Cursor Control Device Characteristics

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Abstract

An analysis of cursor positioning may provide guidelines for improvements in cursor control. Four experiments addressed efficiency of cursor control devices (Mouse, Digitising Pen, Accupoint, Trackball). Participants moved a cursor leftwards, upwards or rightwards, positioning it in large or small targets situated in near or far space on the computer screen. Cursor coordinates were sampled every 5 ms. The number of submovements and the proportion of time spent in deceleration were analysed. Participants could not plan movements controlled by an Accupoint. Cursor trajectories were more variable in near space for detachable manipulanda due to potential cartesian coordinate system incompatibilities

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