Spelarupplevelse i MOBA-spel: Betydelsen av tävling, lagarbete och mästerskap

Player Experience in MOBA Games: The Role of Competition, Teamwork, and Mastery

Examensarbete för kandidatexamen med huvudområdet Informationsteknologi

Grundnivå 15 högskolepoäng

Vårtermin 2023

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Abstract

This study explores player experiences within Multiplayer Online Battle Arena (MOBA) games, focusing on the themes of competition, teamwork, and mastery. Through in-depth interviews, a qualitative analysis was made to shed light on the connection between game balance, communication tools, and player support systems. Mastery is highlighted as a central aspect, significantly enhancing player engagement, with an accentuated effect in team contexts. Emotional dynamics were found to be pivotal in player experiences, indicating the importance of effective communication and balanced game mechanics.

Recommendations include a broader approach in future research, combining qualitative and quantitative methods for a comprehensive understanding of player experiences. A diversified player demographic and consideration of evolving gaming trends are paramount. The findings underscore the necessity for game developers to integrate both technical and social dimensions in game design, facilitating the aspects of competition, teamwork, and mastery, which provide an enriched player experience. In essence, the research sheds light on the intricate interplay of skill development, emotional engagement, and team dynamics within the MOBA gaming sphere, providing direction for future game development and research.
Sammanfattning

Popular Scientific Summary

In today's world of digital products and games, the domain of Multiplayer Online Battle Arena (MOBA) games emerges as a standout. The genre has gained massive popularity within the world of online gaming and is one of the most popular esports genres, being able to gather hundreds of millions of spectators from all over the world. What, then, is the allure of this genre that draws such a vast audience? This study aimed to take a deep dive into this mystery, especially focusing on the demographic of male individuals aged 18-34.

At a glance MOBAs might seem like any other digital game, but a more nuanced analysis reveals a mix of strategic depth, camaraderie, and the pursuit of individual skill advancement. This study confirms the existence and prominence of these themes. The essence of competition serves as an initial attraction, but this study shows that the appeal of MOBAs stems from a desire in players to prove themselves through mastery and proficiency.

MOBA games are not just about individual gameplay however, as teamwork is essential. This study revealed that players greatly value the interactions and communication with teammates in a competitive setting. The ability to effectively communicate with teammates seems to be just as crucial as the game mechanics themselves.

Understanding these motivations is invaluable. Game developers can craft experiences that resonate with players on a deeper level. They can create games that challenge players not just through gameplay but by fulfilling innate desires for mastery and connection.

This study provides a peek into the complex world of MOBA gaming, highlighting the mix of personal achievement and social dynamics. There is much more to explore in this area, and as research continues we’ll uncover even more about the intricate world of MOBA gaming.
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1 Introduction

Exploring player experience in Multiplayer Online Battle Arena (MOBA) games is a complex yet crucial task. The world of MOBA games is characterized by its rich, competitive environment and complex social dynamics. MOBA games are not just about strategic gameplay; they also foster a space where players engage in intense competition, build personal and team strategies, and navigate intricate social interactions (Johnson et al., 2015). However, unraveling the intricacies of player experience, characterized by competition, teamwork, and mastery within this domain requires a comprehensive and nuanced approach.

This study is driven by an endeavor to gain a deeper understanding of the MOBA player experience, grounded in one core research question:

What aspects have an impact on the player experience in MOBA games in terms of competition, teamwork, and mastery?

This thesis aims to provide a detailed analysis of player experiences, focusing on the complex relationships between these core elements. It is informed by qualitative insights, derived from semi-structured interviews with MOBA players, ensuring an in-depth understanding of their experiences (Abbasi et al., 2022). The purpose of this research is not just to describe but to also analyze and offer solutions that can significantly enhance the gameplay experience. By presenting a well-rounded view of players' nuanced insights and experiences, this thesis aims to deliver actionable insights to game developers, designers, and researchers looking to further explore this area.

The thesis is structured to ensure a coherent and systematic presentation of our research. It begins with a review of existing literature, offering insights into the prevailing understandings and gaps in MOBA player experience. The methodology section follows, detailing the procedures and protocols used in data collection and analysis, as well as ethical considerations that were taken into account. The findings are then presented along with real quotes from participants, shedding light on the complex dynamics of player experience. These findings are then synthesized, from which a set of guidelines for future development and research could be produced. The discussion section interprets the findings, drawing connections to existing theories and offering actionable insights for enhancing player experience. Additionally, limitations of the study are discussed in detail, and directions for future research are suggested in the context of MOBA games.
2 Background

This chapter begins by introducing eSports, its most popular games and genres, and how the eSports experience can be designed for both participants and spectators. Multiplayer Online Battle Arena games are discussed further as one of the most popular genres in eSports today. Lastly, in order to design an eSports experience for both participants and spectators, the concept of Player Experience is examined as a basis for developing games that address all elements of the perceived experience.

