Evaluating the Effectiveness of a Health Promotion Intervention in an Urban Population Regarding Stair Utilization

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PURPOSE: The purpose of this study was to assess the effectiveness of a stairwell intervention at Jefferson Station in Philadelphia, Pennsylvania. This study had two aims; 1) to determine if stair utilization increased during and after the intervention periods, 2) to understand the underlying factors related to stair and escalator utilization during the intervention. METHODS: The intervention was conducted at one stairwell/escalator bank between the hours of 11am and 1pm for three days a week for four weeks in September, 2016. We used six stair riser banners (5x48 in. removable banners) that were placed on 6 out of the 35 stairs each separated by 3 steps that were designed to be read as individuals climbed the stairs or escalator. The banners contained two health related messages. Baseline (no banners), intervention (banners present) and post-intervention (no banners) data was collected. Observations were conducted on Tuesdays and Wednesdays and interviews were conducted on Thursdays. RESULTS: A total of 1,719 (n = 1,719) individuals were observed and a total of 50 interviews were conducted over the 12 day/4 week study period. Stair utilization increased from baseline by 3% in male and 5% in female observees. Sixteen percent of those interviewed indicated they changed behavior (took the stairs) because of the motivational signs that promoted healthy behaviors. CONCLUSION: While changes in stair use declined after the intervention, this simple, low-cost model was feasible and with modifications has the potential to change behaviors in thousands of commuters at Jefferson station if implemented Station wide.

Statement of Disclosure: Funding provided by Thomas Jefferson University, College of Population Health, Philadelphia PA