

## **Do Postural Stability Instructor Led Classes Affect the Functional Ability of Female Care Home Residents?**

**Groombridge, M.<sup>1</sup> & Watt, P.<sup>1</sup>**

<sup>1</sup>School of Sport and Service Management, University of Brighton, Eastbourne, UK.

Email: [M.Groombridge1@uni.brighton.ac.uk](mailto:M.Groombridge1@uni.brighton.ac.uk) LinkedIn: [www.linkedin.com/in/megan-groombridge-ab3054153](https://www.linkedin.com/in/megan-groombridge-ab3054153)

The maintenance of functional ability is of particular importance for the elderly. The World Health Organisation (WHO) have stated that the greater cost to society is not the adoption of this functional ability but rather the detrimental effects to public health as a result of failing to attributable to inadequate investment (Organization, 2015). The increased prevalence of medical conditions, lower functional ability and lack of activity of nursing home residents greatly increases the severity of such falls, with a tenfold increased likelihood of significant injury (Cooper, 2017). Given these conditions are all commonly associated with an inactive lifestyle (Health, 2001), even small gains in functional capacity through exercise can result in significant improvements in functional performance and thus quality of life (Singh, 2002). The purpose of this study was to see if Postural Stability Instructor (PSI) led classes affected the functional ability of female care home residents. Six female care home residents (age 92±4 year) took part in a 5-week control period, in which they maintained their regular routines, followed by a 10-week Falls Management Exercise (FaME) based exercise intervention which was held twice a week for 1-hour. The resident's functional ability was measured using Sit To Stand (STS) time, Timed Up and Go (TUG), 180° turn and functional reach. These measurements were taken pre-control, post-control, mid-intervention and post-intervention. In addition to this participants completed a confidence in balance questionnaire (ConfBal) and an interview took place with the care home manager at the end of the intervention. The results showed no statistically significant difference between the intervention and control periods. The mean differences showed that participants STS and TUG times were quicker after the intervention compared to the control, by 0.17seconds and 4.47seconds respectively. More steps were taken in the 180° turn after the intervention, with a difference of 1 step, and functional reach was 3cm greater after the intervention. Likewise, the ConfBal showed no significant difference when carried out by the residents or the care home manager. The main themes identified in the interview were 'physical functioning' and 'mental state'. To conclude although in this study a 10-week PSI intervention in a care home had no significant effect on the resident's functional ability or confidence in balance, the interview with the care home manager did identify a perceived impact. This study was limited as it only used a small sample size, used a community based intervention and was of relatively short duration. However, it has provided a base for future research into the effectiveness of functional ability focused exercise interventions in care homes as well as the use of the most appropriate and sensitive tests.