



The Power of Playing Video Games

WHY PLAY MATTERS

Now more than ever, video games are central to modern culture. Once considered a niche hobby for enthusiasts, video game play today brings joy to billions of people of all ages and backgrounds around the world. Video game players are active participants in games as they make decisions, interact with other players, create, learn, relax and enjoy a multitude of other benefits.

HOW PLAYING VIDEO GAMES HELPS PEOPLE THRIVE

- **Enhancing well-being.** Many people derive mental stimulation, relaxation and stress relief from regular video game play. Video games provided an important source of comfort and have been beneficial to mental health during the COVID-19 pandemic.¹
- **Bringing people together.** Video games offer players shared interactive digital and physical experiences that can broaden and enhance their perspectives. They give players a sense of community² in which they can work together to investigate, compete and solve problems. During the pandemic, when other forms of shared entertainment were scarce, video games provided opportunities for socialisation³, and engagement in game play became a means of preventing feelings of loneliness.⁴
- **Boosting physical health.** Playing video games can offer new forms of physical fitness activities and can expand healthcare treatments, such as physical therapy and pain management.

ADDITIONAL BENEFITS OF PLAY

- **Expanding healthcare treatment options.** Video games can be used as a supplement to traditional therapeutics or as a prescribed treatment. For example, video games are used to alleviate anxiety⁵ and ADHD⁶, to help patients with Alzheimer's and to help manage side effects from cancer treatments.⁷ Some video games also may improve cognitive performance.⁸

¹ [COVID-19 as 'Game Changer' for the Physical Activity and Mental Well-Being of Augmented Reality Game Players During the Pandemic: Mixed Methods Survey Study](#). Louise A. Ellis et al. Journal of Medical Internet Research. 2020.

² [The role of social identity and online social capital on psychosocial outcomes in MMO players](#). Linda K. Kaye, Rachel Kowert, Sally Quinn. Computers in Human Behavior. 2017.

³ [Online-only friends, real-life friends or strangers? Differential associations with passion and social capital in video game play](#). Ryan Perry et al. Computers in Human Behavior. 2018.

⁴ [Online Gaming and Prolonged Self-Isolation: Evidence from Italian gamers during the COVID-19 outbreak](#). Alessandro Giardina et al. Clinical Neuropsychiatry Journal of Treatment Evaluation. 2021.

⁵ [Zombies vs. Anxiety: An Augmentation Study of Prescribed Video Game Play Compared to Medication in Reducing Anxiety Symptoms](#). Matthew T. Fish, Carmen V. Russoniello, Kevin O'Brien. Simulation & Gaming. 2018.

⁶ [Akili Announces FDA Clearance of EndeavorRXTM for Children with ADHD](#), the First Prescription Treatment Delivered Through a Video Game. Akili. 2020.

⁷ [The Association Between Pain Relief Using Video Games and an Increase in Vagal Tone in Children With Cancer: Analytic Observational Study With a Quasi-Experimental Pre/Post-test Methodology](#). Mario Alonso Puig et al. Journal of Medical Internet Research. 2020.

⁸ [Efficacy of interactive video gaming in older adults with memory complaints: A cluster-randomized exercise intervention](#). Udhir Ramnath et al. PLOS One. 2021.

- **#PlayApartTogether.** During the pandemic, video games were a much-needed source of connection and leisure activity for players around the world. In addition, the video game industry agreed to disseminate key messages from the World Health Organization to help slow the spread of COVID-19. Leaders in the interactive entertainment space launched #PlayApartTogether, an initiative that encouraged their vast network of users to follow the WHO's health guidelines – including physical distancing, hand washing hygiene, respiratory etiquette and other powerful preventive actions – to fight COVID-19.

