HEALTHY GRANDPARENTING

The impact of non-residential grandchild care on physical activity and sedentary behavior in people aged 50 years and over.

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ABSTRACT OF THE RESEARCH

Today’s society is characterized by increasing life expectancy and an expanding number of middle-aged and older adults. As a result, grandparents play a larger role in the lives of their children and grandchildren. Flemish grandparents are often actively involved in looking after and caring for their grandchildren. Research shows that this can have an impact on their health and lifestyle, but the specific impact of providing care for grandchildren on grandparents’ physical activity (PA) and sedentary behavior (SB) levels has not been studied before. Therefore, an observational follow-up study was conducted to examine and compare both energy-expenditure related behaviors as well as body composition and health-related quality of life among caregiving grandparents, non-caregiving grandparents and non-grandparent peers. An additional purpose was to better understand the underlying factors and mechanisms of grandparents’ PA and SB during the provision of care for their grandchild(ren). To this end, a qualitative study using focus group discussions was set up.

A first study embedded in this dissertation compared the PA and SB levels of grandparents taking care of their grandchildren on a regular basis against grandparents who do not frequently care for their grandchildren as well as people aged 50 years and over without grandchildren. As it turned out, grandparents involved in regular caregiving for their grandchildren obtained higher light-intensity PA levels and lower SB levels than the other two grandparental subgroups. Moreover, these regularly caregiving grandparents were found to have a more favorable body composition and quality of life than their peers without grandchildren.

Subsequent research within this dissertation also showed that the amount of time grandparents spent on grandchild care was positively related to their PA and SB levels. In particular, grandmothers showed more light-intensity PA and less SB when spending more time on the provision of grandchild care. Moreover, the third study of this dissertation found that grandparents were more active and less sedentary on days when they provided care for their grandchildren than on days without such caregiving tasks. More pronounced within-subject differences regarding more time spent in light-intensity PA and less time in SB were demonstrated when the specific caregiving moment was compared with a non-caregiving moment (i.e., similar time span on the non-caregiving day). This finding suggests that the observed differences could possibly be attributed to the caregiving activities related to grandchild care. A lower amount of time spent in moderate-to-vigorous PA at the care moment compared to the non-care moment does show that providing care for grand-children also has a negative effect on grandparents’ PA levels. However, it appears that grandparents may be compensating for this outside the care moments since no differences were found regarding the level of moderate-to-vigorous PA when comparing the care day with the non-care day.

In addition to this quantitative research component, a considerable number and different sample of grandparents regularly looking after their grandchildren participated in the focus group discussions. These discussions taught us that a combination of several factors play a role in grandparents’ PA and SB levels during the provision of care for their grandchildren. Personal factors, such as grandparents’ physical health and perceptions of their role as a grandparent as well as grandchildren’s characteristics (e.g., their age and sex), the caregiving environment and the available facilities that encourage PA all play a part in this.

In summary, this PhD research on healthy grandparenting shows that looking after and caring for grandchildren is associated with more PA and less SB in grandparents taking on this role.
Consequently, grandparenthood, and more specifically the regular provision of care for grandchildren, may contribute to an active and healthy lifestyle at a more advanced age. The insights and knowledge gained from this project regarding the different factors that influence grandparents’ PA and SB levels while caring for their grandchildren can be used in view of future interventions to encourage grandparents towards a healthier lifestyle.

CURRICULUM VITAE

Marie Vermote (°29/08/1995) graduated (magna cum laude) in 2018 as a Master in Physical Education and Movement Sciences at the Vrije Universiteit Brussel (VUB).

In 2019, she was granted a PhD Fellowship for fundamental research by the Research Foundation Flanders (FWO, 1134020N). Starting in 2020, Marie carried out her joint PhD research activities within the Healthy Grandparenting Project under supervision of Prof. dr. Eva D’Hondt and Prof. dr. Tom Deliens from the Vrije Universiteit Brussel as main host institution (Department of Movement and Sport Sciences, MOVE research group) and under supervision of Prof. dr. Benedicte Deforche at Ghent University as partner institution (Department of Public Health and Primary Care, Health Promotion research group).