

A CASE FOR COMMUNITY ACTION

Esports, older players, mental health and social isolation

Lee Willows & Jack Fenton. Research on Esports Promotion and Development for the international Esports Federation (IESF), by ESG Gaming and Esports Insider.



ESG
Gaming

ESG Gaming
124 City Road
London
EC1V 2NX
United Kingdom

esggaming.org

ESI ESPORTS
INSIDER

Esports Insider
1 Putney Bridge Approach
London
SW6 3JD
United Kingdom

esportsinsider.com



in are
her
ive back
nity.

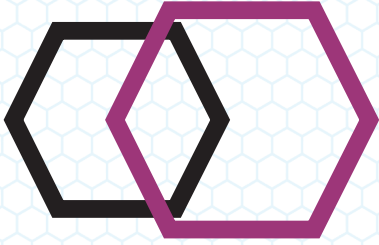


ESG
Gaming



POWERED BY
VIVER
FOR BUSI





ACKNOWLEDGEMENTS

Both Esports Insider and ESG Gaming would like to thank the International Esports Federation (IESF) profusely for their trust and support in providing this opportunity to work on this research paper.

The topic of mental health in esports is an increasingly crucial aspect of both the professional community and of those who enjoy esports games casually. In a digital age where we connect increasingly online, those that are less digitally literate struggle more and more with an inevitable challenge of loneliness that is not part of the regular dialogue on mental health.

Thanks to IESF and Busan Metropolitan City, we are able to cast a light on a topic that is core to the work of ESG Gaming and that we hope can become an increasingly more discussed part of the mental health dialogue in esports. With many countries facing ageing populations, contrasted with the early retirement age of esports players, there is a disparity between how esports is praised for combating loneliness in young people, but not being utilised to support those who are of ages 50 or above.

We sincerely hope that this project and paper is just the first exploratory piece in a series of research carried out by Esports Insider and ESG Gaming, one that encourages others to get involved and support the cause as we are able to conduct primary research in the future. We will be taking this research with us to various industry events and we hope that IESF wishes to be involved in future again as we continue to pioneer this work.

ABSTRACT

This project provides a cross-sectional, qualitative industry report of the literature that covers the topics of esports, older players, mental health, and social isolation. To consider how esports can be used as a tool to address and international well-being concern in the older generation (social isolation), this paper has reviewed the available literature and drawn from secondary research to provide both a review of the academic literature as well as the market data that can inform the best practice for those that want to mobilise esports as an interventionist tool for elderly social isolation.

It has been found that there is very little available coverage on esports being played by the older population, however by cross-examining research with the younger population and its effects on physical and mental health, one unforeseen benefit that will further supplement the social focus of this research hypothesis is that there could be cardiovascular benefits for the older population that take part in esports as a social activity, as well as mood-related benefits which some research found. One core turning point in the literature is the role that the COVID-19 pandemic has played in the exacerbation of social isolation and the effect that has had on gaming habits. Using this, this investigation draws three clear age groups for the purpose of coordinated future research into this area.

The report compounds existing literature and draws direct suggestions for action from the wider research and esports community, with a focus on defining the game that would be best suited for engaging the older population and what other aspects of social gaming should be addressed such as whether in-person or online gaming are the best considerations for both battling social isolation whilst also protecting the target population from existing concerns such as disease and other threats due to their lessened immune system.

CONTENTS

4. Introduction
5. Literature Review
 5. a) The Consideration of East & West.
 6. b) Minimal Overlap in Literature on Ageing and on Esports
 6. c) The Gerontological Phenomena of the UK's Returnships
 6. d) Esports and Games as a Prescription for Medication
 7. e) Esports' Benefits
 8. e) The Role of Gender as a Cause for Investigation
8. Methodology
9. Discussion
12. Conclusion
13. References

A CASE FOR COMMUNITY ACTION: ESPORTS, OLDER PLAYERS AND MENTAL HEALTH.

This research, and thus, this paper, has been conducted by commission of the International Esports Federation (IESF) to investigate the role of mental health in the esports community, with a specific emphasis on the role esports could have in the mental health support of older players. Over the past two decades, the esports industry has grown consistently, year-on-year, achieving consistent growth of global industry value and most notably to the onlooker, hundreds of millions of viewers each year (Pannekeet, 2019).

Despite this growth, esports continues to be an activity that is pervasive mainly with the younger generations, which for the purposes of this paper will be considered one of three age categories, younger participants being players up to the age of 25. The methodology behind this age categorisation will be outlined in more detail throughout the next two sections, the literature review and the methodology.

After the age of 25, players enter a second phase of their player journey which is the age group of 25-50, for most professional players that is post-play and during their professional period as staff or in adjacent industries enjoying games as a hobby. It's evident to many here that what esports is seeing is an accelerated version of what is common in the sports industry, which has sparked hundreds of years of social research. In the last five to ten years, we have seen esports attract researchers who have shown interest in the social practices of esports, amongst many has been the discussions of where esports fits within the definition of sport (Jennyet al., 2017). For this paper, where esports fits on this continuum of sport is not relevant, for we are looking at esports as a social practice and increasingly popular past-time for all ages. Therefore, this introduction will not be assessing the debate of whether esports is a sport, rather focusing on the social phenomena of esports as an activity that could help to combat social isolation in elderly people.