2.1 eSports

In recent years, eSports have gained a lot of popularity in video gaming culture. eSports tournaments today match the widespread fame of many international traditional sports events. In 2018 the League of Legends finale in the World Championship tournament had over 200 million viewers (Esports Charts, 2019), which set the record for the most viewed eSport tournament of all time and it shows how far eSports have come in recent years. Other popular eSports events also made history in 2018, such as The International, a Dota 2 tournament organized by the game company Valve, which beat the record for the highest prize pool in an eSports tournament. The prize pool was partially crowdfunded by the community and reached a total of $25 million (ESPN 2019).

eSports are most commonly referred to as competitions in video games, usually in the form of tournaments between professional teams. One recent definition by Hamari and Sjöblom (2017) describe eSports as “a form of sports where the primary aspects of the sport are facilitated by electronic systems; the input of players and teams as well as the output of the eSports system are mediated by human-computer interfaces” (p. 213). The eSports industry has become a very large and profitable industry, and is expected to become a billion dollar industry in 2019 (Newzoo 2019). Much of this growth in popularity and revenue happened in parallel with the growth of video games being broadcast online via live stream services. Live streaming allows people to broadcast the games they play to viewers live, and interact with their audiences through a chatroom. According to Sjöblom and Hamari (2016) designing games with live streaming in mind provides new challenges for developers, as the games not only have to be enjoyable to players, but also appealing to spectators. In another article the same authors found that successful eSports games focus on visual simplicity and clarity (Hamari & Sjöblom 2017). Some games, for example, League of Legends, have custom made spectator modes that allow spectators to control the camera view, get an overview of game events, and use other tools that the players themselves do not have access to while playing. This makes the spectator experience much more engaging, both for personal use and in live streamed eSports tournaments. In these events technicians can control what the spectators see, which allows them to, for example, highlight player choices or provide an overview of the events happening in the game, which are important aspects of a good spectator experience (Rambusch, Alklind Taylor & Susi 2017).

There are many different reasons why people participate in and watch eSports, and some of them are investigated by Hamari & Sjöblom (2017). The authors found escaping everyday life, acquiring knowledge about the game being played, novelty and aggression from professional players to be associated with how much people watch eSports. This is in line with
what Seo (2013) found in an earlier study on the user experience of electronic sports. It was established that the eSport experience was primarily motivated by escapism, that learning about games and eSport is an important aspect of watching others play, and that events such as tournaments supported the escapism experience. Seo also found that watching others play, especially if they are good at the game, is just as important for the entertainment value of eSports as participating in the game.

The most common genres that are associated with eSports and live streaming are, like traditional sports, very competitive, and usually consist of two teams that compete against each other. This is shown by the fact that real-time strategy (RTS), multiplayer online battle arena (MOBA) first-person shooter (FPS), fighting, and battle royale games are the most popular. This thesis will focus specifically on the genre of multiplayer online battle arena games (MOBAs). The two most popular MOBAs, League of Legends and Dota 2, are also some of the most prevalent in eSports, as noted above. However, as the genre is relatively new compared to genres such as FPS or RTS, there hasn’t been much research on MOBA games. In addition, previous research on MOBA games has mainly focused on the two most popular games, League of Legends and Dota 2, so it could be of interest to explore other games within the genre and their relation to eSports.

2.2 Multiplayer Online Battle Arena games

Multiplayer Online Battle Arena (MOBA) games are a subgenre of real-time strategy games characterized by two teams battling against each other on a map with two bases (Johnson, Nacke & Wyeth 2015). The teams usually have five players in each, where players control one character with its own properties and abilities. The goal is to defeat the opposing team by destroying their buildings and eventually the core structure (such as the Nexus in League of Legends). The playing field in some of the most popular MOBAs is characterized by the so called lanes which are like paths from both teams bases that meet up at the top, middle and bottom of the map. Between the lanes there is a jungle where the teams can kill non-player characters for things like gold and experience, which benefits their characters. Another important aspect of these games is killing other player characters, which will usually grant your team similar advantages as mentioned above. However, the team structure, map, winning conditions and other aspects of MOBA games can vary between different games of the genre. In recent years, some of the main aspects that characterize the most popular MOBA games have been changed or removed in some newer games of the genre. For example, in some MOBAs you can win by defeating all of the players on the enemy team (the goal in the game Battlerite) or the map could just have one lane instead of three, such as in Vainglory’s Hclyon Fold map (Super Evil Megacorp 2016). Johnson, Nacke, and Wyeth (2015) also write that the nature of MOBA games is very competitive, as players emphasize the need for making strategic decisions or attempting to outplay their opponents in order to gain an advantage in a match. These strategic decisions are often made as a team, so succeeding in MOBA games often require a high level of teamwork, communication and cooperation within the teams (Shores, He, Swanenburg, Kraut & Riedl 2014).
There are many areas in relation to the games industry, MOBA games, and their players that require further research, as illustrated by Mora-Cantallops and Sicilia (2018) with a Venn-diagram (see Figure 1, p. 3). Some of these areas can be difficult to research in detail because these games often change with frequent intervals. Players have come to expect changes in gameplay with so called *patches*, that can contain updates to the gameplay by changing characters, items, or the map as a way to keep the experience engaging and interesting. This thesis will continue to explore some aspects of the Player Experience (PX) in MOBA games, as well as how this experience relates to eSports. PX is essentially the result of what players think, feel and do, during and after the process of interacting with a digital entertainment system. What PX is and how it can be measured is discussed in greater detail in the next subchapter.

