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Study of Motivation to Play Video Games in the 90s Generation Using the Gamer Motivation Model

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ABSTRACT
The 1990s were a pivotal era for the development of video game consoles, significantly influencing the gaming preferences and habits of the 90s generation, often referred to as digital natives. This research investigates the motivations behind why individuals from this generation engage in video gaming, utilizing the Gamer Motivation Model as a framework. The study involved interviews with 9 respondents from the 90s generation who are actively involved in gaming. The findings highlight that the primary motivations for these gamers are driven by the desire for Completion and the thrill of Excitement during gameplay. Players find satisfaction in collecting items, completing missions, and reaching milestones within games, which serve as key motivators. Furthermore, they are drawn to dynamic gaming experiences that are rich with surprises, providing emotional highs and adrenaline boosts that enhance the overall gaming experience. In addition to these primary motivations, the research also delves into secondary motivations, exploring other factors that contribute to the gaming experience for this demographic. The insights gained from this study are valuable for both researchers and game developers, as they provide a deeper understanding of the specific gaming motivations of the 90s generation. This understanding can be leveraged to design gaming experiences that are more closely aligned with the preferences and needs of this group.

KEYWORDS

Player Motivation
90s Generation
Video game
Gamer Motivation Model

INTRODUCTION

Play is something that cannot be separated from the life of a human being. (Reynaldo et al., 2022). Therefore, humans are also referred to as Homoludens, which means "creatures of play"(Mcdonald, 2019). In its development, play is closely related to the emergence of video games. Video games are an important part of modern popular culture. The 90s saw the early development of video game consoles that significantly influenced people's play preferences and habits, especially for the 90s generation (Ciszek, 2021). The 90s generation is a transitional generation from the millennial generation, aka generation-Y, which is the generation born between 1980 and 2000 (Harber, 2011). One of the main characteristics of the millennial generation in general is strong digital skills. They grew up in the digital age, with easy access to computers, the internet, and mobile devices. Therefore, they are very tech-savvy and comfortable in using various digital devices. They are very accustomed to change and innovation. millennials tend to accept change as normal and even look for change as an opportunity to grow. They are very open to new ideas and can quickly adjust to technological developments, which is why they are dubbed as digital natives

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(Palfrey & Gasser, 2008).

Video game players in the millennial generation can be classified based on their year of birth. This division can provide a more detailed insight into their preferences and playing habits. There are several age groups within this generation that correspond to the era of each console that was popular at the time (Chang et al., 2007) These include:

1) Early Millennials (1980-1985)

They grew up during the transition from the era of 8-bit consoles like Nintendo to 16-bit consoles like Super Nintendo and Sega Genesis. They grew up with classic games like Super Mario Bros and Sonic the Hedgehog. Personal computers were starting to emerge, but were still limited to simple games like Tetris. As adults, they experienced the development of next-generation consoles like PlayStation and personal computers. They tend to favour games with high difficulty and simple graphics.

2) Mid-Millennials (1986-1990)

They grew up during the golden age of 16-bit consoles like the Super Nintendo and Sega Genesis. They grew up with games like Street Fighter and The Legend of Zelda. Personal computers started making their way into their homes, but they were still limited. As they reached adulthood, they experienced the development of next- generation consoles like the PlayStation 2 and more powerful personal computers. This generation began to favour games with in-depth stories, complex gameplay and better graphics.

3) Late Millennials (1991-1995)

They witnessed the beginning of the 32-bit console era like the first PlayStation. They grew up with games like Super Mario 64 and Final Fantasy VII. Personal computers started making their way into their homes with games like StarCraft and Age of Empires. As they matured, they experienced the explosion of online gaming, mobile gaming, and next-gen consoles like PlayStation 4 and Xbox One. Their preferences are more diverse, with online and mobile gaming increasingly dominating.

