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Aging in the Information Age: An Ethnographic study of Video Gaming in Canadian Retirement Centres

Project Summary

This research explored the use of sport-based video games (or 'exergames') in activity programs for older persons. In recent years, games like 'Wii Bowling' for the Nintendo Wii gaming system have become popular in seniors' centres in Canada, among other countries. The objectives for this research were as follows:

1. To examine ways in which older persons engage with 'exergames' in seniors' centres.
2. To identify the perceived benefits and drawbacks of 'exergaming' according to both older persons and staff members employed at seniors' centres.
3. To inform debates in academic literature on how and why people utilize devices like the Nintendo Wii in a time of: a) proliferating technologies (i.e., the 'information age'); and b) changing demographic trends (i.e., 'population aging').
4. To communicate study results with seniors' communities (e.g., participating retirement centres).

The main conclusions arising from this research are as follows:

1. That sport-themed video games like Wii Bowling are generally viewed as beneficial, mainly in that they call to mind 'real' forms of sport participation (e.g., 'real' bowling) and are potentially conducive to social engagement and (moderate) physical activity.
2. That these same technologies also bring challenges for seniors. First, since games like Wii Bowling are 'simulation' games (i.e., bowling movements are physically acted out) they raise health and safety concerns (e.g., over falling, injury). Second, the interactive nature of these technologies is unique compared to 'older' media; challenges and at times frustration arise in developing 'new media literacies' – which is to say in learning how to make sense of on screen messages and properly handle media hardware at the same time.
3. The presence of 'exergames' in particular, and the growing presence of technologies in seniors' centres in general, creates challenges for staff members as well. This is true mainly in that staff members need to develop new media literacies of their own in order to teach/oversee gaming activities.

Research methods

The research methods employed in this study including the following:

1. Participant observation at three retirement centres employing 'exergames' as part of their activity programming in eastern Ontario. This involved recording field notes on: the settings in which exergaming took place; the types of games that were played; the number of participants involved; and the interactions between participants, between participants and gaming systems, and between participants and seniors' centre staff.
2. Semi-structured interviews with seniors (n=8) involved in 'exergaming' and with staff members (n=9) devising/overseeing such activities (a fourth seniors' centre was involved at this stage). Interviews with both groups included questions on (among other things): 'exergame' experiences; views on the

benefits and drawbacks of (for example) Wii Bowling; and the ways these activities fit in to activity/social programming in general.

3. Analyses of relevant materials produced by or pertaining to the participating seniors' centres (e.g., websites, videos, activity schedules).

Research results

As suggested above, the findings from this research can be organized into three general themes:

- **Theme 1: Social/Physical Engagement**
Physical activity in general was valued at the participating seniors' centres – e.g., for its potential health benefits and for its ability to bring residents together. Likewise, technologies in general were said to be increasingly prominent in seniors' centres, due in part to a 'new generation of seniors' that are technologically curious and that have used technologies in their past work/leisure experiences. 'Exergaming' takes place at the intersection of these trends: games like Wii Bowling were viewed as tools that can potentially promote social and physical engagement among older persons. This is likely the reason sport-based video games have grown popular in seniors' communities in recent years; one staff member said that she does not know of a seniors' centre that does not use the Wii.
- **Theme 2: Challenges for Seniors**
At the same time, using these new technologies does not come without challenges. Given that 'exergames' generally involve sport simulations (e.g., bowling activities are fully acted out), they create health and safety concerns – e.g., pertaining to falling while playing. Furthermore, though seniors may be familiar with technologies in general, the interactive nature of exergames in particular is quite unique. The need to (for example) follow directions on screen while manipulating media hardware and acting out a sporting manoeuvre all at the same time at times proved difficult. In other words, new media bring the challenge for older persons of developing 'new media literacies'.
- **Theme 3: Challenges for Staff**
Finally, staff too needed to be versed in using new technologies. This was said to be a challenge at times in that staff members sometimes lack experience using gaming systems like the Wii or in that there can be limited time for training around this issue. Some participants suggested that 'new media literacies' among staff is and will continue to be a general concern for seniors' centres as technologies become ever more prominent in retirement settings.

The main limitation related to these results is the size of the study sample. Future research might extend the methodological protocol used here to other seniors' centres/retirement communities, or might employ methods that allow for a wider pool of participants. This research also did not elicit views from seniors choosing not to engage with 'exergames' – a potential matter for future research also.

Policy implications

At a time when governments at various levels are concerned with promoting 'active aging' (e.g., see the 'Seniors Strategy' outlined in the report for the Ontario government entitled 'Living Longer, Living Well') and when organizations/institutions such as seniors' centres are devising activity programs aimed at keeping seniors active as well, this research provides initial indication that sport- and exercise-themed technologies are often viewed as tools for promoting social engagement and (moderate) physical activity.

That said, 'exergames' bring challenges as well, both in that they give rise to some of the same health/safety concerns that 'real' sports do and in that they require unique media literacies, as described above. Staff members partaking in this research were asked for their recommendations regarding technology-based

activity programming for older persons. Recommendations relevant to these challenges included: the need for patience and personalized instruction in developing media skills (or ‘literacies’) among older persons; the need to ensure that those leading activity programs have the time/training to use ‘exergames’ themselves; and the need to avoid negative stereotypes pertaining to later life (e.g., that older persons are inherently disinterested in technologies). In considering these implications, the above noted limitations to this research should be kept in mind.

Next steps

Possible next steps to follow from this research include:

- Expansion of this research to include the perspectives/experiences of a greater number of participants.
 - Research focused mainly on the views of older persons choosing not to use sport- and fitness-themed technologies.
 - Further consideration of how experiences of sport/fitness and (new) media are shaped by contextual circumstances – for example, the experiences of older persons in public vs. private retirement centres/communities.
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Key stakeholders and benefits

Potential interested parties include:

- CARP (formerly the Canadian Association of Retired Persons)
- Active Living Coalition for Older Adults (ALCOA)
- Ontario Ministry of Tourism, Culture and Sport
- Ontario Seniors’ Secretariat