2.3 Player experience

Player experience (PX) originates from research in the field of User Experience (UX), and many of its theories, techniques, and methods come from research on human-computer interaction (Wiemeyer, Nacke, Moser & Mueller, 2016). For example, conducting playtesting sessions with players where they get to play and give feedback on a game being developed is very similar to usability testing used in HCI, where users are asked to perform specific tasks in a system in development in order to evaluate and improve its usability. Ferrara (2012) also notes the connection between UX and video games, as the breadth of what games are expand to different
areas, the difference between UX and game design is blurred or overlaps. The two areas share, among other things, many similar theories, goals, methods, and the overarching objective to offer people positive experiences.

Some veins of research have mainly focused on pragmatic usability aspects in games, but that is not enough to evaluate the user experience of video games (Sánchez 2012). In order to understand players experiences with games fully we have to consider a more holistic perspective, and take into account the hedonistic and subjective part of players interactions with games. So, compared to the UX of traditional interactive systems, the PX of games is even more subjective and comprehensive. Rambusch, Alklind Taylor and Susi (2017) suggest that the perspective of UX can offer designers and researchers a holistic view on the experiences that are perceived by users. This makes PX an interesting concept to research further, since the subjective and hedonistic aspects make the experience different for different types of players, games, and game genres.

There is also some research regarding the term playability and its relation to player experience research. Playability is described as something that can be evaluated in order to improve the design of a game, while the focus of player experience is on the subjective experiences of players (Nacke, Drachen, Kuikkaniemi, Niesenhaus, Korhonen, Hoogen, Poels, IJsselsteijn & Kort, 2009). Sánchez (2012) attempts to further explore and define the concepts of playability and player experience, and proposes that playability is a set of properties that describe the PX. Seven properties of playability are identified: satisfaction, learnability, effectiveness, immersion, motivation, emotion and socialisation. These attributes can be used to measure a games development process and mechanics, in order to see how different elements of the game affect the player experience.

In a more recent study by Denisova and Cairns (2018), the authors look at the nuanced relationship between player experience and the perception of game difficulty. They found that players are more immersed when they believe the game adapts to their skill level, even if no actual adaptation occurs. The revelation that the mere belief in adaptive difficulty can enhance player immersion offers a compelling perspective to the complexity of player experience in digital games.

2.3.1 The (socio-)psychological level of Player Experience

Wiemeyer et al. (2016), in a comprehensive attempt to investigate what player experience (PX) is and how it can be measured, discuss three different levels that they suggest make the whole player experience. The first being the (socio-)psychological level, which focuses on what the players themselves think about what they perceive and experience. The second behavioral level concerns what players actually do when playing a game, so this part of PX looks at the behavior that can be observed. The third level that PX consists of is the physiological level, where players' physical reactions are measured and taken into account. These three levels make up a holistic view of what players are experiencing when playing games. This thesis will focus on the (socio-)psychological level, investigating players' own thoughts, motivations, and subjective feelings, as combining the three levels of PX would be beyond the scope and resources of this project. By analyzing the different psychological models, Wiemeyer et al. (2016) combined the most important elements that make up the (socio-)psychological level of player experience. Here's a brief description of the key elements constituting this level:
- **Competence**: This element focuses on the players' perception of their own skills and effectiveness in the game, influencing their satisfaction and motivation to continue playing.
- **Autonomy and Control**: Relates to the degree of freedom and choice players feel they have within the game, impacting their engagement and overall experience.
- **Immersion, (Spatial and Social) Presence, Flow, and GameFlow**: These aspects describe how deeply players are absorbed in the game, including their sense of being 'present' in the game world and experiencing a seamless flow of gameplay.
- **Involvement and (Enduring) Engagement**: Involvement refers to the emotional and cognitive investment in the game, while engagement denotes the sustained interest and participation over time.
- **Social Relatedness and Social Interaction**: This element covers the social aspects of gaming, including the players' connections with other players and the community.
- **Challenge**: This involves the game's ability to provide appropriate difficulties, testing the players' skills and encouraging growth.
- **Tension**: Reflects the level of suspense and excitement experienced by the players, often associated with challenges and game narratives.
- **Curiosity**: Represents the players' interest and desire to explore and discover new aspects within the game.
- **Fantasy**: Relates to the game's ability to provide an imaginative escape, allowing players to experience scenarios beyond the realm of reality.
- **Positive and Negative Emotions**: Encompasses the broad range of emotional experiences, both positive and negative, elicited by the game.
- **Intrinsic Goals**: These are the self-motivated goals that drive the player, not necessarily linked to the game's explicit objectives.
- **Feedback and Evaluation**: Involves the game providing players with responses to their actions, contributing to a sense of achievement and direction.

