Animal Crossing New Horizons As A Platform For Entertainment and Learning

Asha Golveo

Embry-Riddle Aeronautical University

MSHF 618 Human Factors in Virtual and Simulated Environments

Video games are electronic games that involve elements of play, challenge, and role-playing. They can simulate real-world scenarios and situations, in a virtual world where players can explore and make decisions without real-world consequences. Video games are interactive, allowing players full control within the story, while engaging players in challenges to encourage return. While some video games have simplistic goals, others have highly complex storylines spanning different worlds and characters. Advancements in technology have allowed game platforms to expand in availability from computers, consoles, smartphones, and tablets. Powerful smartphones are captivating platforms for video games due to their mobility, lower development costs, and usually lower purchase price for the consumer, allowing mobile games access to a wider audience. As a significant industry in the entertainment economy, some games have transcended the video game ecosystem to develop movies, shows, and sales of various merchandise. In addition, professional players can compete globally, with some competitions broadcasted live for the audience to view over the Internet, or television. Consequently, game consumers now span individual players, sports-like spectators, and top-ranked teams. Multiplayer games have allowed players to play with friends and family, as well as establish new friendships with players they have never met.

Video games have inspired technology in fields such as military training programs, virtual showrooms, molecular biology, and the "gamification" of learning tools to educate, train employees, and address public issues (Marchand & Hennig-Thurau, 2013). Gamification relies on the motivational and competitive elements of video games applied to real-world applications, incorporating rewards, gifts, badges, and leaderboards. Progress bars act as status indicators, and performance graphs can show a user their achievement status against friends, fulfilling the individual's competence need satisfaction, while "avatars, meaningful stories, and teammates affect experiences of social relatedness" (Sailer et al., 2017). Video games can be a driving force to social connectedness, allowing players a secondary space to foster relationships with old and new friends. Social simulation games allow players to inhabit multiple artificial lives,

while exploring social relationships between different forms of characters. As a subgenre of life simulation games, social simulation games allow players to build their life, house, job, and family.

Animal Crossing: New Horizons (ACNH) was developed by Nintendo in 2001, subsequently releasing the game on Nintendo platforms such as Nintendo 64, Nintendo DS, Nintendo 3DS, and Nintendo Switch. Animal Crossing grew in tremendous popularity during the COVID-19 pandemic, with forced lockdowns and quarantining measures globally forcing people to stay home. The loneliness and anxiety induced by the pandemic provided many people a means of escape and comfort, while allowing people to interact and connect with friends they could not physically see. ACNH creates an immersive experience, with relaxing, open-ended gameplay, combined with cute dialogue, charming characters, colorful art style, pleasant hourly music, and the console's internal clock and calendar to simulate the passing of real time. The simplicity of ACNH allows players to quickly learn how to play the game. Furthermore, players can set their own goals within the framework of the game, thereby providing a virtual life that is constructive, positive, and soothing focused on each player's intrinsic values. The peaceful nature of the game ensures its accessibility to people of all ages, and the anthropomorphic nature of the characters allow them to circumvent race or age. This paper explores the elements that make video games entertaining, the strengths and weaknesses of the gaming industry in delivering entertainment, and how games serve as tools for training and performance, while examining how ACNH represents those qualities.

From the perspective of entertainment, video games should evoke enjoyment, sustain engagement, and fulfill the psychological need of accomplishment. A game with a strong immersive experience includes high-quality graphics, a compelling storyline that encourages exploration, realistic sound effects, and attachment to the characters. An engaging game fosters emotional investment in the virtual world, creating spaces that players want to inhabit and return to. Successful social simulation games can create long-term relationships with players, a

strategy of player retention that encourages loyalty and continued engagement from its players. ACNH accomplishes immersion by creating a world that is charming, customizable, and an outlet for freedom of expression. An analysis of ACNH's Reddit community found that players formed connections with the characters, applying them to social contexts similar to the real-world, such as social rules, social norms, and gender stereotypes (Lazzeretti & Gatti, 2023).