With that in mind, our elderly category as set by ESG Gaming in their continued work with older players, is 50 and above. Using these three categories we are mobilising this paper to investigate in detail and draw attention to the ways in which esports is being evidenced as a social tool for combating social isolation across all three categories, with a particular focus on the third category as that is the area of the global population that experiences the greatest instances of social isolation. In the United Kingdom, a study of loneliness and isolation by Owen (2001) revealed that over 12 percent of people aged 65 and more years felt socially isolated, with Victor et al. (2000) finding that in Australia up to 20% of the elderly population would express that they are socially isolated. It's worth noting also that these are self-reported admissions of social isolation and given the social pressures of expressing factors such as loneliness (Joppich, 2023), it would not be a huge leap to claim that it is likely that a quarter or more of elderly people are experiencing social isolation.

To address this, we have outlined two core questions each with a more narrowed 'specific objective' within them, these are as follows:

GENERAL OBJECTIVE 1 - To provide a foundational review paper that can act as an industry anchor point for industry research and action towards supporting mental health in esports across all age demographics.

SPECIFIC OBJECTIVE 1 - Consider different esports game genres (i.e. first-person shooter, action, adventure, simulation video game etc) and make recommendations as to which game genres may be more suitable to bring parents/grandparents and children together to experience play, knowledge, intergenerational and Internalised ageism understanding.

GENERAL OBJECTIVE 2 - To explore the under-researched area of older esports players and provide clear guidance to ensure that this research project is the foundation for future investigations and community action globally.

SPECIFIC OBJECTIVE 2 - Consider different game genres (i.e. first-person shooter, action, adventure, simulation video game etc) and make recommendations as to which game genres may be more suitable for those aged 50 years and over to minimise social isolation and loneliness.

Each objective can and should feed into each other throughout the following research. With objective one operating as our baseline, covered largely in the literature review section of this report, as a foundation for our industry review that will then address specific objective one. Specific objective has been outlined for the purposes of ensuring this report provides clear direction for the industry to generate action from any findings we've collated from the industry review. It is imperative that the three age-groups that we are discussing in this report, are not treating in isolation both in this writing and in the follow-on action taken across the industry.

Objective two is the core focus for this paper, with an action-centred approach that will draw together the existing industry research into one place as a clear reference point for the industry to digest, understand, and use for positive action moving forwards. The specific objective for objective two has been defined to provide some more esports-industry-informed advice for those action points. We believe that by providing unique input from Esports Insider's expert knowledge of how different game communities connect and interact, that better guidance can be provided in order to combat the issues that are being addressed in this research.

Again, we would like to thank and commend the International Esports Federation for their support in this paper and their choice to shine a light on a massively under-researched area of esports and gaming. Due to the incredibly under-researched nature of the connection between esports, the elderly, and social isolation, this paper has been designed as an industry review that will use secondary research garnered from a cross-section of relevant literature in order to create a strong foundation for future research. That future research, ESG Gaming and Esports Insider are keen to carry out following this investigation.

LITERATURE REVIEW

This literature review not only will investigate the current academic literature on the topics discussed in this paper, but will also delve into the relevant policy choices present globally, in particular in the UK, that align with this research and provide points of reference for how we can combat social isolation at a policy level. Connecting this with patterns in the esports industry, this review will allow us to frame the opportunities to utilise esports in these ways.

Throughout our research and literature review, a lot of research around the health benefits of video games and, specifically, competitive video gaming (esports) for young people has been researched. This evidence has contributed to significant educational programmes being created globally as a career pathway for young people and students. However, what has become apparent is that there is very little published research into the health benefits of competitive video gaming for older people (i.e., those aged 50 years and over). Despite there being prominent work such as Plagg et al's 2020 journal article addressing the Prolonged social isolation of the elderly during COVID-19, there is very little if any work done to address whether the intervention of games, in particular esports titles which are inherently interconnected, can be used as a vehicle to combat that exact phenomena.

A core piece of literature for this paper is Chen and Schulz's 2016 article on the effect of information communication technology as an intervention for socially isolated elderly people. They found that generally participants responded positively to technology as a conduit for communication, which has provided a strong base for future investigation in this space. This review takes that one step further, looking through the lens of esports as the intervening technology, gamifying the communication to increase social interaction and cohesion and thus combating social isolation.

One principle objective arising from the IESF Report was to produce guidance for (i) future investigations and (ii) make recommendations on how the global esports community might create further social impact to benefit humanity. Having considered some of the most pressing humanitarian challenges, it is best to summarise the literature into three schools of thought.

The Consideration of East & West

From the literature review, small-scale studies from the East (Asia) (Onishi et al., 2022), but hardly any studies at all from the West (Europe and America) on the participation of esports among older people. This immediately prompts us to consider two future studies with participants aged 50 years and over from Europe and Asia. East study would test the assumptions of the health benefits of esports through controlled participation over a one, three and six month period.

A mixed method approach of qualitative and quantitative methods would be applied to understand the following characteristics of esports participation of those ages 50 years and over. A potential framework on how we approach this might be:

1. Health (e.g., participation of activity) this factor allows for us to test health assumptions from the current literature to understand the topic and contribute further insight.
2. Environmental (e.g., social factors) is also an important factor to consider for undertaking if esports can help minimise social isolation or loneliness among those ages 50 years and over;
3. Technological (e.g., games types), analysing the types of games will help us understand those of most appeal and benefits to mental development

It's valuable to note that without comparing results from studies in East and West, we will be unable to understand if there are any cultural or geographical differences.

Interestingly, one of the international turning points for comparing East vs West as two demographics of elderly communities, was an international conference on "Aging East and West: Demographic Trends, Socio-cultural Contexts, and Policy Implications", which took place in Seoul, South Korea, in September 1995. It is then apt that South Korea, specifically Busan Metropolitan City, is subsidising this research to investigate how esports can be utilised as an intervention for the global ageing community.

