INTERGENERATIONAL PHYSICAL ACTIVITY: EFFECTS OF A THREE-MONTH INTERVENTION BRINGING TOGETHER OLDER ADULTS AND ELEMENTARY SCHOOL CHILDREN

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INTRODUCTION

For the first time in history, children are projected to have a shorter life expectancy than their parents (Olshansky et al., 2005). Besides, older adults are the less active population group (Sun et al., 2013). Intergenerational physical activity (PA) has the potential to increase PA and quality of life (QoL) among those two age-groups but research in the field is still very limited (Flora & Faulkner, 2007). Accordingly, the aim of this study was to examine the impact of an intergenerational PA intervention on self-reported PA and Qol among older adults and elementary school children.

METHOD

At baseline, two intergenerational groups were formed (Table 1): 11 older adults (SEN1) and a class of 18 preschool children (PRECHILD); 9 older adults (SEN2) and a class of 13 primary school children (PRICHILD). Those groups took part in a three-month intergenerational intervention including one weekly session of PA practiced in the school context. Assessments were performed before (T0), during (satisfaction level), after the intervention (T1) and after a three months' follow-up period (T2). PA and Qol were respectively assessed with the QAPPA and the SF-36 among older adults, and with adapted versions of the PAQ-C and the AUQUEI among children. Older adults' physical fitness was also assessed with the SFT battery test.

RESULTS AND DISCUSSION

Participation rate was relatively high in both groups during PA sessions (Gr1: 81.48% older adults and 93.21% children; Gr2: 83.33% older adults and 91.45% children). At T1, Only 1 older adult (Gr1) dropped out of the study, as 9 children (group 1) and 6 children (group 2) dropped out due to the failure of the parents to complete and return the children's questionnaires. Among seniors, preliminary results of the SFT exposed significant improvements of the upper limbs strength ($p<0.05$) and non-significant improvements of the mean mental and physical health scores of the SF-36 in both groups. Among children, no significant improvements of the PA level were observed in both age groups. Satisfaction questionnaires indicated that the intergenerational PA program

Table 1: Participants characteristics

Children	Baseline (T0)		Follow-up (T2)	
	PRECHILD (n = 13) mean ± σ	**PRICHILD** (n = 18) mean ± σ	**PRECHILD** (n = 6) mean ± σ	**PRICHILD** (n = 9) mean ± σ
Age (years)	4.85 ± 0.38	7.17 ± 0.38	4.86 ± 0.38	7 ± 0.17
Gender (% Female)	30.77	50	28.57	44.44
Senior adults	**Baseline (T0)**		**Follow-up (T2)**	
	SEN1 (n = 11) mean ± σ	**SEN2** (n = 9) mean ± σ	**SEN1** (n = 10) mean ± σ	**SEN2** (n = 9) mean ± σ
Age (years)	63.91 ± 7.62	68.67 ± 7.25	64.3 ± 7.92	68.67 ± 7.25
Gender (%	81.82	88.88	80	88.89

was well adapted, accepted and appreciated by all participants. However, only few of them reproduced the PA games performed during the intervention outside of the program context.

CONCLUSIONS

Intergeneration PA could be considered has a promising PA promotion approach. This study pointed out the physical, social and psychological benefits that intergenerational PA can lead to. However, methodological issues still need to be overtaken in order to provide evidence-based statements and disseminate intergenerational PA on a broader scale. Further analysis of the educational process would also bring a clear added value to the research in the field.

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