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About me

I am an experienced industry professional with more than 12 years of working experience. At present, I am pursuing my PhD in Design in the Department of Design IIT Guwahati. My area of research is determining the relationship between haptic experience and game design requirements for entertainment digital games.

I graduated with a B.Tech in Mechanical Engineering from Haldia Institute of Technology, West Bengal, in 2007. After graduating, I started my professional journey by joining TVS Motor Company Pvt Ltd. I worked in R&D Engines for TVS Motor Company for almost 8 years in engine transmission design and development for the three-wheeler vehicle segment. My extensive work in this domain resulted in 2 patents to my name as well.

After gaining a significant and in-depth understanding of the engineering and technical aspects of product design and development, I proceeded to do an MBA from IIM Lucknow to understand the business aspects of products and how business

requirements are tied into the entire process. After completing my MBA, I worked in the corporate strategy department of Shapoorji Pallonji Group. I was primarily involved in business strategy and business plan development for various group-level projects and new product development and business planning for various subsidiaries of the Shapoorji Pallonji Group.

After this corporate stint, I returned to academics and became a PhD student in the Department of Design, where I could bring my extensive industry experience related to product development and business planning to the field of design and marry it with my long-time passion for digital games and contribute to the field of research in game design and player experience.

What Women Gamers Want

Saptarshi Samanta, PhD Student (4th Year)

Ph.D Student in Department of Design

Introduction

Entertainment digital games, also known as video games, have been around for quite some time. Social media is flooded with posts by various players and their latest conquests or game studios posting about their latest upcoming games. We see people from various age groups traveling in different types of public transport, engaged in combat games like PUBG or Fortnite on their mobiles, or lazily swiping their fingers on games like CandyCrush. PokemonGo was quite a rage not long ago when we saw young kids running across the neighborhood with mobile phones to capture a Pokemon that might have spawned in their locality. There are so many more examples of such games and the impact that they have had on the minds of the populace. The common thing observed is that many find entertainment digital games great for relaxing, having fun, finding friends, and making memories. The number of video games released each year has been steadily rising, and for the people engaged in playing video games, this couldn't have been a better era to live in. So where do women fit into this world of entertainment digital games? In this article, we shall try to shed some light on the aspect of women gamers and what they need from game designers.

1.24. Size of the video game market

The video game industry was valued at USD 282.3 billion in 2024 and is estimated to be worth USD 312 billion by 2025 (Howarth, 2024; Statista, 2024). From the size of the video game industry in

terms of revenue, it is easy to estimate the number of people playing video games every day. In 2024, data from various sources highlight that approximately 3 billion people are actively engaged in playing video games globally. The global population in 2024 stood at 8.2 billion people. The above data shows that at least 36.5% of the worldwide population is engaged in video games. This is quite a sizeable portion of the population indeed and indicates that entertainment digital games are not restricted to particular niches of the global population. Let's look at the distribution of the population engaged in playing entertainment digital games by region. We observe that Asia alone has 1.48 billion players, whereas Europe, Latin America, and North America combined have 1.42 billion players. This makes Asia the largest market for entertainment digital games. A fact that has not gone unobserved by various game studios and the Asian market has become a focal point for driving future growth of the game industry.

1.25. What is the proportion of women in the video game player population?

We have already established that more than a third of the global population plays entertainment digital games. However, we have not touched upon the gender distribution of the global gaming population. We are particularly interested in the women game players of the world, what kind of games they like to play, what challenges they face, and how game designers can make games that have equal appeal for women and men. If one looks at various tabloids, articles, and posts on social media, one might believe that playing entertainment digital games is predominantly a pastime of the male gender. However, the gender-based data of the global gaming population has another story contrary to popular belief. Globally, there are approximately 1.7 billion men gamers and 1.39 billion women gamers (Howarth, 2024). It is almost a 50-50 divide

between the two genders. The ESA has conducted an in-depth analysis of the gender divide in gaming in the US video game market. As per their records of 2024, 53% of the players in the US were male, and 46% were female (ESA, 2024). In Figure 1, we have captured the data related to the percentage of women gamers in different regions for 2024.