4) Transitional Millennials (1996-2000)

They grew up with consoles like PlayStation 2, Xbox, and GameCube. They were familiar with games like Halo and Grand Theft Auto. Personal computer games also became more sophisticated, and the internet became more integrated into the gaming experience. As they mature, they experience the era of next-generation consoles like PlayStation 5 and Xbox Series X/S. They are also familiar with sophisticated mobile gaming and online microtransaction-based games or Play to Earn games such as NFT games.

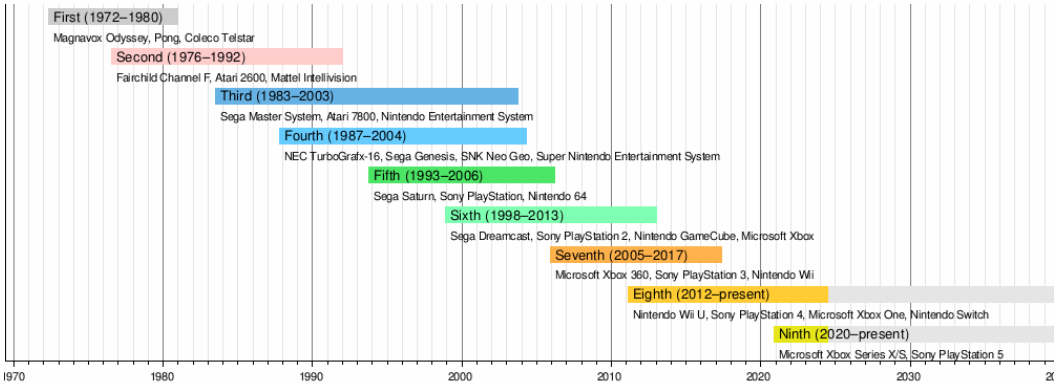

Figure 1. Timeline of video game console development
Source: https://en.wikipedia.org/wiki/Home_video_game_console_generations

The 90s generation, as part of the millennial cohort, grew up alongside the gaming technology revolution. They witnessed the significant evolution of the first 32-bit consoles like the PlayStation, which offered iconic gaming experiences like Super Mario 64 and Final Fantasy VII, as well as strategic games popular on personal computers like StarCraft and Age of Empires. As they entered adulthood, they witnessed the emergence of next-generation consoles like the PlayStation 2, Xbox

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and GameCube, which brought games like Halo and Grand Theft Auto into sharp focus. This progression extended their experience to increasingly complex online and mobile games, and to more recent consoles such as PlayStation 4, Xbox One, and later PlayStation 5 and Xbox Series X/S. This generation is not only accustomed to increasingly sophisticated and interactive games, but is also adapting to innovations such as microtransaction-based games and the Play to Earn Game phenomenon with NFT technology (Nurcahyanto, 2023). With experiences spanning multiple platforms and genres, they show high adaptability to rapid developments in gaming technology, while still reminiscing about the classic games of their childhood with deep nostalgia. Since the 90s generation not only played video games as children, but also continued the hobby into adulthood, even after getting married and starting a family, they still love playing video games (Ghea & Pratama, 2023). So what is more important is not the type of video game console they use to play, but rather what kind of motivation underlies the 90s generation in playing video games.

Understanding video game play motivations is crucial in the development of game designs that are effective in achieving their goals (Tondello et al., 2017). This knowledge is not only important for designing satisfying gaming experiences (Teng et al., 2024), but also to maintain player retention and optimise monetisation strategies based on appropriate play motivations (Ascarza et al., 2024). Knowing player motivations can also be used in applying design thinking approaches, especially in the empathy stage, to find innovative game designs. This allows developers to more deeply understand players' emotions, wants and needs, ensuring that the resulting play experience is not only technically satisfying, but also emotionally fulfilling (Kloeckner et al., 2021). Knowing play motivations can also even help design intrinsic educational games by incorporating learning elements into engaging gameplay. This can increase learning effectiveness and player engagement. In game design, this understanding is important to ensure players are internally motivated to continue playing, not just because of external rewards (Songer & Miyata, 2014).