Prior to COVID-19, studies found that video games could relieve stress and combat loneliness, with video games acting as a distraction from the monotony and boredom of daily life, escape, and access to social interaction (Yee & Sng, 2022). This can be attributed to a video game's ability to harness encompassing focus, involvement, and attention, with the ability of role-playing games to stimulate a player's self-presence (Marchand & Hennig-Thurau, 2013). It stands to reason that video games would emerge as a popular coping mechanism for the social isolation and loneliness exacerbated during the pandemic, with social simulation games such as ACNH filling the void of social connection. "The consequences of becoming housebound include depression, lower quality of life, and shortened life expectancy", while a sense of connection can be fostered through shared activities such as video games (Osmanovic & Pecchioni, 2016). ACNH has the ability to foster social intergenerational game play, allowing multigenerational families to interact and play together, in an environment that is less competitive, and more supportive. In addition, visiting another person's island, and interacting with their avatar, "generated a sense of social presence, referring to the psychological experience of virtual avatars as actual people" (Yee & Sng, 2022).

Before the pandemic, playing video games was viewed by many as unproductive and anti-social. ACNH demonstrated that video games could cross the barriers of age, language and gaming experience, while creating spaces that fostered social connection and competence. In addition, video games can provide psychological relief when faced with stressful situations by satisfying psychological needs such as autonomy, relatedness, and competence (Yee & Sng,

2022). Some have posited that video games such as ACNH provided people a sense of control, amidst global uncertainty that removed their sense of autonomy and freedom, and feelings of incompetence and frustration from job insecurity (Yee & Sng, 2022). A study by Barr and Copeland-Stewart (2022) found that players were motivated to play ACNH for its ability to act as a source in satisfying psychological needs limited during the pandemic, as well as generating feelings of agency and inducing positive effects on wellbeing.

The motivation to play video games is an important factor on its effect on mental health, such as playing for enjoyment and social connection, rather than obsessive competition. Furthermore, many games overemphasize monetization, prioritizing microtransactions over user experience. Excessive complexity in video games can overwhelm players, with steep learning curves deterring casual audiences. Progress in accessibility for players with disabilities is still limited, with many games lacking features that could promote more inclusivity. While ACNH has avoided the flaws of monetization and complexity, the game still lacks any meaningful progress in accessibility. ACNH has also been criticized for its simplistic dialogue, with characters repeating the same responses programmed from a script of limited speech. A petition signed by many ACNH players conflicts with research on the game's strength in connection and presence, with players writing that "most important to us is for Nintendo to create the illusion of individuality in our villagers by improving dialogue…current dialogue is charming, but passive and repetitive, and we don't feel connected to them" (Sign the Petition 2020).

In addition to entertainment, games are used for training and performance measurement, emphasizing skill development, feedback mechanisms, and applicability to real-world tasks. Video games can enhance skill acquisition by focusing on cognitive, motor, or social skills, while training games can provide repetition and consistent practice. Research by Martinez et al. (2022) found that video games can be effective as an educational tool, particularly in subjects such as foreign language and the sciences, with "serious" video games enhancing academic learning when "embedding pedagogical purpose in the game scenario".

ACNH is lauded as a family friendly game that can teach personal skills such as responsibility and resource management. Multiple studies have addressed ACNH as an instrument to teach economics, sustainability, and environmental conscientiousness (Lazzeretti & Gatti, 2023). Players learn to balance limited resources, while crafting materials for efficient progress. Activities like fishing or bug-catching require pattern recognition and timing, improving with increased practice. ACNH demonstrates how tasks like gardening and resource management can be enjoyable, while imparting life skills. Furthermore, games simulate real-world scenarios in a controlled setting, with ACNH providing structured goals that mimic task completion in work or school environments. The inclusion of tracking player progress, choices, and interactions, provides a wealth of data for performance measurement and improvement.

The primary weakness of video games as an avenue for training and performance is the lack of real-world transfer. While video games may enhance abstract skills such as problem-solving or hand-eye coordination, the connection to practical, job-specific skills is often tenuous. Entertainment-focused games such as ACNH rarely provide structured skills applicable to professional, or technical tasks. Furthermore, games often simplify tasks and scenarios to maintain player engagement, resulting in training programs that fail to capture the depth and variability of real-world challenges, thereby making them less effective for developing nuanced skills. A study by Sanchez, D. R. (2022) found that video games can impact training performance when goals and rules are clear, "impacting mid-training performance but not post-training performance". While video games possess inherent rules, the lack of clarity and failure to deliver precise performance tracking can limit its use as a reliable training tool. Complexity and lack of coherence can incite cognitive overload, reducing focus on specific training objectives and hindering performance improvement.

