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# Defeating the boss level ... exploring multigenerational gaming experiences

## Editorial

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### Abstract:

### Introduction:

Video games straddle both the twentieth and twenty-first centuries, the former been the place holder in history of this entertainment medium and as videogame history illustrates throughout the decades of the late twentieth century a medium which is accessible to all citizens and spheres in society. Recent statistics published by the AARP organisation in the USA report older adults (50+ years) play videogames on a daily basis, with women in particular engaging with this medium. In contemporary society AARP reports that older gamers do not seek information, or assistance from their children or grandchildren but instead look to learn about new games via multiple channels, social media platforms and from various smartphone apps (Kakulla, 2019).

The Entertainment Software Association (ESA), note in their 2019 analysis how 65% of American adults play videogames, with smartphones (60%) been the most preferred device, followed by a PC (52%) and a specific game console (49%). Overall, the casual game genre is the most preferred type of games with 71% of respondents playing, followed by Action (53%) and Shooter (47%) (ESA, 2019). The ESA note the average age of a gamer is 33 years, and have been playing for fourteen years, while the average age is 34 years for a female gamer and 32 years for a male gamer (ESA, 2019)

For different societal generations (e.g. Baby Boomers, Gen X, and Millennials) the ESA (2019), have presented various information surrounding gaming preferences (see Table 1), based on gender, and digital device. However, it is unclear how they have decided the age categories for the respective generations and for Baby Boomers, they do not include older baby Boomers who in 2019, turn 74 years. Furthermore, for Generation X, it seems the report (ESA, 2019) is including/merging Millennials into the lower-end of Generation X.

Table 1 displays the gaming demographics, preferences and digital devices (ESA, 2019)

<b>Generation</b>	<b>Gender</b>	<b>Age range</b>	<b>Favourite Genre(s)</b>	<b>Favourite Game(s)</b>	<b>Preferred device</b>
Millennial	Male	18-34	<ul style="list-style-type: none"> <li>• Action</li> <li>• Shooter</li> <li>• Sports</li> </ul>	<ul style="list-style-type: none"> <li>• God of War</li> <li>• Madden NFL</li> <li>• Fortnite</li> </ul>	Game console
	Female		<ul style="list-style-type: none"> <li>• Casual</li> <li>• Action</li> </ul>	<ul style="list-style-type: none"> <li>• Candy Crush</li> <li>• Assassin's Creed</li> <li>• Tomb Raider</li> </ul>	Smartphone
Generation X	Male	35-54	<ul style="list-style-type: none"> <li>• Sports</li> <li>• Racing</li> <li>• Shooters</li> </ul>	<ul style="list-style-type: none"> <li>• Forza</li> <li>• NBA 2K</li> <li>• Call of Duty</li> </ul>	Smartphone
	Female		<ul style="list-style-type: none"> <li>• Casual Games, including Puzzle and Classic Arcades</li> </ul>	<ul style="list-style-type: none"> <li>• Tetris</li> <li>• Pac-Man</li> </ul>	Smartphone
Baby Boomers	Male	55-64	<ul style="list-style-type: none"> <li>• Card</li> <li>• Puzzle</li> </ul>	<ul style="list-style-type: none"> <li>• Solitaire</li> <li>• Scrabble</li> </ul>	PC
	Female		<ul style="list-style-type: none"> <li>• Virtual Board Games</li> </ul>	<ul style="list-style-type: none"> <li>• Mahjong</li> <li>• Monopoly</li> </ul>	Smartphone

The iGAME special issue is timely given the rise of interest in the use of technology to facilitate a myriad of societal challenges and enablers. Ranging from health-related concerns to our ageing populations.

iGAME opens with a review by Marston and Duro who explore published, empirical research comprising of participants categorised as Generation X (Vogels, 2018; Nielsen, 2014). To date, there has been substantial interest and research in the realm of videogames by children and by older adults to tackle health and wellbeing, mental health, obesity, game playing preferences, design, motivation and experiences. However, as we enter our third decade of the twenty-first century, the academe and industry have been slow to diversify their scholarly activities and to

broaden their interest regarding this medium and how videogames impact on the lives of Generation X within society. It could be asked, why Generation X should be given attention and even so preceding cohorts such as Millennials, but given the national and international interests of governments relating to longevity, (social) loneliness and active and healthy ageing (Marston, van Hoof, 2019), exploring and investigating the issues, needs and requirements of future ageing populations is crucial, for when respective cohorts reach old age.

There is a breadth of work surrounding technology and game studies research associated to older adults which has and continues to push the boundaries in a bid to move international debates forward (Brown, 2019; Brown & De Schutter, 2016; Osmanovi & Pecchioni, 2016; Marston & Graner-Ray, 2016; De Schutter & Brown, 2015; Charness, 2014; Belchior et al., 2013; Allaire, et al., 2013; Marston, 2013a/b; Brown, 2012; McLaughlin, et al., 2012; Mitzner et al., 2010; De Schutter, 2010; Vanden Abeele & De Schutter, 2010; Basak et al., 2008; Ijsselsteijn et al., 2007; Goldstein, et al., 1997; Whitcomb, 1990; ).