Research on motivations for playing video games has grown rapidly in line with the growth of the gaming industry and the increasing role of games in various aspects of life (Vigato & Babic, 2021). The Gamer Motivation Model (GMM) is one of the analytical tools that can be used in video game motivation research. The model categorises gaming motivation into 6 main dimensions, each of which has 2 sub-dimensions, allowing for a more structured and comprehensive analysis of gaming motivation. With an understanding of the play motivations of the 90s generation, this research can make a significant contribution to the field of game studies and assist game developers in designing more engaging gaming experiences that cater to the preferences of players from this generation. This research can also serve as a foundation for future studies that want to further explore gaming motivations in other age groups or in different cultural contexts.

METHOD

1. Gamer Motivation Model

Quantic Foundry, a game analytics and market research company that combines social science with data science. Quantic Foundry formulated the Gamer Motivation Model to understand what drives gamers through survey-based motivational analysis. This understanding is critical in designing immersive and engaging gaming experiences. The Gamer Motivation Model is a comprehensive framework that outlines the various dimensions of player motivation, each representing a different aspect of player preferences and behaviour (Yee & Ducheneaut, 2019).

Table 1. Dimensions of the Gamer Motivation Model (Yee & Ducheneaut, 2019)

Action	Social	Mastery	Achievement	Immersion	Creativity
Destruction	**Competition**	**Challenge**	**Completion**	**Fantasy**	**Design**
Guns. Explosives. Chaos. Mayhem.	Duels. Matches. High on Ranking.	Practice. High Difficulty. Challenges.	Get All Collectibles. Complete All Missions.	Being someone else, somewhere else.	Expression. Customisation.
Excitement	**Community**	**Strategy**	**Power**	**Story**	**Discovery**
Fast-Paced.	Being on Team.	Thinking	Powerful	Elaborate plots.	Explore. Tinker.

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Action. Surprises. Thrills.	Chatting. Interacting.	Ahead. Making Decisions.	Character. Powerful Equipment.	Interesting characters.	Experiment.

The dimensions of the Gamer Motivation Model include several spectrums of motivation and their sub-motivations, including:

1) Action*:*
   Motivation to participate in fast and stimulating actions, such as testing reflexes and motor skills.
   - Destruction: Players enjoy the satisfaction of damaging or destroying objects or enemies in the game.
   - Excitement: Players seek high thrills and tension in games, often through fast-paced action and thrilling moments.
2) Social:
   Motivation to engage in social interactions with other players, such as collaborating or competing.
   - Competition: Players feel driven by competition with other players to achieve certain goals or win the game.
   - Community: Players want to interact with others in the game, create social relationships and forge friendships.
3) Mastery:
   Motivation to master skills and strategies in the game.
   - Challenge: Players seek challenges that require skill and strategy to overcome.
   - Strategy: Players enjoy the process of planning and implementing strategies to overcome obstacles in the game.
4) Achievement:
   Motivation to achieve goals, seek praise, and improve status in the game.
   - Completion: Players feel satisfied when they achieve certain goals or complete tasks in the game.
   - Power: Players want to feel power and dominance over the environment or other players in the game.
5) Immersion:
   The motivation to feel emotionally involved in the storyline or game world.
   - Fantasy: Players engage in a fictitious game world and want to experience fantastic adventures and stories.
   - Story: Players are looking for an immersive storyline experience and interesting characters to explore.
6) Creativity:
   Motivation to express creativity and innovate in the game.
   - Design: Players enjoy the process of designing or building something in the game, such as a character or level.
   - Discovery: Players explore and discover new things in the game, and can conduct experiments.

Each dimension encompasses specific motives that underlie players' engagement and enjoyment in the game. For example, the Achievement dimension relates to players who are driven by goals, rewards, and tracking progress, while the Social dimension focuses on players who seek social relationships, co-operation, and competition with other players. In the game design process, the Gamer Motivation Model serves as a guide to tailor the game experience to the diverse motivations of players. By aligning the features and mechanics of the game with the identified dimensions of player motivation, designers can create experiences that suit the target audience. In conclusion, the Gamer Motivation Model offers a deep understanding of player motivations, providing designers with insights into diverse motives so as to create more targeted game experiences, better maximising player satisfaction, retention and enjoyment (Yee & Ducheneaut, 2019).