Games designed for education may prioritize engagement over deep learning, simplifying complex concepts for entertainment purposes. This can lead to a superficial understanding of topics without fostering critical thinking, or in-depth knowledge. Furthermore,

design elements of entertainment games, such as flashy graphics or overly gamified rewards, can distract from the educational purpose and shift focus away from core objectives. This can be especially problematic for students with learning disabilities, with video games acting as a distraction, and overwhelming players with multiple demands for attention. In addition, games that are overly complex can overwhelm learners, making it harder to retain educational content. This is especially problematic when video games try to balance teaching with high-paced entertainment.

ACNH exemplifies the qualities of an engaging entertainment game, offering immersion, freedom, and social interaction. While the video game industry excels in creating captivating experiences and fostering communities, it sometimes prioritizes monetization and complexity at the expense of accessibility and inclusivity. From a training perspective, ACNH highlights the potential of games to teach soft skills but also reveals the industry's challenges in aligning entertainment with measurable, real-world outcomes. To fully leverage games for both entertainment and training, developers must strike a balance between engaging design and functional application.

References

Villarejo-Carballido, B., Pulido, C. M., & Tejedor, S. (2022). Key Competences for Lifelong Learning through the "Animal Crossing: New Horizons" Video Game. Future Internet, 14(11), 329. https://doi.org/10.3390/fi14110329

Yee, A. Z. H., & Sng, J. R. H. (2022). Animal Crossing and COVID-19: A Qualitative Study Examining How Video Games Satisfy Basic Psychological Needs During the Pandemic. Frontiers in psychology, 13, 800683. https://doi.org/10.3389/fpsyg.2022.800683

Yang, J., Wang, R., Cook, A., & Fuller, R. (2023). Gaming during the COVID-19 pandemic: Examining its effect on loneliness & motivation, playing and gratification differences between competitive and recreational gamers. Telematics and Informatics Reports, 11, 100093-. https://doi.org/10.1016/j.teler.2023.100093

Halbrook, Y. J., O'Donnell, A. T., & Msetfi, R. M. (2019). When and How Video Games Can Be Good: A Review of the Positive Effects of Video Games on Well-Being. Perspectives on Psychological Science, 14(6), 1096–1104. https://doi.org/10.1177/1745691619863807

Christoph, K., Dorothée, H., & Peter, V. (2009). The Video Game Experience as "True" Identification: A Theory of Enjoyable Alterations of Players' Self-Perception. Communication Theory, 19(4), 351–373. https://doi.org/10.1111/j.1468-2885.2009.01347

Martinez, L., Gimenes, M., & Lambert, E. (2022). Entertainment Video Games for Academic Learning: A Systematic Review. Journal of Educational Computing Research, 60(5), 1083-1109. https://doi.org/10.1177/07356331211053848

Osmanovic, S., & Pecchioni, L. (2016). Beyond Entertainment: Motivations and Outcomes of Video Game Playing by Older Adults and Their Younger Family Members. Games and Culture, 11(1–2), 130–149. https://doi.org/10.1177/1555412015602819

Marchand, A., & Hennig-Thurau, T. (2013). Value Creation in the Video Game Industry: Industry Economics, Consumer Benefits, and Research Opportunities. Journal of Interactive Marketing, 27(3), 141–157. https://doi.org/10.1016/j.intmar.2013.05.001

Lazzeretti, C., & Gatti, M. C. (2023). Dialogic interaction between player and non-player characters in animal crossing: A corpus-based study. Language and Dialogue, 13(1), 81–102. https://doi.org/10.1075/ld.00136.laz

Sailer, M., Hense, J. U., Mayr, S. K., & Mandl, H. (2017). How gamification motivates: An experimental study of the effects of specific game design elements on psychological need satisfaction. Computers in Human Behavior, 69, 371–380. https://doi.org/10.1016/j.chb.2016.12.033

Barr, M., & Copeland-Stewart, A. (2022). Playing video games during the COVID-19 pandemic and effects on players' well-being. Games and Culture: A Journal of Interactive Media, 17(1), 122–139. https://doi.org/10.1177/15554120211017036

Sanchez, D. R. (2022). Videogame-Based Training: The Impact and Interaction of Videogame Characteristics on Learning Outcomes. Multimodal Technologies and Interaction, 6(3), 19-. https://doi.org/10.3390/mti6030019