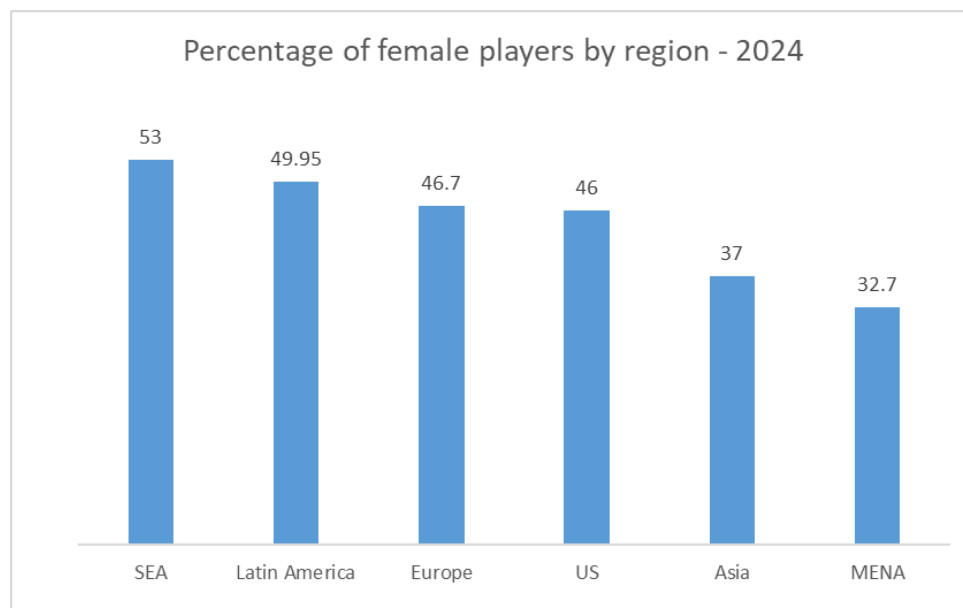


Figure 1: percentage of female players by region-2024

The SEA region mentioned here comprises Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam. Latin America has data from only Brazil and Mexico, while the data from other countries in the region is dated or unavailable. Asia comprises China, Chinese Taipei, India, Japan, and Korea. MENA comprises Egypt, Saudi Arabia, and the UAE. Figure 1 shows that the percentage of women gamers in each geographical region is between 30 – 50%. This is quite a sizable market indeed and not a figure to be scoffed at. So, the popular notion that entertainment digital games are meant for men and that these games are "boy toys" does fall flat on its face. The data shows that women are as interested in entertainment digital games (video games) as men. In the case of India, the story is the same for women gamers.

Almost 41% of the gaming population in India is female (Times of India, 2024).

1.26. Do women gamers have the same game genre preferences as men?

Though women gamers occupy almost the same space as their male counterparts, from various surveys of gamers across the globe, we can see that women's preferences differ from those of men. A good amount of data is available on the game genre preferences of men. However, data related to game genre-based preferences for women, though present, is not detailed enough. From reviewing various literature related to the game preferences of women, we observe that women's preferences vary along the lines of preferred elements of the game, as well as the platform of choice for playing those games. Playing games on mobile phones was the preferred platform of choice for most women gamers, followed by consoles and PCs. Women who prefer to play on mobile phones generally tend to identify themselves as casual gamers, and women who prefer consoles or PCs self-identify as core gamers (Eliza Crichton-Stuart, 2024; Rival Tech Company, 2021).

Though the genre preferences of women gamers are not well known, recent research into understanding women gamers has shed some insights into this section of the gaming populace. Thakur et al. (2023) state that women gamers prefer games that require a shorter duration to play and that let the players get involved with the narrative and visual aesthetics of the game. Women gamers have identified completion, fantasy, design focus, community, and story as the top motivators for playing any game. So, if any of the games have these elements in apt quantity, it will attract women gamers. In contrast, male gamers preferred games with more destruction and competition elements (Rival Tech Company, 2021). This stark difference in preferences for game elements between

female and male gamers shows that there is a need to relook at how games are made today.