Each of these elements plays a crucial role in shaping the (socio-)psychological aspect of player experience, contributing to a holistic understanding of what players undergo on a mental and emotional level during gaming.

### 2.3.2 The Elements of Player Experience

In order to help designers make games that provide fun and interesting experiences to players, Ferrara (2012) proposes a model that represents a different way of thinking about player experience (see Figure 2, p. 5). The model is based on the layered model of UX by Jesse James Garrett, called *The Elements of User Experience*. Ferrara’s model of player experience is divided into five planes, each of which can have both short-, and long-term effects on the player experience. It is recommended to begin considering the core of the experience first (the motivation plane) and continue upwards, so that no important part of the experience is neglected when designing a game experience.
The first thing designers have to consider is who the players are and why they want to play the game, which are the core questions for the motivation plane. In the short-term it is important to catch the players interest and offer a core experience that provides a sense of joy. For example, completing a job or defeating an opponent satisfies a basic human need and makes people feel good.

**Meaningful choices**

The choices players can make in the game is decided by the games rules and structure, which affect how things play out in the game. Examples of meaningful choices in games could be making fast tactical decisions in a first-person shooter game like Counter Strike: Global Offensive, or a strategically selecting which character to play in Overwatch. Constantly trying to make the best choices are a big part of what makes games so engaging.

**Balance**

A game has to be balanced in terms of difficulty, while also considered fair by players. It can be hard to predict how certain variables will affect the game play, or how different players interactions with the game world will play out. One of the best ways of balancing...
these interactions is, just like in traditional user experience design, to continually create prototypes and iterate on the experience that players perceive. For example, creating paper prototypes for menus or short battles, or conducting longer playtest sessions of story games allows designers to discover problems early in the design process and deal with them accordingly.

- **Usability**
  The usability layer is also based on traditional user experience design, as well as the field of human-computer interaction, because it is about making sure the games menus and interface are easy to understand and use. However, usability in games has some additional aspects to it, with a focus on making sure players understand how the game will react to their actions. For example, players can look at the death recap interface in League of Legends for further details about what killed them. So it is important for usability in games that players understand what their options are, or at least have the possibility to explore those options, so that they can enjoy the rest of the experience by, for example, making meaningful choices.

- **Aesthetics**
  The last layer to be considered in the design process, and the first that players come in contact with, is the aesthetics layer. The aesthetic design of games include what affects the players sensory experience directly, like images, sound, or a vibrating controller. But aesthetics in games can be much more than that, as things like the games writing style and art, or the games story also affect the aesthetic experience. Most of these properties can be changed without affecting the core game mechanics since it is the top layer, but aesthetics can still have a large impact on what the player experiences.

Ferrara also brings up what they consider to be the most important part of games, that games should be fun, which there have been many different articles, theories and models about, but is not directly shown in this model. Instead, Ferrara believes that it is the combination and interaction of these elements that has the potential to make games be considered fun. Fun and positive experiences is not something you can design directly, but it can only be designed for, since the concept of fun is individual and subjective to each player. So, by getting a better understanding of the different elements that make up the player experience, designers can focus on improving the properties that make games fun.

Ferrara's model has some similarities to the elements of the (socio-)psychological level of player experience identified by Wiemeyer et al. (2016), but also some major differences. Ferraras model of *The Elements of Player Experience* is mainly focused on offering designers a way of thinking about what the player experiences when coming in contact with a game. This allows designers to evaluate and design the different parts of the game that, together, make up the whole experience. The (socio-)psychological level summarizes different theories and perspectives on the players emotions and attitudes when playing, as well as how they can be measured, from a more research-focused perspective. So the (socio-)psychological level is not necessarily about how this experience relates to the elements in the game, but more about how the player is affected by the characteristics of the game. One of the major similarities between these theories is that both of them consider the players own subjective perspective in order to improve the interactions that occur between games and players.
Vanden Abeele et al. (2020) made significant efforts in attempting to capture and address the full range of player experience. Based on the expertise of 64 game user research experts and over five studies totaling 529 participants, they crafted the Player Experience Inventory (PXI), a reliable and theoretically sound tool for researchers to measure player experience and investigate how game design choices are linked to emotional responses. Their findings suggest that this tool can be useful for game developers, helping them see how game design changes can make the games more engaging and enjoyable. This work, grounded in rigorous validation, takes a big step toward helping researchers grasp the multifaceted topic of player experience, by offering a clearer picture of how game features and players' feelings are connected.

The next part will explore player experience further by exploring what previous research has found about the player experience of different game genres, with a special focus on Multiplayer Online Battle Arena games.