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2. Research Scenario

This research uses qualitative methods with in-depth interviews to gain a richer and more in-depth view of individual experiences and motivations for gaming (Yee & Ducheneaut, 2019). In this study, interviews were conducted with nine 90s generation video game enthusiasts with diverse backgrounds. Through analysing the interview data, this study aims to identify the key dimensions of 90s gaming motivations and relate them to specific examples of relevant video games, as well as look for commonalities between them. The interview scenario will be conducted with the following steps:

1) Interviews can be conducted offline or online.
2) The audio of each interview session was recorded.
3) The interview began with the respondent introducing themselves with details of their name and year of birth to find out whether the respondent was the appropriate research target, namely the 90s generation.
4) Opening question session (details can be found in the question list section).
5) Core question session (details can be found in the question list section).
6) During the core question session, the interviewer will dig deeper into the respondent's answers by reading out the 12 dimensions of the Gamer Motivation Model.
7) Photo documentation with respondents after the interview was completed.

In order to understand the motivations for playing video games in the 90s generation, a series of questions were developed in accordance with the Gamer Motivation Model framework. These questions were designed to explore the respondents' gaming experiences, preferences and behaviours, so as to identify the dominant dimensions of motivation. The following questions were asked in the interviews:

1) Opening Question
   - What platforms have you used to play video games?
   - What video games have you enjoyed over the last 10 years?
   - What video games have you played a lot in the last 1 year?
2) Core Question
   - What do you think should be in a game?
   - What kind of gaming experience do you enjoy?
     What are the activities you do most often in the game?

RESULT AND DISCUSSION

The data obtained from the interviews was analysed and categorised according to the dimensions of the Gamer Motivation Model. The results of this analysis are presented in the form of a table, which summarises relevant quotes from the respondents and relates them to the identified dimensions of motivation. The table provides a comprehensive overview of how the various aspects of each dimension of gaming motivation are reflected in the respondents' gaming experiences and preferences.

The following Gamer Motivation Model data analysis table shows the relationship between respondents' quotes and the identified dimensions of gaming motivation:

Table 2. Gamer Motivation Model data analysis table

Respondent	Excerpt Data	Analysis
R1 (1997)	"As a cozy gamer, I feel that achievements and collecting things are important, like when I play Coral Island I like to collect fish or plants and so on, I have a certain satisfaction in collecting things in games, because exploration without collecting things is less challenging." "Thrill should be in the moments in the game so that it doesn't get boring"	It can be concluded that R1's main play motivation is collecting things, which can be seen from R1 who likes to collect fish, plants, etc. in the Coral Island game. So the dimension of play motivation is Completion (Achievement). And Thrill is also considered important by R1 which is the Excitement (Action) dimension. Another dimension that can be seen from the type of game played is Discovery (Creativity) According to the GMM

