

**To:** City Development

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Subject: Essential Evidence on a page: Stairs instead of escalators

Top line: Motivational posters to encourage stair use rather than escalators have been shown to be effective in increasing stair use. There is some evidence that males respond more positively to such messages than females.

Increasing physical activity is an international public health priority. The most effective interventions are likely to be those which can become part of the routine of daily living. A study, since replicated in various cities across the developed world, used a motivational poster placed at a choice point between escalator and stair use. Signs saying "Stay Healthy, Save Time, Use the Stairs" were placed in a city centre underground station where stairs (two flights of 15 steps) and escalators were adjacent. Observers recorded the number of men and women using the escalators and stairs on Mondays, Wednesdays, and Fridays between 8.30 am and 10 am over a period of 16 weeks. This motivational intervention doubled stair use during the intervention period (fig 1).

The study also showed that men and boys used the stairs more than women and girls both before and after the poster intervention, but there was no obvious explanation of this finding. Follow up interviews with 200 stair users or escalator users showed that motivational posters can change the behaviour of people who are not very active as not all those using the stairs were regularly active. The barriers to stair use were time, laziness, and effort, while the motivations for stair use were saving time and improving health. Women cited laziness as the key barrier to stair climbing and in comparison with men perceived stair climbing as requiring more effort.



Fig. 1 Choice point between escalator and stairs at central Glasgow underground station

Twelve weeks after removal of the posters stair use remained significantly higher than at baseline. There was, however, a downward trend suggesting a possible eventual return to baseline values. Several other studies have shown similar results.<sup>2</sup>

The study results led to the design and distribution of stair walking promotional posters throughout Scottish workplaces by the Health Education Board for Scotland. Within

Glasgow a new promotional campaign was developed using life size cut out cartoon characters placed at the foot of escalators, as posters on platforms, and as advertising cards on trains. These materials encouraged stair use and had straplines explaining the health benefits of small amounts of physical activity.

<sup>1</sup> Blamey, A., Mutrie, N., Aitchison, T. 1995 Promoting active living: increasing stair walking by motivational stimulus cues. *British Medical Journal*.311:289–90.

<sup>2</sup> Titze, S., Martin, B., Seller, R., Marti, B. 2001 A worksite intervention module encouraging the use of stairs and evaluation issues, *Preventive Medicine*, 46: 13-19.