Minimal Overlap in Literature on Ageing and on Esports

Importantly, as this paper is inherently gerontological in nature, it's important to consider that this area is intently cross-disciplinary in nature and the impact that has on research is immense, meaning that this review could not possibly cover the full scope of the both esports as a social intervention tool for isolation and for social isolation in elderly people, as both research spheres are currently entirely separate. The following item outlines visually how we this research review considers these two spheres of investigation, in terms of where the literature currently stands (left) vs where we hope it to be in the next 2-3 years (right):

Figure 1



The Gerontological Phenomena of the UK's Returnships

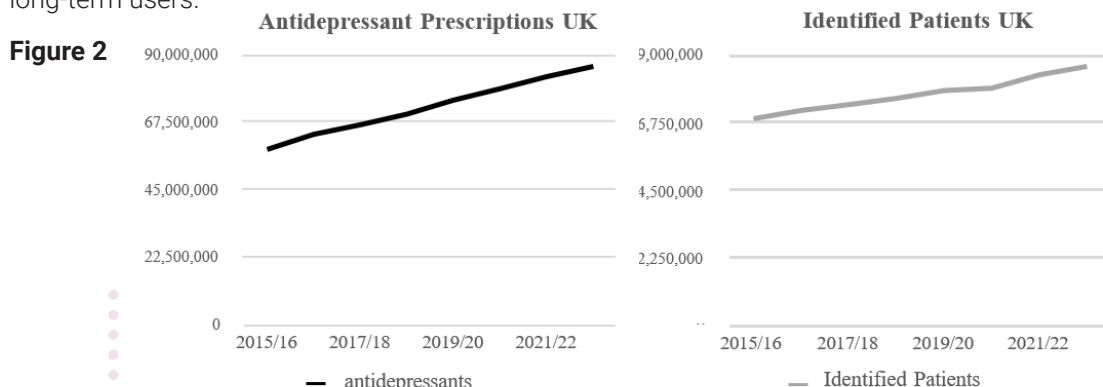
The United Kingdom Government has recently announced 'returnships', a UK flagship policy for workers to return to work to help bolster and get the UK economy moving. A 'returnship' is a new offer which brings together three programmes to help get older workers back to work. These include Apprenticeships, Skills Bootcamps and Sector- Based Work Academy Programmes (SWAPs). 'Returnships' will raise awareness of these pathways, providing a clear route back into work and encouraging employers to hire older workers.

Young people and students have the opportunity to study for various academic courses or degrees in 'esports' as a springboard to launch their career in the gaming, tech, event or design sectors. The UK has seen a rapid growth in esports degree programmes that have had a mixed reception globally, however within the literature it has been seen as an evolution of sports management (Funk, Pizzo & Baker, 2018), which would fit 'Returnships' perfectly as it would not only bring the elderly population together in an educational setting, but existing teach could be adapted into a broadly identical programme, aimed at older workers with a view to get them back to being economically engaged.

This would bring skilled and experienced workers into the workforce and help to foster positive relationships, minimising social isolation and loneliness.

Esports and Games as a Prescription for Medication

The British Medical Journal suggests over the past decade, antidepressant prescriptions have almost doubled in England (Leung & Chu, 2023), rising to 85.6 million in 2022-23. Over 8.6 million adults in England (nearly 20% of adults) are now prescribed them annually. Those aged 50 – 55 years are the highest users of antidepressants. Finally, the average duration of time for which a person takes an antidepressant has doubled, with around half of the patients now classed as long-term users.



As literature has clearly defined, there's no single cause of depression. It can occur for a variety of reasons and it has many different triggers. Depressive symptoms affect the brain by causing anhedonia, lack of self-worth, energy, poor concentration, changes in appetite, along with motor changes, and recurrent thoughts of death, all based on dysfunction of the neural network.

Given the health benefits of esports, we would propose a collaboration between the United Kingdom's Health Service (NHS) or a Private Health Care Provider and not-for-profit partner to undertake some medical research and evaluation through the delivery of a programme aimed as a pilot alternative to a prescription. The pilot would target those aged 50 years and over and take place over a three-month period.

Esports' Benefits

Where there was relevant clear literature that connected esports, gaming, and elderly people was looking at gaming as a positive health intervention in elderly people (Hall et al., 2012). Concluding that there is a 'significant potential' for games as an interventionist method in elderly mental health.

Hall et al.'s research was carried out as a systematic review of the research literature, conducted through multiple academic databases for works, published between the years 2000 and 2011, looking at digital videogame interventions with adults 65 years of age and older. In the last decade, however, there has not been similar investigation until this paper today.

Whilst we have not been able to instigate the same academic rigour and systematic investigation of global literature on the subject, this literature review provides a qualitative review of the existing findings. From those, we have compiled some examples of esports' benefits are as follows:

