On the Adequacy and Uptake of Keyboard Access Facilities for People With Motor Disabilities

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ABSTRACT
Modern operating system interfaces include a number of features designed to make keyboards easier for people with motor disabilities to use. However, previously little or no quantified data on physical difficulties with keyboards has been available. This paper describes the keyboard errors of twenty people with a motor disability, compared with a group of six people with no disability. This data is then used to assess the adequacy of the commonly available keyboard access facilities: Sticky Keys, Repeat Keys, Bounce Keys and Slow Keys. The results indicate that these do not address all the major problems, while Slow Keys was of very limited use among the group studied. One potentially useful new facility is proposed.

Finally, the usage of these facilities in day to day computing among the participants is examined. Failure to use a potentially useful facility was found generally to be due to ignorance of its existence and/or reluctance to alter a machine used by many people. One potential method of overcoming these barriers is suggested.

Keywords
keyboard, accessibility, motor disability, input errors, users

INTRODUCTION
There are many computer users with motor disabilities who find that the keyboard, while not ideal, is the fastest and most convenient input device for them to use.