2.4 Player experience and motivations of different game genres

Previous research on player motivations has mainly been focused on why people play games in general or looked at the motivations for players of different genres. Johnson, Nacke, and Wyeth (2015) summarize some of the previous research on motivations for players of different genres of games. Players of first-person shooter (FPS) games and role-playing games (RPG) both seem to be motivated by achievement, but players of RPGs are also motivated by immersion. Strategy and RPG games both provide players with stronger feelings of presence and autonomy than shooting, sport and simulation games. Another article cited also found that sport, racing, and fighting games are worse at making players experience flow, and that immersion varied across different genres (Johnson, Wyeth, Sweetser & Gardner 2012 cited in Johnson, Nacke & Wyeth 2015, p. 2).

2.4.1 Motivations to play MOBA games

As for MOBA games, due to the fact that they are a relatively new genre of games, there have been few articles investigating this genre of games through a player experience and motivations perspective. This is surprising, as Johnson, Nacke and Wyeth (2015) found that, compared to other game genres, MOBA games uniquely offer significantly less immersion, presence, and autonomy, but have higher levels of competition and teamwork. The authors think the lack of autonomy, and to a lesser extent immersion and presence, in MOBA games could be because of the competitive focus with other players in the game, and the lack of control one player has of each match. For example, if four players in one team are not performing very well, there probably is not much the fifth player can do to shift the balance of the game in their favour. Furthermore, MOBA games were found to offer more frustration than other game genres. Johnson, Nacke and Wyeth suspect this is because of the steep learning curve, but also because of the competitive nature of MOBA games. As concepts like immersion is not mainly what keeps players interested, but instead competition and cooperation with other players, it can be much easier to become frustrated on other players performance in the game, especially teammates.

Even though players often run into toxic behavior or experience feelings of frustration (Shores, Swanenburg, Kraut & Riedl 2014), the competitive nature of these games and the
teamwork-focused gameplay seem to be able to overcome these negative aspects, proven by the fact that they are so popular. Or as Johnson, Nacke and Wyeth (2015) puts it “the results suggest that MOBA games lack most of the commonly occurring positive components of PX. The primary redeeming feature of MOBA games in terms of our study appears to be the challenge they offer” (p. 6). For example, winning a really close game, coordinating well with your team, or mastering a champion or role seem to be enough to keep players engaged. This could also mean that, as these games require full concentration during gameplay, positive feelings could likely occur when the match is over and the tension is gone.

Another large part of the motivation to play MOBA games is the social aspect. One of the main reasons why people start to play MOBA games is because a friend is already playing it (Tyack, Wyeth & Johnson, 2016). The authors also found that playing with friends helps with long-term engagement and gives players a reason to come back to the game after taking a break. Playing with friends seemed to improve the overall experience, possibly because it offers more effective teamwork and communication, for example, by using an external voice chat program, or because friends are more supportive of mistakes. Iosup, van de Bovenkamp, Shen, Jia, and Kuipers (2014) provide further insight by identifying a difference in MOBA games compared to other games, as teamwork seemed to be one of the most important factors of succeeding in the game, and found that players of socially networked games were also motivated by their opponents. In a more recent study by Aaltonen (2023), the changing nature of teamwork is discussed. Teamwork seems to have grown and shifted over time in these gaming environments, as key findings include the role of in-game communication in enhancing player experience. Aaltonen is able to show that, while negative interactions exist, removing communication features can hurt the gameplay experience. The work highlights the importance of understanding when and why abuse happens rather than removing communication tools, pointing towards a need for smarter design solutions to manage negative player behavior.

More recently, an increasingly comprehensive view of player interaction with MOBA games has emerged. Researchers found that factors related to emotional experiences, such as enjoyment and arousal, and imaginal experiences, such as escapism and role projection, lead to a greater intention to play MOBA games. Some factors can also negatively affect motivation, as the researchers found that the fantasy element had a negative impact on the intention to play. These emotional and imaginative facets of player engagement is further evidence that player engagement is multidimensional in nature and affected by a multitude of factors (Vanden Abeele et al., 2020).

### 2.4.2 Three key factors of the MOBA game experience

By further exploring the motivation for playing MOBA games and the PX of these games with a series of interviews, Johnson, Nacke, and Wyeth (2015) identified three key factors that characterize the experience of playing MOBA games. The authors’ results indicate that competition is highly valued, that satisfaction stems from a sense of mastery and that the key motivational driver to playing MOBA games is teamwork. These findings are in line with what Mora-Cantallop and Sicilia (2018) identified in a literature review as important aspects of MOBA games that need further research: competition, teams, and collaboration, as well as further exploring the communities surrounding these games. Johnson, Nacke, and Wyeth (2015) further discuss patterns they identified in relation to these three themes:
• **Competition**
  Aspects related to competition and challenge were valued highly by MOBA players, as well the feeling of achievement they offer. Performing well, such as getting a lot of kills or winning, were some of the most important motivations to play, but losing could make players feel frustrated instead.

• **Mastery**
  Feeling a sense of mastery from, for example, getting over the steep learning curve of MOBA games, was one the main sources of satisfaction for players. The same feelings could also come from overcoming the difficulty of these games, and mastering the challenges they offer. Therefore, many players felt it was of great importance to master the mechanics of the game, and to highly value strategic thinking.