THE POWER OF PLAY BY THE NUMBERS

- Nearly 1 in 3 people globally play video games.⁹
- Nearly half (48% in 2021) of game players in Europe are women, and 76% of video game players are over 18.¹⁰
- In the U.S., among parents with children who play video games, 83% use parental control settings on at least one of their child's game devices.¹¹
- 46 million people with disabilities in the U.S. play video games.¹¹

THE INDUSTRY'S COMMITMENT TO UNDERSTANDING THE IMPACT OF VIDEO GAMES ON PLAYERS

- **Supporting Scientific Research.** The video game industry believes in the importance of independent scientific research into the connection between video games and wellness. The industry supports such research through the provision of anonymized and deidentified data for use by independent academic researchers.¹²
- One such recent study, which examined the anonymized data of 40,000 players, found a positive relationship between video game playtime and well-being.¹³ Another such study highlighted that the connection between video games and well-being relates to the quality rather than the quantity of play.¹⁴

PROMOTING BALANCE: VIDEO GAMES AS PART OF A HEALTHY LIFESTYLE

- **Creating tools and resources for players.** For more than 25 years, the video game industry has provided tools and information to players – especially parents and caregivers – to encourage digital wellness for players of all ages.
- **Empowering players, parents and caregivers.** Almost all video game devices provide family settings to encourage players, parents and caregivers to determine what works best for them and their families. Control settings also allow players and families to:
 - Filter by age ratings;
 - Manage time spent;
 - Control spending; and
 - Tailor communication.¹⁵

⁹ Newzoo [2021 Global Games Market Report](#).

¹⁰ ISFE, [2022 Key Facts about Europe's Video Games Sector](#).

¹¹ ESA, [2022 Essential Facts about the Video Game Industry](#).

¹² [Oxford Internet Institute](#), Ground-breaking new study says time spent playing video games can be good for your wellbeing.

¹³ [Video Game Play is Positively Correlated with Well-Being](#). Niklas Johannes, Matti Vuorre, Andrew K. Przybylski. Royal Society Open Science. 2021.

¹⁴ [Time spent playing video games is unlikely to impact well-being](#). Matti Vuorre, Niklas Johannes, Kristoffer Magnusson, Andrew K. Przybylski. Royal Society Open Science. 2021.

¹⁵ See, for example, [Responsible gameplay](#). Pan European Game Information (PEGI); [Family Gaming Guide](#), Entertainment Software Rating Board (ESRB).

Appendix

THE POWER OF PLAY: DIGITAL WELLNESS

First and foremost, playing video games is a source of entertainment and fun for billions worldwide.¹⁶ Research shows that video games also provide numerous other benefits to players of all ages, including enhancing mental well-being, bringing people together and facilitating physical activity.

Video games are being used to improve health-related outcomes. Video games can be used as both a supplement to traditional therapeutics and as a prescribed treatment. One noteworthy study found that playing video games contributed to significant levels of pain reduction in children with cancer. In that context, games also served as a psychological therapy, helping to reduce anxiety associated with hospitalization.

One game (I, Hope) supports children with cancer by providing a creative outlet during treatment and helping children visualize beating their disease. All profits generated by I, Hope support children with life-threatening illnesses and their families.

Another study found that medically prescribed video game play significantly improved participants' anxiety. In 2020, EndeavorRx™ was approved in the United States for use as a prescription treatment for ADHD in children ages 8 to 12.

Sources:

- Cancer Treatment Centers of America, <https://www.cancercenter.com/community/blog/2017/02/can-playing-video-games-help-cancer-patients>
- Journal of Medical Internet Research, The Association Between Pain Relief Using Video Games and an Increase in Vagal Tone in Children With Cancer: Analytic Observational Study With a Quasi-Experimental Pre/Post-test Methodology, <https://www.jmir.org/2020/3/e16013/>; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7154929/>
- Zombies vs. Anxiety: An Augmentation Study of Prescribed Video Game Play Compared to Medication in Reducing Anxiety Symptoms, Simulation & Gaming, <https://journals.sagepub.com/doi/abs/10.1177/1046878118773126>
- I, Hope, Microsoft, <https://news.microsoft.com/europe/features/gaming-meets-good-cancer-battles-take-on-new-life-in-upcoming-xbox-game-i-hope/>
- Alkili, <https://www.akiliinteractive.com/news-collection/akili-announces-endeavortm-attention-treatment-is-now-available-for-children-with-attention-deficit-hyperactivity-disorder-adhd-al3pw>

A majority of video game players find mental stimulation, relaxation and stress relief flows from regular video game play. Video games can help to alleviate anxiety and other mental health conditions. During the COVID-19 pandemic, video games were a source of comfort and positively impacted mental health. Some of the latest independent academic studies – which are unique in that they use anonymized player in-game data from video game companies – have shown that playing games can be positively correlated with overall well-being.

¹⁶ Newzoo 2021 Global Games Market Report.

