



displayed in a format that is dissimilar to the tasks being interrupted. On the other hand, experiment 2 suggests that the similarity of the interruption to the interrupted tasks may have less of an effect on performance when the operator is aware that she must recall several multi-system parameters after the interruption. The results from the second experiment also suggest that it would be best to warn the operator of an imminent interruption in this scenario.

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AN EVALUATION OF ALTERNATIVE DESIGNS FOR VARIABLE SELECTION LISTS

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Alternative designs for the selection of items from a list were evaluated using a Thurstone scaling technique. When making choices among alternative designs, the software designer often wants to know the magnitude of the differences among the designs. This poster demonstrated the use of this technique to help software designers make more informed decisions.

The data were obtained from a usability study of methods to extend list (menu) selection in the IBM*CUA Panel Design and User Interaction book (1987). Various methods for making single and multiple selections from lists were proposed and evaluated. Users learned how to select items from a menu for each method using either a pencil and paper survey (Experiment 1) or an online prototype (Experiment 2). In both experiments, participants were asked to choose the better set of designs from a pair. A Thurstone scaling procedure (Emory, 1976) was applied to the paired comparison data.

The Thurstone scaling helped to quantify the differences between the selection methods tested. This technique gives the designer the ability to consider the effects of design tradeoffs because the relative size of the differences among designs is uncovered. For example, in Experiment I, the most preferred single selection method, paired with one type of multiple selection (ms) method, was rated approximately twice as good as when it was paired with another ms method.

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DECIDING THROUGH DOING: THE ROLE OF SKETCHING IN TYPOGRAPHIC DESIGN

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INTRODUCTION

Current computer-based tools for document creation do not yet support and enhance the full range of traditional skills possessed by professional typographic designers. These tools' strengths lie in the latter stages of the process, that is, in the production aspects, but they provide only limited support for the early, design stages. Traditionally, the early, decision-making part of the design process has been executed through sketching using paper and pencil. Observations of contemporary professional designers indicate that even those who fluently use computer-based systems for implementing designs nevertheless use paper and pencil to sketch their initial exploration of design ideas. That designers choose the traditional medium for sketching strongly suggests that they are engaging in an activity that