• **Teamwork**
  Similarly to some of the findings in previous research (Iosup et al. 2014; Shores et al. 2014; Tyack, Wyeth & Johnson 2016), the social interactions and competitive focus that occur within teams were another important factor for playing MOBA games according to Johnson, Nacke and Wyeth. The authors divide this concept into three themes. Firstly, playing and having fun with at least one friend in the game was preferable to most players. These social interactions with familiar players were a great source of enjoyment and satisfaction in these games. Secondly, the feelings of cohesion and unity within a team were some of the most positive experiences related to teamwork. Players would interact mainly from a competitive angle by, for example, creating strategies within the teams to improve their chances of winning. Teamwork also seemed to be closely related to the value they placed on competition and mastery, as players found success in the game to be dependent on the strategies and interactions within the team, and the performance of their teammates. This teamwork focused gameplay also had some negative effects, since the pressure and tension within the game could lead to negative interactions between teammates. The third theme Johnson, Nacke and Wyeth identified in relation to teamwork is that players separate play that is fun or more serious. Playing with friends was usually more fun and relaxed, and friends seemed to be more forgiving of mistakes and losses, whereas playing with strangers or with friends of the same skill level could lead to more serious play.

Some of these aspects of MOBA games could also be closely related to some core concepts in player experience theories. Firstly, some of the elements identified by Wiemeyer et al. (2016) have a strong connection to competition, teamwork, and mastery. Experiencing challenge in a game is strongly related to the competitive nature of MOBA games, but also mastery, as players felt satisfaction in overcoming those challenges. Competence, the feeling of successfully doing something in the game, can be linked to what players felt when winning or performing well, which are aspects of competition. Competence is also related to mastery to some extent because, for example, successfully playing a certain role in a MOBA game requires mastery of game mechanics and strategies. There is also a connection between the player experience elements of feeling autonomy and control and the sense of mastery in MOBA games. Johnson, Nacke, and Wyeth (2015) found that MOBA games offer less autonomy than other games, and thought that it could be because the games in the genre are so difficult to learn, and even harder to master. The concepts of social relatedness and social interaction are strongly related to teamwork in MOBA
games. Tension in a game is also an element identified by Wiemeyer et al. (2016) and could be linked to both competition and teamwork, since players feel tension in a competitive game, and that tension or pressure can lead to negative interactions between players. There are probably many other connections that can be drawn, but the main connections noted above will be in focus in order to not exceed the scope of this thesis.

There is also a strong relation between MOBA player experience and The Elements of Player Experience that Ferrara (2012) writes about. One of the main connections is that all three aspects (competition, teamwork, and mastery) are major motivators for playing MOBA games, which is the most fundamental layer in Ferrara's model. Ferrara writes that people are motivated to play because of friends already playing or because they feel satisfaction in winning or performing well in a game. Another connection is the relation between meaningful choices and MOBA games. In such a competitive environment, short-term tactics can be imperative to overcome smaller battles against other players, or executing a long-term strategy well can be what eventually leads to a win. Balance is also very important in competitive games, where things like matchmaking have to feel fair in order to reduce frustration. Designing the usability layer well, by iterating and prototyping in the design process, helps make the learning curve easier for players and helps them feel in control, which progressively leads to mastery of game mechanics (Ferrara 2012). As for aesthetics, the top layer in The Elements of Player Experience, it is harder to see a direct relation to competition, teamwork, or mastery. However, Hamari and Sjöblom (2017) found that the aesthetics in eSports games tend to focus on simplicity and clarity, which makes it easier for spectators to watch, but could also be an important element of the competitive environment for players of MOBA games where they often have to quickly realize what is happening and react accordingly.

An in-depth analysis of Multiplayer Online Battle Arena (MOBA) games, particularly highlighted in a study by Mora-Cantallops & Sicilia (2018), demonstrates that player experiences in games such as League of Legends are significantly shaped by the player's skill level or rank, while surprisingly remaining relatively independent of the chosen role. This research underscores the significance of team collaboration, pinpointing it as not only a key determinant of success but also as an essential element in fostering a positive player experience.
### 3 Project aim and objectives

Both player experience (PX) and Multiplayer Online Battle Arena (MOBA) games are in need of further research. In a literature analysis on MOBA games, Mora-Cantallops and Sicilia (2018) emphasize the need for future research to “get closer to the players” (p. 24), suggesting that qualitative methods are needed to gain further understanding of MOBA games and their players. In the same vein of research, Johnson, Nacke, and Wyeth (2015) suggest that incorporating measures related to competition, teamwork, and sense of mastery would be the way forward. The authors also note the need for continued research on PX and motivation factors in other multiplayer games and different modes of play with a focus on social interaction. The social aspect of MOBA games, such as teamwork and facilitating new friendships is an especially important part of these games, as it can both get people to start playing, but also facilitate engagement over time (Tyack, Wyeth, Johnson, 2016). There is also a need for further research in the area of eSports to, for example, develop improved tools for spectating or to create better eSports events (Hamari & Sjöblom, 2017). Because the games, their eSports scenes, communities, and players are all interconnected, research on any of these areas could increase our understanding of all of them.