Sources:

- Journal of Medical Internet Research, COVID-19 as 'Game Changer' for the Physical Activity and Mental Well-Being of Augmented Reality Game Players During the Pandemic: Mixed Methods Survey Study, <https://www.jmir.org/2020/12/e25117/>
- Clinical Neuropsychiatry Journal of Treatment Evaluation, Online Gaming and Prolonged Self-Isolation: Evidence from Italian gamers during the COVID-19 outbreak, <https://www.clinicalneuropsychiatry.org/download/online-gaming-and-prolonged-self-isolation-evidence-from-italian-gamers-during-the-covid-19-outbreak/>
- Royal Society Open Science, Video Game Play is Positively Correlated with Well-Being, <https://royalsocietypublishing.org/doi/10.1098/rsos.202049>

Other independent research studies indicate that there may be no causal relationship (positive or negative) between time spent playing video games and well-being. Rather, these studies find that the connection between video games and well-being is more about the quality rather than the quantity of play. Motivations for playing, such as socialising, using games as tools for prolonged exercises, aiding temporary routines and mental structure, as well as the player's pre-existing family and peer relationships, all have a higher impact on well-being than the video games themselves.

Sources:

- Oxford Internet Institute, Royal Society Open Science, Time spent playing video games is unlikely to impact well-being, [https://psyarxiv.com/8cxyh/](https://psyarxiv.com/8cxyh;); <https://royalsocietypublishing.org/doi/full/10.1098/rsos.220411>
- Journal of Child Psychology and Psychiatry, Contextualising the link between adolescents' use of digital technology and their mental health: a multi-country study of time spent online and life satisfaction, <https://pubmed.ncbi.nlm.nih.gov/32634259/>

Video games can help improve mental acuity and otherwise offset cognitive signs of aging, especially when paired with exercise. Brain training video games improve memory and help older people to manage daily tasks. Video games can also help offset cognitive decline, and they can help manage the onset and assist in treatment of Alzheimer's disease. For example, Alzheimer's Australia partnered with Melbourne-based Opaque Multimedia to create The Virtual Forest Project, a gesture-based interface that provides stimulation by allowing patients to control interactive features in a calming virtual world.

Sources:

- Alzheimer's Society UK, <https://www.alzheimers.org.uk/about-dementia/risk-factors-and-prevention/brain-training>
- Dementia Australia, <https://www.dementia.org.au/information/resources/technology/the-virtual-forest>
- The Aerobic and Cognitive Exercise Study (ACES) for Community-Dwelling Older Adults With or At-Risk for Mild Cognitive Impairment (MCI): Neuropsychological, Neurobiological and Neuroimaging Outcomes of a Randomized Clinical Trial, <https://pubmed.ncbi.nlm.nih.gov/29780318/>
- PLOS One, Efficacy of interactive video gaming in older adults with memory complaints: A cluster-randomized exercise intervention, <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0252016>

Studies find video games can contribute to social well-being by providing social interaction and a sense of community. Video games offer players shared interactive digital and physical experiences that can broaden and enhance their perspectives. They give players a sense of community in which they can work together to investigate, compete and solve problems. During the pandemic, when other forms of shared entertainment were scarce, video games provided virtual socialization and a sense of routine, allowing players to stay in touch with friends and family while physically isolated.

Sources:

- [Frontiers in Psychology](https://www.frontiersin.org/articles/10.3389/fpsyg.2021.698799/full), Massively Multiplayer Online Games and Well-Being: A Systematic Literature Review, <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.698799/full>
- Clinical Neuropsychiatry Journal of Treatment Evaluation, Online Gaming and Prolonged Self-Isolation: Evidence from Italian gamers during the COVID-19 outbreak, <https://www.clinicalneuropsychiatry.org/download/online-gaming-and-prolonged-self-isolation-evidence-from-italian-gamers-during-the-covid-19-outbreak/>

Additional references and links:

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- Could video games be a healthy medium to deal with mental health? <https://www.isfe.eu/perspective/could-video-games-be-a-healthy-medium-to-deal-with-mental-health/>
- 2021 Essential Facts About the Video Game Industry, <https://www.theesa.com/resource/2021-essential-facts-about-the-video-game-industry/>
- 2020 Essential Facts About the Video Game Industry, <https://www.theesa.com/resource/2020-essential-facts/>
- Tech Radar best fitness games 2022, <https://www.techradar.com/news/best-fitness-games>