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		theory.
R2 (1997)	"A sense of achievement is important, like in Minecraft when we manage to build something or collect something like collecting Pokémon or rare characters in Genshin Impact."	It can be concluded that the main playing motivation of R2 is collecting rare characters, it can be seen from R2 who likes to collect Pokémon, or characters in Genshin Impact. So the dimension of playing motivation is Completion (Achievement). Another dimension that can be seen from the type of game played is Design & Discovery (Creativity) According to the GMM theory.
R3 (1994)	"I think a game should have a fun and exciting feeling, instead of games that are full of explosions I prefer games that are fast-paced, thrilling, even Tetris which doesn't have many kinds, not explosive but can be very thrilling because it gets faster and more challenging." "I really like treasure hunts like looking for stamps, looking for pins, like in Dufan even though it's not a game, in games I really like collecting Pokemon, even in Pokemon Emerald I managed to collect all 150 Pokemon complete to the langend, in Stradew Dalley I also like to collect special fruits every season to complete side-quests."	It can be concluded that R3's main gaming motivation is to seek thrill and excitement in a fast-paced and challenging game, which is the Excitement (Action) dimension. In addition, R3 also has a tendency to collect various items and complete side-quests, indicating the Completion (Achievement) dimension According to the GMM theory.
R4 (1999)	"I like RPG games that have a strong story, in the story in RPG games I think thrill or tense atmosphere becomes a turning point momentum that surprises the storyline and interesting gameplay."	It can be concluded that the main playing motivation of R4 is to seek thrill and surprise in the game, which is the Excitement (Action) and story (Immersion) dimensions According to the GMM theory.
R5 (1997)	"Games like Elden Ring also provide many surprises such as each boss has a different movement pattern, for example there is a small boss that turns out to be really difficult to fight, that's what gives its own excitement"	Given that R5 enjoys the experience of fighting boss variations that are full of surprises, it can be concluded that R5's main motivation for playing is to find surprises in the game, which is the Excitement (Action) dimension According to the GMM theory.
R6 (1998)	"Unlocking maps or unlocking new weapon variations in games like Assasins Creed or Doom is a must, even though not all the weapons will be used but if everything is complete it feels more satisfying" "I enjoy exploration, like collecting fish in Stardew Valley, or collecting recipes in Harvest Moon.	R6 enjoys the experience of playing when he manages to unlock or collect something in the game so it can be concluded that the dimension of his motivation to play is Completion (Achievement). Another dimension that can be seen from the type of game played is Excitement (Action) According to the GMM theory.
R7 (1997)	"Until we get a special cow plant in The Sims, it's a reward that we can only get if we reach level 10 and it's a challenge in itself." "I enjoy collecting asteroid stones in The Sims, the more we collect the higher the chance of getting a rare stone. So I often watch the walktroughs that give me interesting easter eggs to explore."	R7 enjoys collecting or overcoming challenges to get special items or exploring secret places to find rare items, so the dimension of motivation to play is Completion (Achievement). Another dimension that can be seen from the type of game played is Design & Discovery (Creativity) According to the GMM theory.
R8 (1999)	"There must be an element of collection such as collecting spell cards, especially in mobile games that are always updated, new cards often appear, which makes me want to get them even more." "I often do duels in-game to push rank so that I can compete with more challenging global players, because if there is no such thing the game will be less challenging."	R8 likes to wait for updates in mobile games so that he can collect new items, and he also often duels and increases his rank so that he can compete with other players globally. So the dimensions of his motivation to play are Completion (Achievement) and Competition (Social) According to the GMM theory.
R9 (1998)	"Collect a variety of Pokémon from common to legendary because it gives its own rewards. Just like in Marvel Snap, when we play with other players and win a lot we can get new cards."	Collecting Pokémon or cards in Marvel Snap provides its own challenges and rewards for R9, so the dimension of motivation to play is Completion (Achievement) According to the GMM theory.

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Based on the analysis of the Gamer Motivation Model data that has been carried out, there are various kinds of playing experiences from each respondent, there are two main dimensions that often appear, namely Completion which is part of Achievement and Excitement which is part of Action. This can happen because based on the interviews conducted, millennials have childhood memories of playing games such as Pokémon, Harvest Moon, and other open world role playing games that make them have a special pleasure in collecting something or exploring a game world full of surprises (Yee & Ducheneaut, 2019).

Table 3. Respondents' main dimensions on Gamer Motivation Mode

Action	Social	Mastery	Achievement	Immersion	Creativity
Destruction Guns. Explosives. Chaos. Mayhem.	**Competition** Duels. Matches. High on Ranking.	**Challenge** Practice. High Difficulty. Challenges.	**Completion** Get All Collectibles. Complete All Missions.	**Fantasy** Being someone else, somewhere else.	**Design** Expression. Customisation.
Excitement Fast-Paced. Action. Surprises. Thrills.	**Community** Being on Team. Chatting. Interacting.	**Strategy** Thinking Ahead. Making Decisions.	**Power** Powerful Character. Powerful Equipment.	**Story** Elaborate plots. Interesting characters.	**Discovery** Explore. Tinker. Experiment.