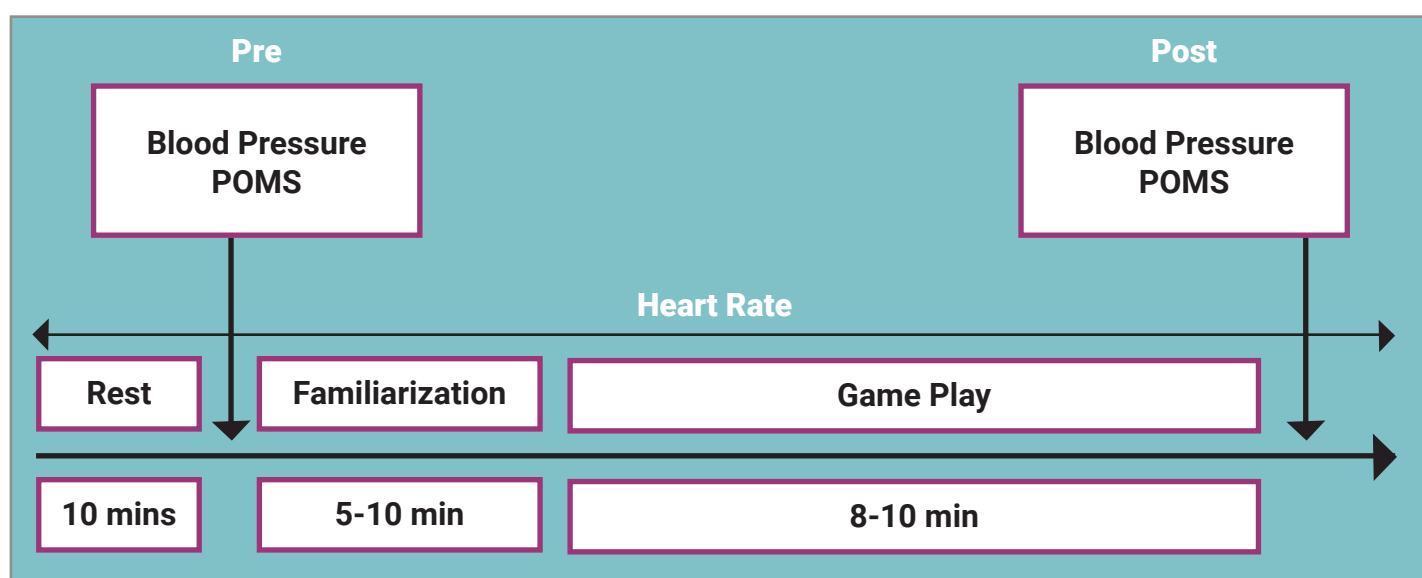
- **Cognitive stimulation:** Esports require strategic thinking, quick decision-making, and problem-solving skills. Engaging in esports can help older individuals keep their minds active and sharp.
- **Social engagement:** Esports provide opportunities for older people to connect with others who share similar interests, whether through online gaming communities or local gaming events. This can combat social isolation and loneliness.
- **Stress relief:** Playing video games, including esports, can be a great way to unwind and reduce stress. Older individuals can use gaming as a form of relaxation and escapism.
- **Improved hand-eye coordination:** Esports often demand precise and quick movements, which can help improve hand-eye coordination. This can be especially beneficial for older individuals looking to maintain or enhance their motor skills.
- **Flexibility and adaptability:** Learning and mastering new video games require adapting to changing environments and strategies. This can help older individuals develop flexibility and adaptability, which are essential skills in everyday life.
- **Bonding with younger generations:** Esports can provide an opportunity for older individuals to connect with their grandchildren or younger family members who are interested in gaming. It's a way to bridge generational gaps and build stronger relationships.
- **Entertainment and enjoyment:** Just like any other form of entertainment, esports can be a source of enjoyment and fun for people of all ages. It's a way to relax, have fun, and experience new challenges.
- **Competitive spirit:** Esports can satisfy the competitive drive in older individuals. Participating in tournaments or ranked matches can be a thrilling experience, even if it's just for fun.
- **Lifelong learning:** Esports constantly evolve with new games, updates, and strategies. Engaging in esports can encourage a mindset of lifelong learning, which is beneficial for cognitive health.
- **Physical benefits:** While esports themselves may not be physically demanding, they can encourage individuals to maintain a more balanced lifestyle by incorporating regular breaks, stretching exercises, and healthy habits into their daily routines.

The Role of Gender as a Cause for Investigation

Importantly, the vast majority of professional esports athletes are male, a topic that we do not have the time nor pages to investigate in this paper however, as esports continues to make strides towards more opportunities for women and non-binary players in the space, efforts towards social inclusion would have to do the same and the role of gender in the research has been one that has rarely been the focus. However, in one of the most pervasive works for this topic, which did draw together elderly people and esports in one unique piece of writing, it was found that not only could partaking in esports have a positive social impact on older adult players, but that it could have a particularly positive effect on older female players (Onishi et al., 2022).

However, when gender was considered as a key investigative factor, the focus was mostly on the physical health of those older players, rather than the social aspects of their quality of life. It's important to consider, noting back to our first subcategory of the literature, that this investigation focused largely on Japanese elderly women, this would be an interesting study to repeat in western communities, to see whether a similar phenomena can be observed as there was a clear correlation of improved mood, when you consider the physical factors that constitute a positive mood. It would also be interesting to see how this could then address social isolation. The figure below shows the methodology from Onishi et al.'s research that tracked a more positive mood, taking inference from their blood pressure after playing the game.

Figure 3



METHODOLOGY

The method of this paper was a qualitative investigation into leading research in the last two decades, with an allowance for any work in the 21st century that addressed the objectives outlined in the introduction. Whilst this showed that there was very little literature that encompassed the narrow, yet socially significant focus of this research, one of the core patterns to note is that this area of investigation is inherently multidisciplinary, built on sociology but borrowing from psychology, social work, biomedicine, demography, and public health as well as other field (Putney, Alley, Bengtson, 2005).

