

Move-It 動起來: A cluster-randomised digital worksite exercise intervention in China: outcome and process evaluation

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Introduction: Developing strategies to promote exercise is a major health priority in China. Integrating exercise within the working day may benefit employee health, although workplace interventions are less commonplace in China. We evaluate the outcomes and processes of a video and web-based worksite exercise intervention for sedentary office workers.

Methods: Employee outcomes were assessed in a 2-arm cluster-randomised wait-list control trial (intervention INT: n=143, wait-list control WLC: n=73). Eligible clusters were two sites of a major organisation in China randomly allocated to group (Int: Guangzhou, WLC: Beijing); eligible participants were site employees (n=490). A theoretically-informed digital workplace intervention (Move-It 動起) involving a 10-minute Qigong exercise session (video demonstration via website) was delivered twice a day at set break times during the working day for 12 consecutive weeks. Process evaluation used the RE-AIM framework to explore reach, effectiveness, adoption, implementation and maintenance. Data from employee exercise logs, six focus groups with employees and managers, and analysis of documents including employee profiles and promotional materials were examined.

Results: Employees' physical activity increased from baseline to post-intervention in both the intervention and control group, though the magnitude of change failed to reach statistical significance. There were no changes in weekday sitting hours or work performance. The intervention had wide reach and was successfully marketed to all employees with good uptake. The participatory approach increased perceived organisational support and enhanced adoption. The intervention was implemented broadly as planned, with employee enthusiasm for long-term maintenance but no concrete plans in place at study sites.

Discussion: Qigong worksite exercise intervention can be successfully delivered to sedentary office workers in China using video and web-based platforms. It may increase physical activity and does not adversely affect perceived work performance. The study highlights the complexity of conducting health promotion research in real-world organisational settings.