invitation for the session attendees to be active in the discussion as it progresses through issues relevant to increasing application of warning design principles. Among the topics that may be addressed by the panel include: (a) writing second-level articles about good warning design for publication in trade and popular periodicals, (b) compiling and making available a collection of tips and tools for warning design on a WWW site, and (c) exploring topics in related risk-communication areas such informed consent, legal contracts, and population-risk messages.

Another main focus of the panel discussion will be on the differing perspectives and goals of the fields of marketing and safety. Sometimes this conflict can result in “watered-down” warnings. In the U.S., the legal system has brought to fore warning adequacy issues. In products liability cases, human factors professionals/ergonomists may be asked to render an opinion on whether the warnings available to the plaintiff(s) (i.e., the injured party) were adequate. Forensic work by human factors professionals can suggest better methods manufacturers can take to improve their warnings. In addition, the forensic work can suggest interesting research topics that might otherwise not be salient. Often the expert’s opinions may be partially based on research involving products environments, and situations that are different from those that occurred in the specific case. Thus, an issue for panel discussion may concern the extent to which warning research can be generalized to particulars.

Lastly, other topics may be discussed in the panel session. One concerns future expansion of the theory involved in warning processing. Several human information-processing models have been introduced in recent years, and these may undergo future development. Thus, where theory may go in modeling the processes involved may be an additional topic explored in this panel session.

RESOURCES

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