One core part of our methodology, which we will continue to use moving forward as more action is taken by ourselves and our peers to research this area, is the three age categories discussed in the introduction. Those are as follows:

1. Younger Player: 0 - 24 years
2. Adult Player: 25 - 49 years
3. Older Player: 50 + years

These age categories were outlined firstly with the consideration of the average retirement ages across major esports titles, which ranges across the early twenties but can be considered by most major media outlets to be 23-24 years of age (Lee, 2022). In addition to that, there is a strong presence of literature investigating the physical performance of esports players (much more than there is literature investigating the social factors of elderly gamers, logically due to the performance being a commercial factor of the business). Taking from that, esports performance, and thus a players career, relies on players' ability to respond to complex visual stimuli correctly and at high speed (Hong, 2022). Hong continues to outline the following bleak patterns in young players' careers:

Thompson et al. (2014) suggest that this ability is likely to decline at about age 24. Thus, eSports players' peak performance period is very short (Smithies et al., 2020) – the careers of about 20% of professional eSports players are only about 2 years (Ward & Harmon, 2019).

From this, we can say that the ceiling of 24 for our 'younger player' category is founded on sound investigation from the last decade of esports performance research. Our middle age group then consists of three main demographic groups:

1. The 'lucky' professional players that have a career that continues on into 25 and beyond
2. Those that have retired but actively take part due to their connected nature as a professional in the esports industry, working as team staff, business staff, or other adjacent roles.
3. Those that continue to play esports titles as a hobby. This may include those that also only ever played esports as a hobby prior to 25.

It's important to consider this research and this categorisation does not hinge on the player being a paid professional at any point, or even the player being good at or a frequent player of any esports title. These categorisations are made to be theoretically aligned with the professional experience and to match the biological literature on performance in these games, as the lower expected performance of players as they age is a core factor that will cause resistance in the elderly groups that we want to carry out active participation with, in order to combat social isolation.

The categorisation of 50+ as our more senior age group is also one that warrants methodological justification. It's important to consider that the 2020 average retirement age across OECD countries for an individual with a full career and who entered the labour market at age 22 was equal to 63.4 years for women and 64.2 years for men (OECD Library, 2021). In this context, the OECD refers to the Organisation for Economic Co-operation and Development, which is a global community including South Korea, Japan as well as the usual Western countries such as the UK and US as has been majorly discussed throughout this paper.

The 50 plus age group is based on a phenomenon that the UK has noticed in their research national surveys. In May to July 2022 there were 386,096 more economically inactive adults aged 50 to 64 years than in the pre-coronavirus (COVID-19) pandemic period (December 2019 to February 2020). Thus, The Over 50s Lifestyle Study (OLS) was designed to gather more information from adults aged 50 and over to better understand their motivations for leaving work and whether they intend to return. We have collated those core reasons below to further evidence our methodological decision for this study, and our suggestion for future research as 50 plus being an optimal categorisation. All of the following are provided as part of the OLS, an Office for National Statistics (ONS) investigation:

1. *The majority (66%) owned their homes outright, and were more likely to be debt free (61%) compared with those who left their job after the pandemic and returned to work (42% debt free).*
2. *Financial resilience varied by age: those aged 50 to 54 years were significantly less likely to be debt free, excluding a mortgage (49%), compared with those aged 60 to 65 years (62%), and more likely to have credit card debt (39%, compared with 24%).*
3. *More than half (55%) of those aged 60 to 65 years were confident or very confident that their retirement provisions would meet their needs, compared with just over one-third (38%) of those aged 50 to 54 years.*
4. *Age was also a factor when considering whether to return to work; the younger cohort were more likely to say that they would consider returning to work (86% for those aged 50 to 54 years, 65% for those aged 55 to 59 years and 44% for those 60 to 65 years).*

Taking this into account, 50+ is a better categorisation than taking the global average retirement age of 63/64 as it has proven to be a post-covid phenomenon that must be considered when conducting research in this context. Importantly, prominent research has shown that mental and physical health in older people has been significantly negatively affected during the social distancing for COVID-19. Therefore, a multicomponent activity with exercise and psychological strategies are highly recommended for this population during the confinement (Sepúlveda-Loyola et al., 2020). This research conducted by Sepúlveda-Loyola concluded that there is a necessary need for future investigations in this field, further solidifying both the need for this research and our chosen methodology.

DISCUSSION

From what literature does exist that combines esports or games with older players, there has consistently been positive results from across all research that we found during this project (Hall et al., 2012). However, what would be best placed would be research that specifically investigates the role of esports, as opposed to general video games, as an independent intervention tool for older people. Throughout wider esports literature, that which investigates purely the performance of younger players in our first age group, most physiological studies have pointed to a clear action point that esports cannot and should not replace physical exercise in anyway, despite it actually providing benefits to the player's cardiovascular health (Seffah et al., 2023). When you consider the physical limitations of those in our older age category, regular moderate physical activity is still advised, especially for those in the lower end of our 'older' category. For those capable, some vigorous physical exercise would be encouraged both for physical and mental health (Paterson, Jones & Rice, 2007), but we are proposing here that this is supplemented with, not replaced with, activity in team esports for the reason of combating social isolation.

We also found that from the older people surveyed in the research, that around 15% of people aged 55 or more are already regularly playing video games (The Goodman Group, 2023). When you contrast this with our other two age groups, there is a massive populous of players engaging with video games on a regular basis, Uswitch outlined some clear market data that evidenced that in 2022, the overall UK video game consumer market valuation was £7.05 billion – 17% more than that seen in the pre-pandemic time period (Baker, 2023). Also outlined in that report were the following clear social patterns that solidify gaming's role as a culturally significant activity for the younger generations:

- 8% of young adults (aged 16-24) play video games, of which 29% were playing online with people they don't know outside of the gaming world.
- For children aged 7-18, more than two-thirds (68%) own their own games console, with a further 9% having consistent access to one.

