Effect of Sma;; Dynamic Information Displays for Webs-Design on users' Reading Performance and Subjective Preference

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ABSTRACT

This research investigated that the effects of Chinese dynamic information design on subjects ’ comprehension and subjective preference. This research includes two experiments. The first experiment investigated the effects of speed, polarity, and Chinese typography on subjects ’ comprehension and subjective preference in three Chinese dynamic displays. This result of this research showed the speed had significant effects on subjects ’ comprehension and subjective preference. Subjects performed the worst comprehension when speed was setting at 300 wpm (words per minute) than at other speeds. Regarding the subjects ’ subjective comprehension, both speed and display type had significant effect on it. In addition, interaction between speed and display type had a significant effect on subjects ’ preference evaluating. When display type was set as leading, subjects showed better preference under 200 wpm; flash display under 200-250 wpm, and RSVP under 250 wpm. Regarding Chinese typography, subjects preferred Ming-type more than Kai-type and Li-type. The second experiment investigated the effects of speed, display position, and polarity on subjects ’ comprehension for dynamic display, searching performance for static display and subjective preference in different dynamic/static displays. This result of this research showed dynamic display and speed had no significantly effects on subjects ’ static search the performance, display position and polarity had significantly effects on subjects ’ static search the performance, while the display positions were left-static information and above-static information has high performance of searching. Dynamic/static polarity set at black-on-white/white-on-black and black-on-white/black-on-white has high performance of searching. In addition, interaction between dynamic display and display position had a significant effect on subjects ’ search performance. When display position set as above-static and below-static information, subject showed better search performance under flash display; leading display under left-static and right-static. In reading performance, dynamic display and display position had no significant effect on subjects ’ comprehension, speed and polarity had significant effect on subjects ’ comprehension. Subjects performed the worst comprehension when speed was setting at 250wpm than other speed. Dynamic/static polarity set at black-on-white/black-on-white has high comprehension. Regarding the subjects ’ subjective preference this result showed only speed had significant. In addition, interaction between dynamic display and speed had a significant effect on subjects ’ preference evaluating. When display type was set as leading, subjects showed better preference under 250wpm; flash display under 200wpm; RSVP under 150wpm.

Keywords : dynamic information, static information, comprehension, subjective preference.

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