In addition to the Completion and Excitement dimensions which are the main dimensions in the 90s generation, there are also secondary dimensions found. These secondary dimensions are:

1) *Design (Creativity):*
   This dimension is reflected in R7, who enjoys in-game activities that involve designing and building things. For example, in games like The Sims, which features designing houses and neighbourhoods. In addition, R2 also showed interest in crafting and building things in games like Minecraft. They enjoy creating and organising elements in the game to achieve certain goals, such as designing buildings or creating certain items in the game. This shows that they find satisfaction in expressing their creativity through designing and building in video games (Yee & Ducheneaut, 2019).
2) Discovery (Creativity):
   This dimension emerged for respondents like R1 and R2, who enjoyed in-game exploration. R1 was satisfied with exploring the Coral Island environment, while R2 enjoyed building things in Minecraft. These activities reflect the motivation to explore and discover new things in the game, as well as to experiment. Other respondents such as R6 enjoyed unlocking new maps or weapon variations in Assassin's Creed or Doom, and R7 enjoyed finding easter eggs in The Sims (Yee & Ducheneaut, 2019).
3) Competition (Social):
   R8 demonstrated play motivations related to competition and social interaction, especially when dueling to increase rank and competing with other players globally. In-game competitions provide challenges and fun for them (Yee & Ducheneaut, 2019).
4) Story (Immersion):
   Some respondents showed interest in the immersion aspect of games, such as enjoying an immersive story or a detailed and interesting game world. This can be seen in respondent R4 who favours RPG games with strong stories. R4 stated that the thrill element in RPG game stories creates turning point moments that provide surprises to the storyline and gameplay, making it more engaging. R4's main motivation is to engage in an immersive story that allows them to engage further in the game world, creating a more immersive and satisfying gaming experience (Yee & Ducheneaut, 2019).

These secondary dimensions show that while Completion and Excitement are the primary motivations, the 90s generation also has quite diverse interests in other aspects of the game. This reflects the complexity and diversity of play motivations in this age group, as well as the importance of considering various elements in game design to cater to the needs and preferences of millennial players.

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CONCLUSIONS

This study uses the Gamer Motivation Model to identify the motivations for playing video games in the 90s generation. The results show that this generation has a strong tendency towards two main dimensions, namely Completion (Achievement) and Excitement (Action). The Completion (Achievement) dimension shows that the 90s generation likes games that have elements that can be collected and completed, such as collecting various items in the game or completing certain challenges. This reflects their tendency to seek achievement and satisfaction in completing specific goals in games. In addition, the Excitement (Action) dimension also emerged as a key motivation, showing that the 90s generation favoured games with fast pacing and surprising challenges. They seek thrills and suspenseful moments in games, which make the gaming experience more exciting and adrenaline-pumping. This tendency can be seen in their preference for games that offer dynamic challenges and surprises in gameplay.

Overall, this study provides a deeper understanding of the motivations for playing video games among the 90s generation. This generation displays complex and diverse tendencies in their gaming preferences, including achievement, excitement, creativity, exploration, competition, and immersion. These findings can serve as a guide for game developers in designing more engaging gaming experiences that align with the needs and preferences of players from the 90s generation.

Suggestions for future research include expanding the scope of the study by investigating gaming motivations across different generations, such as Millennials or Generation Z, to understand how generational differences influence gaming preferences. Additionally, research could focus on how these gaming motivations evolve with technological advancements, such as virtual reality and augmented reality, as well as changes in gaming industry trends. Further research could also explore the impact of gaming motivations on social and cognitive aspects, as well as their effects on players' emotional well-being.

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