This is where this paper can address our first specific objective, indicating that there is a social need for esports to act as a conduit to bring together the older generation and the children and grandchildren of those that reside in the upper age brackets of society. To do so, the reason we suggest an esports title is due to the increased cardiovascular benefits in taking part in esports as opposed to casual games. Crucially, it is due to the fact that esports are an inherently social activity, in which those that are taking part must communicate clearly, which creates a strong sense of community and belonging for those that regularly partake in team esports.

As the older generation have less access and physical ability to participate in team sports, esports can plug a hole that will both address the social isolation that we have seen post-pandemic. With older generations leaving the work-force and having been abruptly disconnected from a lot of physically connected communities, some of which did not return following the lifting of lockdown restrictions globally, esports provides a risk-free solution to the increasingly alarming social phenomenon of elderly social isolation.

We believe that the main road-block in instigating esports into the homes of elderly people will be from a personal resistance to the activity itself, stemming from anxiety around their own performance and their access to technology. Older adults' perceptions and use of technology are embedded in their personal, social, and physical context (Peek et al., 2015).

With technology becoming and increasingly embedded part of life for the older generation, we believe that by adding a social aspect to their technology usage that allows them to connect directly with their family members and friendship/support groups, this will

provide important personal connections that will motivate them to take part in this as both a research study as a follow-up from this paper, but also as a long-standing activity that can become a core part of their daily habits. The following two figures illustrate why this is a realistic possibility, with figure 4 illustrating the technology uses of the populous in the last few years, and with figure 5 demonstrating the market-share of console and pc game purchases, as a means to provide guidance on which games and game genres are best suited to addressing this research project.

Figure 4 Average share of daily internet usage in the UK as of June 2023, by age group and device

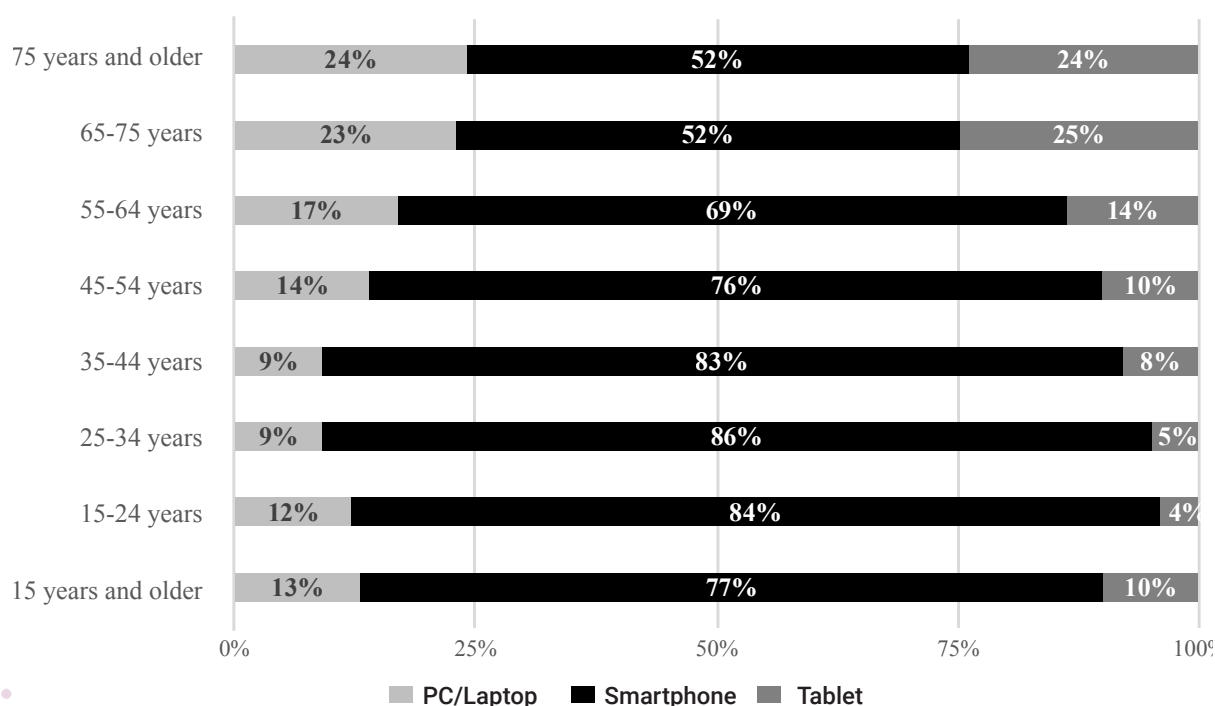
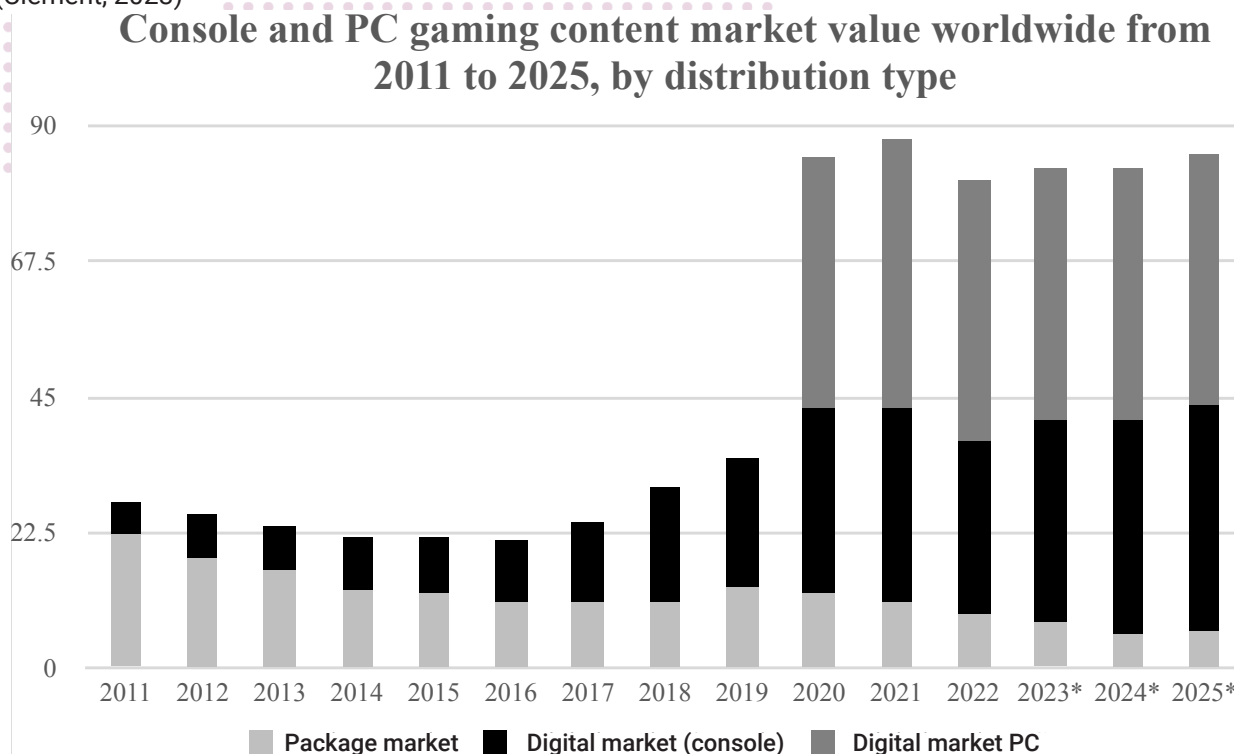