This leads to the aim of this thesis, which is to further explore the player experience of and motivations for playing MOBA games. With MOBAs being one of the most prevalent games in eSports today, the perspective of participating in eSports events will also be considered when looking at players experiences in, and outside of the game. Based on areas that need further exploration within the genre of MOBA games, the following research question has been identified:

> What aspects have an impact on the player experience in MOBA games in terms of competition, teamwork, and mastery?

To address the research question, the primary objective of this study is to explore how competition, teamwork, and mastery within MOBA games shape players' perceptions and emotions. This exploration aims to shed light on the complex dynamics and psychological support structures that drive player engagement and experiences in these games. By focusing on these key elements - competition, teamwork, and mastery - the research seeks to uncover the nuanced aspects of player behavior and motivation within the MOBA gaming context. This understanding is crucial for developing a deeper insight into the MOBA genre and can inform game design, enhancing player experiences in this rapidly evolving genre.

#### 3.1 Expected contributions

The main contribution expected of this thesis is to begin to develop a set of design guidelines for Multiplayer Online Battle Arena (MOBA) games. The guidelines will be focused on enhancing the experience of competition, teamwork and, mastery, as these are the most important concepts in MOBAs. Design guidelines based on the most important aspects of MOBA games can offer designers a focus point for designing new, or enhancing already existing experiences. Additionally, design guidelines could provide researchers with aspects or elements of a game
experience that are the most important in MOBA games, which could be used to further investigate the game genres prevalence in eSports for both participants and spectators.

3.2 Limitations

This study will be conducted with certain practical limitations in mind. In terms of participant selection, the study's range is limited to MOBA players over 18 years old who have adequate experience playing MOBA games. This will ensure that participants have enough experiences that they can share, and that they can articulate their insights well. As a consequence, the findings might not fully encapsulate the broad spectrum of experiences across the diverse global MOBA gaming community, especially from various cultural and socio-economic backgrounds. However, a limited participant demographic can strengthen the internal validity of the study by narrowing the scope of the research to study the insights of a narrow group.

The research is also time-bound, reflecting the state of the chosen MOBA games during the study period. Because of the dynamic nature of these games, which have frequent updates and changes, the findings might not accurately represent future iterations or past versions.

Furthermore, this study focuses on key MOBA gameplay aspects: competition, teamwork, and mastery. These elements are central to player engagement, offering insights into what drives player behavior in MOBAs. This concentrated approach allows for an in-depth exploration of these core aspects, capturing the strategic and collaborative essence of MOBA games. While it means not focusing on other aspects of player experience like immersion and fantasy, this narrowed scope provides a detailed analysis of the elements that most significantly shape the MOBA gaming experience.

Understanding these limitations is vital for interpreting the study's findings. They provide a focused yet limited view within the broader scope of MOBA gaming. Future research could expand beyond these confines to offer a more comprehensive understanding of player experiences in MOBA games.
4. Method

To better understand MOBA player experiences, this study has used a qualitative research approach, inspired by Mora-Cantallops Sicilias (2018) emphasis on the need to “get close to the players”. It is about digging deeper and exploring the subtle aspects of player engagement, emotions and reactions, which often is overlooked in more quantitative studies.

Patton (2015) means that depending on one data collection method can be more error prone, such as in the case of interviews where loaded questions or biased answers can steer the research in the wrong direction. This highlights the importance of accuracy and careful consideration in the choice of research method. Even though a qualitative method was chosen for this study, the combination of qualitative and quantitative methods are common to reinforce the results by combining multiple methods that capture both the breadth and depth of the problem being investigated.

The primary goal with this research is to understand MOBA players experiences and perceptions with a special focus on the aspects of competition, teamwork, and mastery, to identify potential areas of improvement. Patton (2015) explains that qualitative methods are used to explore a problem or aspect in detail, whereas quantitative methods generally mean to establish generalizations based on a larger sample. A qualitative method can thereby offer a deeper understanding of context, human behavior, and the reasons behind those behaviors, even if it can be more subjective in nature.

By adopting a qualitative study design consisting of thorough semi-structured interviews, nuanced and detailed information could be collected about the player experience aspects of competition, teamwork, and mastery in MOBA games. A combination of methods was outside of the scope of this study, but is strongly recommended for future research projects as a way to confirm and strengthen the results found. Further methodological and ethical aspects are discussed further in chapter 6, Discussion.

