Work Package 3.1 (WP3.1) – Development of an audit tool for the outdoor environment that will identify options for falls prevention

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Research Questions

1. Can we produce a tool that reliably (test-retest and inter-rater reliability) identifies aspects of the environment that have caused people to fall, or fear falling?
2. Is such an audit tool (a) easy to use and (b) useful for OTs and related professionals?
3. Can such a tool also identify features of the environment that offer safety and assist in avoiding falls?
4. What features best support older people’s confidence to go outdoors without falling?

Research Methods

1. Produce a draft audit tool, using investigators’ current knowledge and experience (e.g. Millington et al., 2009; SPARColl experience) and findings from WP2.
2. Refine audit tool by undertaking accompanied walks with 5 older participants in each of 4 areas, (either identified as ‘hotspots’ in WP1, or typical of different kinds of urban environment that are of interest, identified through WP2). Possible use of Personal Projects methods as a way into meaningful audits for different scenarios.
3. Use mailing lists and networks to get feedback from OT’s on the draft audit tool: have we missed anything or got anything wrong? (Possibly include workshop with falls practitioners as well for this)
4. Trial the final audit tool with auditors (OTs plus RAs) Replicate audits in same locations (places known to be associated with falls and places not high risk) for inter-rater reliability; test-retest reliability.
5. In parallel with this, develop exploratory conjoint analysis questionnaire to explore (a) what aspects of the environment most deter or reassure older people in deciding to go out and (b) specifically what best reduces fear of falling (min 30 participants, ideally from falls clinics). Maybe trial this in internet survey to explore how good a response is possible and what the participant profile is.

Outputs

1. A usable and reliable audit tool for use in future studies to evaluate person-environment fit in relation to outdoor falls and
2. A tool to identify interventions most likely to be effective in preventing falls.
3. Academic papers on the draft audit tool and how it was developed and on what actually seems most important in reducing fear of falls in older people.
Going Outdoors: Falls, Ageing & Resilience

Outputs (continued...)

(There are some bigger questions here that we need to discuss across Go Far Investigators. For example, if it is more active older people, those who go outdoors more often, who fall more often, does it matter? Does the rate of falling per time spent (or distance travelled) vary? If being active an getting outdoors is generally good for health, but exposes one to more risk of falls and negative consequences in old age, do the benefits of getting outdoors and being active outweigh the consequences, or vice versa? What metrics best capture that: cost of healthcare; longevity; QUALYs etc?)

Background

Lawton and Nahemow (1973) developed an Ecological Model of Ageing that introduced the concept of environmental press – the differential effect of the environment on behaviour that relates to the capabilities and characteristics of the individual. Building on this and the transactional relationship between people and place, models of environmental fit (Lawton, 1980; Kahana, 1982; Carp and Carp, 1984) have been developed to describe how the environment can become a limiting factor on people’s mobility as their functional capabilities change in old age (Iwarsson, 2005). Related to this, the concept of environmental support draws on the work of Kelly (1955) and Little (1983) to focus on environmental quality in relation to desired activities, especially for an ageing population. Environmental supportiveness is seen as the extent to which the environment supports or hinders physical activity (Sugiyama and Ward Thompson, 2007a; 2007b). As a concept, it links environmental attributes with people’s perceptions of them in relation to their own, idiosyncratic desired and necessary activities.

References


Kelly, G. 1955. The psychology of personal constructs. New York: Norton