Figure 5 (Clement, 2023)



Considering the above market indicators, both PC and Console hold a largely shared percentage of the population, which puts the choice of gaming platform down to the nature of the games available and the accessibility of the console. It's generally accepted that PC gaming is a harder to access subject, due to the complexity of obtaining an esports-ready computer and maintaining that, compared to the extremely minimal upkeep for a games console. On top of that, console games are inherently controller-based whereas PC games are general keyboard and mouse, reducing the keybinds and configurations needed to engage in the activity will be a crucial motivation for which games are chosen, with simplicity being key. As it is not the hand-eye coordination that we are looking to test with the older players that are taking part in esports as a social activity, it is just the cross-section of a social game that allows for some tactical and strategic thinking which will positively benefit the users in three different aspects: their cardiovascular health, their mental health, and their perceived social togetherness.

One alternate factor to consider, which would be one for future investigation as it has not been the focus of this research but does connect directly with both objectives and sub-objectives (specific objectives), is the benefits of connecting players of all ages in physical venues together. As it has been an assumption and consideration of this research and of a lot of the research investigated in this paper that these players would be looking to engage in esports as an online activity, each player connecting from their homes. Earlier in our writing, this has been regarded as a 'risk-free' element that would protect our older and thus at-risk players from disease and/or other complications that can come from the lessened immune system that comes with older age.

However, it is a valuable consideration for future research that bringing together those that are able to do so into a physical environment such as an esports arena, pc cafe, or PC방 (PC Bang, as it has been popularly coined in South Korea). This could exponentially increase the benefits of engaging the participants in esports with an aspect of physical togetherness. There are also various research papers that outline how participants typically enjoyed playing video games together in-person with family members, and social benefits are the most salient in family settings (Wang, Taylor & Sun, 2018).

CONCLUSION

Bringing together this cross-sectional review of the literature and the data available on the topics of esports, mental health, and older players, with particular attention to the potential that it has in addressing the increasing well-being concern for the ageing population of social isolation. To conclude, and to explicitly address both specific objectives, the game genre that we would suggest for future research and for effective instigation of togetherness would be a console-friendly game that can be accessed easily by the older generation. A game with cross-platform capabilities would be best to ensure that there are minimal boundaries to access for all that take part. As one of the core motivations is to create intergenerational social interaction through esports, if a parent is playing from a Playstation, whilst a child is playing from a Nintendo Switch, and a grandparent only has access to an Xbox, it needs to be the case that all three of these players would be able to easily play together.

The second necessary consideration in order to conclude a clear action regarding the game is specifically which genre is best suited to this audience. We would suggest avoiding shooters due to both the social concerns that are often held with the older generation (Andrews, 2023), importantly we are looking at gamifying social interaction, as opposed to encouraging the adoption of any game as a profession or real-life activity, so a easy-to-digest and generally accessible game would be the best option. With that in mind, we would lean towards a game genre such as racing or world-building, however these lack the inherently social aspects and the esports nature that we are looking to combine all in one place. There is one exception however, with Rocket League, which is considered a tier-2 esports title, on the cusp of being a tier-1 game that is increasingly finding its space in the mainstream (Nordland, 2022). With a PEGI-3 rating, this game is truly family friendly and is available on all platforms, including PC.