1.27. Challenges faced by women gamers

Even though the number of women gamers is almost equal to the number of men gamers globally, there is a disparity in designing games. Kuss et al. (2022) have pointed out that, at present, entertainment digital games tend to be designed by men for men. Women gamers' preferences and needs are not adequately addressed or considered. This results in several challenges for the player experience of women gamers. Even in academic research related to the study of gamers, the focus is predominantly on men gamers (Kuss et al., 2022; Thakur et al., 2023). Only in recent years we are seeing an increased interest in understanding women gamers. The challenges women gamers face can be broadly broken down into two categories. The first category deals with how playable female characters are represented in entertainment digital games and the overall game narrative and game design. The second category deals with how the gaming community interacts with women gamers.

The representation of female characters, playable as well as non-playable, is quite a vexing one. As male designers dominate game design, the representation of the female characters is dominated by how these male designers view women. This has resulted in the sexualization or objectification of the female characters with a focus on sex appeal cues like large breasts, narrow waist, wide hips, exposed skin, and minimal clothing. This has resulted in shifting the focus away from understanding and liking the female character as a person and appreciating her qualities and skills. Instead, the female character is relegated to an object. While men gamers might find this kind of female character representation attractive, women gamers are not drawn to this type of depiction

at all (Lynch et al., 2024). This kind of depiction of female characters also affects the perceptions of body image and confidence of women gamers, resulting in women gamers avoiding digital games further. The other challenge arises from applying gender-based stereotypes to female characters. The female characters are often depicted as damsels in distress or incapable of completing tasks without help or making correct decisions, or appear manipulative. This makes female characters, playable and non-playable, undesirable to women players. However, due to a paucity of suitable female characters that meet the preferences of female gamers, the female gaming population does have limited choices.

This brings us to the second challenge: how the gaming community interacts with women gamers. This challenge is inherently linked to the first challenge. The representation of female characters within the game also influences how men gamers perceive female characters. Women gamers are often viewed as incompetent and lacking in skills required for playing digital games. Furthermore, due to the sexualized representation of female characters, women gamers are often at the receiving end of harassment, online and probably in real life. The issues of women gamers are often unaddressed by game developers or half-hearted measures that are cosmetic at best (Batista et al., 2024; Lynch et al., 2024; Thakur et al., 2023; Uchidiuno et al., 2023). This further alienates the female gaming population from engaging with the broader gaming community. Women gamers often refuse to identify as gamers and avoid online gaming and social gaming interactions to minimize the chances of hostile interactions (Kuss et al., 2022).

1.28. How can game designers make entertainment digital games more attractive to women?

There are considerable challenges faced by women gamers. The

question then would arise: what can be done to alleviate the challenges faced by women gamers? Women in Games, a not-for-profit organization, has highlighted that women are grossly underrepresented in leadership positions in the gaming industry. Addressing this disparity by involving more women in the decision-making process of game design might aid in the creation of more women-friendly or universally acceptable games for all genders. The realization that women gamers have not been adequately studied and that game designers have not considered designing games that cater to women's preferences is a step in the right direction. Reduced stereotypical portrayal of female characters with more focus on the characters' abilities and skills might prove attractive to women gamers. Some measures can include attaching strength cues to female characters and allowing them to use heavy equipment like their male counterparts in the game. Similarly, skills and qualities normally attributed to male characters in games can also be associated with female characters and increase women players' interest in games. There is a need to understand what exactly makes a female player character feminine and acceptable to women gamers. This can be achieved by conducting extensive studies about the requirements of women gamers about female characters and involving women game designers in the game design process.

Creating games exclusively targeted at women gamers or making games more inclusive for all genders is an underexplored segment. It presents an exciting opportunity for game development in the gaming industry as well as for those interested in research related to digital games.

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