

Preliminary usability testing with eye tracking and FCAT analysis on occupational safety and health websites

ABSTRACT

Many factors contribute to the design of a successful Occupational Safety and Health (OSH) website. In this study we assessed three OSH websites namely DOSH, NIOSH, and OSHA using eye tracking system and both subjective and moderator ratings. Eighteen subjects were asked to perform same tasks across the websites and the results reveal that overall usability score for DOSH, NIOSH and OSHA are 75%, 77% and 64% respectively. Eye tracking data together with user feedback has help reveal the cognitive process. Therefore, we can establish how the website display may or may not facilitate task completion by analyzing eye movement.

Keyword: User Experience Test (UET); Eye Tracking; Retrospective Think Aloud with Eye Movements (RTE); Feedback Capture After Task (FCAT); Concurrent Think Aloud (CTA); Occupational Safety and Health (OSH)