Ideally, we would be able to outline an esports game that has been specifically designed for elderly players (Boot et al., 2020), but in this case and to align with the wider esports industry, we believe that Rocket League is best suited for the purposes of future research. Action is also a genre that doesn't typically resonate with the older generation (Cheshem et al., 2017), with the older generation preferring puzzles and strategy, but to get this aspect into a real-time team-based esports title, Rocket League is the best option without the use of a famously complex yet more strategic game title such as League of Legends.

In sum, the research has proven limited but there are clear positive patterns that show esports can be a positive intervention tool for both the physical and mental well-being of players generally, in particular older players. This paper now is perfectly positioned to act as a call-to-action for the industry at large to study these areas, considering the various factors that make it an exciting area that will be able to address an international well-being concern. In particular, the consideration of in-person vs online, as well as the experiences of all generations when playing the same game simultaneously for an extended period of time and the effects this has on their togetherness and in particular the perceived social isolation of the older age group.

REFERENCES

- Bengtson, V. L., Kim, K. D., Myers, G., & Eun, K. S. (Eds.). (2000). *Aging in East and West: Families, states, and the elderly*. Springer Publishing Company.
- Boot, W. R., Andringa, R., Harrell, E. R., Dieciuc, M. A., & Roque, N. A. (2020). Older adults and video gaming for leisure: Lessons from the Center for Research and Education on Aging and Technology Enhancement (CREATE). *Gerontechnology*, 19(2).
- Chen, Y. R. R., & Schulz, P. J. (2016). The effect of information communication technology interventions on reducing social isolation in the elderly: a systematic review. *Journal of medical Internet research*, 18(1), e4596.
- Chesham, A., Wyss, P., Müri, R. M., Mosimann, U. P., & Nef, T. (2017). What older people like to play: genre preferences and acceptance of casual games. *JMIR serious games*, 5(2), e7025.
- Findlay, R. A. (2003). Interventions to reduce social isolation amongst older people: where is the evidence?. *Ageing & Society*, 23(5), 647-658.
- Funk, D. C., Pizzo, A. D., & Baker, B. J. (2018). eSport management: Embracing eSport education and research opportunities. *Sport Management Review*, 21(1), 7-13.
- Hall, A. K., Chavarria, E., Maneeratana, V., Chaney, B. H., & Bernhardt, J. M. (2012). Health benefits of digital videogames for older adults: A systematic review of the literature. *Games for health: research, development, and clinical applications*, 1(6), 402-410.
- Joppich, S. (2023, September 8). The Stigma of Loneliness: Why It's So Hard to Admit We're Lonely. Stephan Joppich. <https://stephanjoppich.com/stigma-of-loneliness/>
- Lee, J. (2022, April 20). Esports stars have shorter careers than NFL players. Here's why. *Washington Post*. <https://www.washingtonpost.com/video-games/esports/2022/04/19/esports-age-referment/>
- Leung, K. M., & Chu, W. (2023). eSports participation among Hong Kong middle-aged and older adults: a qualitative study. *Human Behavior and Emerging Technologies*, 2023, 1-11.
- Onishi, T., Yamasaki, M., Hara, T., Hiroto, T., & Miyazaki, R. (2022). Esports for Seniors: Acute Effects of Esports Gaming in the Community on the Emotional State and Heart Rate among Japanese Older Adults. *International Journal of Environmental Research and Public Health*, 19(18), 11683.
- Pannakeet, J. (2019, February 12) Newzoo: Global Esports Economy Will Top \$1 Billion for the First Time in 2019. Newzoo. <https://newzoo.com/insights/articles/newzoo-globalesports-economy-will-top-1-billion-for-the-first-time-in-2019>
- Plagg, B., Engl, A., Piccoliori, G., & Eisendle, K. (2020). Prolonged social isolation of the elderly during COVID-19: Between benefit and damage. *Archives of gerontology and geriatrics*, 89, 104086.
- Seffah K D, Salib K, Dardari L, et al. (June 20, 2023) Health Benefits of Esports: A Systematic Review Comparing the Cardiovascular and Mental Health Impacts of Esports. *Cureus* 15(6): e40705. doi:10.7759/cureus.40705
- Smithies, T. D., Toth, A. J., Conroy, E., Ramsbottom, N., Kowal, M., & Campbell, M. (2020). Life after esports: A grand field challenge. *Frontiers in Psychology*, 11, 883. <https://doi.org/10.3389/fpsyg.2020.00883>
- The Goodman Group. (n.d.). *Technology for Seniors: The benefits of video games and virtual reality*. <https://blog.thegoodmangroup.com/best-video-games-for-seniors>
- Thompson, J. J., Blair, M. R., & Henrey, A. J. (2014). Over the hill at 24: Persistent age-related cognitive-motor decline in reaction times in an ecologically valid video game task begins in early adulthood. *PLoS ONE*, 9(4), e94215. <https://doi.org/10.1371/journal.pone.0094215>
- Ward, M. R., & Harmon, A. D. (2019). E-Sport superstars. *Journal of Sports Economics*, 20(8), 987-1013. <https://doi.org/10.1177/1527002519859417>



PROJ: _____
REEL: _____
**ESG
GAMING.**
SCENE: _____
DATE: _____
1

James
Fraser-Mulson
Director
Fraser Esports
SIC
ALAY

World Esports **IESF**



ESG
Gaming

ESG Gaming
124 City Road
London
EC1V 2NX
United Kingdom

esggaming.org

ESI ESPORTS
INSIDER

Esports Insider
1 Putney Bridge Approach
London
SW6 3JD
United Kingdom

esportsinsider.com