This scholarly work has proved critical in offering baseline data, and insights which have in turn offered scholars the opportunity to build upon and explore other segments and cohorts in society (Marston, 2019; Brown & Marston, 2018; Brown, 2016). Marston and Duro present findings from a scoping review of scholarly work focusing on participants who are now categorised as Generation X. The duration of the search was conducted between 1970-2000 across various databases. Results highlighted 21 papers were included, and following analysis, five primary and seven secondary themes were ascertained.

Our second paper by Havukainen and colleagues take a case study approach in a bid to explore and understand the design of a digital game by recruiting both children and older adults through a co-production/design approach. Havukainen and colleagues propose a co-design process model that takes into consideration an intergenerational perspective when collaboratively and creatively working on videogame design(s). In this particular instance, game designers used concepts associated to childhood memories of the older participants, while exploring innovative game content based on new words and concepts by young people (12-13 years old). From this co-production process several game elements were identified which were deemed essential for integration into the game designs.

Our third paper in this issue tackles a sensitive but important issue of abuse, mistreatment and accessibility, intersecting across the fields of Game Studies and Gerontology. Through a fictional concept, Lafontaine and colleagues, co-create and design the notion of an escape room for older adults, via the design of puzzle games. A qualitative multi-methods approach was instilled using interviews and ethnographic notes were used to address and transfer discussion and conversation surrounding a sensitive topic into videogame designs, reaching both younger adults and targeting older adults. Lafontaine and colleagues aimed to address the issues of such a sensitive topic illustrate how conversations can be implemented into a digital medium, while in a bid to create an innate intergenerational relationship, and design process, while employing a videogame framework. This contribution by Lafontaine and

colleagues highlights and brings to the forefront the need for valuable discussion on the value of intergenerational facilitation within this arena.

Our fourth paper by Hicks and colleagues presents empirical data based on PokemonGo. This study examines the wellbeing of players, and player's motivations for engaging with a particular location-based game. A total of 130 participants who were Pokemon GO players and aged between 19 and 76 years were recruited. Survey results identified 73% of participants chose to play PokemonGo alone, while 33.8% reported playing because PokemonGo offers the chance to form new social connections.

Our penultimate paper is by Khalili-Mahani and colleagues who present perspectives from a series of qualitative data surrounding three serious games. Participants aged between 65 and 90 years were recruited in conjunction with young research student. Older participants with little or no videogame experience or knowledge were also recruited to take part in the study. Qualitative data collection of over 100 hours of conversations with participants were recorded exploring cognitive benefits to playing videogames. Additional phases of data collection were conducted through community classes, enabling the research team to share the various facets of gaming to the participants. This in turn facilitated the members of the community classes to share their stories ranging from gaming experiences to cultural differences and significances. This paper presents multiple findings and include the novel gaming experiences of the participants, the primary motivation for playing serious games is for fun and note the complexity of differential personal preferences of the older participants guaranteeing a direct conceptualisation of videogame preferences more difficult for a homogenous group.

Our final contribution is by Azardvar and Dalqvist who present findings from an industry perspective. Their paper is based on an empirical study conducted by Ubisoft entertainment - Sweden and explores 7000 players of *Tom Clancy's 'The Division'*. Azardva and Dalqvist analysed player behavioural data, extracted from the game's tracking engine, and cross-referenced across various age groups, exploring the relationships between motivation, behaviour and habitual characteristics. Findings focus on demographic data, the affinity for playing different types of videogames and gamers psychological needs satisfaction. Comparison across the different generations identified older players to feel more agentic, present in the narrative and a sense of feeling closer to non-playable characters (NPCs), while they also felt less competent during their game playing sessions.

The goal of the iGAME special issue is to illustrate and present existing data, thoughts, debates and insights into contemporary and future game studies and interdisciplinary research in a bid to extend and broaden the existing arena of intergenerational gaming and game studies. This collection of papers has delivered an array of international scholarly and industry perspectives which intersects across several fields including: gerontechnology, social sciences, design and development, gerontology and through the contributions of respective papers.

The iGAME special issue impacts on academe as a means of moving research forward as well as industry learning, building and implementing scholarly activity into

their own in-house research units. The iGAME special issue illustrates how intergenerational gaming is integral to society in both the developed Western world but also in low middle-income countries (LMICs), while demonstrating the greater need and emphasis by both the academe and industry spheres to move intergenerational research forward. This in turn is critical for all stages of the design and development lifecycle, and taking a co-creation and production approach, is key and positive to ensuring all voices and narratives are recorded.

Moving forward within a more digitalized societal ecosystem, and understanding the needs, concerns and managing expectations of younger cohorts such as Generation X, Millennials and Generation Z, in conjunction with existing older cohorts is necessary if we are to be prepared for future ageing populations. By this we mean, individuals categorised as Generation X or a Millennial have very different experiences to existing older adults and while academe is primarily focusing on older cohorts in conjunction with contemporary government agendas, future aging populations will have different attitudes and requirements for digital entertainment.

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