4.1 Study Design

Semi-structured interviews were chosen as a research method for these particular aspects of player experience as it provides a chance to explore detailed insights, and real experiences from MOBA players. Previous literature is commonly focused on quantitative methods such as questionnaires and surveys, which may lack the rich, contextual and nuanced insights that qualitative interviews can provide. The semi-structured format of the interviews make sure the data collection is consistent by having a set of pre-written questions, which also keeps the scope of the interview to the aspects being researched. In addition, being able to ask spontaneous follow-up questions that can delve deeper into respondents' thoughts and reasoning on a topic makes the chosen method more flexible than more rigid interview structures and can provide additional insights that the researcher may not have considered beforehand.
4.2 Participant Selection

The study involved interviews with five male League of Legends players, ages 18 to 34, from Sweden, Brazil, the United States, Hungary, and Chile. This selection provided a cross-cultural perspective, encompassing diverse experiences in MOBA gaming across different countries. While this variety enriched the study with global insights, it also presented a limitation due to the small sample size and the gender homogeneity of the participants.

The limited time scope of the study, as well as difficulty recruiting participants affected the number of participants that were able to be recruited for the study. However, five participants were deemed adequate as the responses to some questions were already beginning to be saturated, which means themes could be identified and conclusions drawn based on the limited sample size of these participants. The participants were chosen based on the criteria that they had to be over 18 years old and they had adequate experience playing MOBA games. Adequate experience in this case meant that participants needed to have a minimum of one year of playing MOBA games, ensuring a comprehensive grasp of game mechanics and social aspects essential for the research. While the majority of participants were experienced in League of Legends, a few also had exposure to other MOBAs such as Dota 2, offering insights that, while primarily centered on League of Legends, included some broader experiences within the MOBA genre. Additionally, participants were asked to rate the importance of the elements of competition, teamwork and mastery in their MOBA gaming experience. Based on answers to the screener, participants were selected that were experienced and regular MOBA players, had varied roles and perspectives and considered competition, teamwork or mastery important elements of their gaming experience. These criteria ensure that the sample is somewhat representative of MOBA players in general and that participants' insights are relevant to the research question.

Participants were recruited through online gaming forums and communities, although the most success was found on the League of Legends Reddit community, where the recruitment post which consisted of some background on the topic being investigated and the required criteria to participate, got a total of around 12 thousand views and 10 responses. Interested participants were sent a screener from which the interview participants were chosen. The challenges encountered in recruiting participants not only affected the number of participants but also resulted in an all-male participant pool, as only male players responded to the recruitment post.

The interviews were conducted through video call on Discord, as it is one of the most popular ways for gamers to communicate through voice, video and text, as well as through larger gaming communities. Due to the different time zones of participants making booking appropriate time slots for the interviews more difficult, the five interviews were conducted over a span of a few weeks. Before the primary interviews, one pilot test was conducted with an individual known to the researcher who met the criteria of a regular MOBA player. Only minor changes to the phrasing of a few of the questions were needed, and the constructive feedback obtained helped make the primary interviews more reliable.
4.3 Interview Procedure

Before each interview, the participants were thanked for their participation, given a time estimate for the interview, a brief introduction to the purpose of the study and a chance to ask any initial questions. Participants were made aware of their rights as participants of the study, including ensuring that they know their participation is voluntary and that they can withdraw from the study at any point. Additionally, participants were informed that the information they provide would be used solely for the purpose of this research and that all responses would be kept confidential and anonymous in any reports or publications resulting from the study. Each participant was asked for their consent to participate in the study and for the interview to be recorded, after which the interview was started. The interviews conducted varied in length, where the longest interview lasted 48 minutes and the shortest 34 minutes, depending on the participants' responses and the amount of follow-up questions that were asked.

The main body of questions consisted of 11 open ended questions designed to explore the aspects of competition, teamwork and mastery (see Appendix A - Interview Guide). Where appropriate, follow-up questions were asked to allow participants to provide further context or insights. For the aspect of competition, participants were asked what they enjoy about the competitive aspects of MOBA games, how they handle the outcomes of games, and were asked to share a time when competition made their experience especially memorable. These questions were designed to delve into the emotional aspects of competition, such as winning or losing, as well as what made the competitive experiences memorable. The question on enjoyment offers insight into players' motivations for playing competitively, and why they come back to it. As for teamwork, the questions included the experience of playing with a team and how they perceived the importance of effective communication. The purpose of these questions was to gather in depth information about how interactions, teamwork and communication within a group influence players enjoyment and engagement in MOBA games. The role of communication was asked about explicitly as it is a pivotal part of player experience in MOBA games. Further insights could then be gained into how effective communication supports teamplay and strategic gameplay, or conversely, how a lack of communication can lead to decreased performance and enjoyment. The final aspect, mastery, included questions on the importance of getting better (achieving mastery), how improving at the game changed how they felt about it, and significant achievement affected their motivation to play. The questions on mastery were aimed at understanding the psychological and emotional rewards players get from improving at the game and achieving success in MOBA games. They were designed to provide insight into how mastery influences players' motivation, engagement, and overall gaming experience. Additionally, a few general questions were asked to gain additional insights into participants' motivations for playing, what they especially like about the MOBA game they play, and how they would improve the game if they had the chance. At the end of the interview participants were given a chance to share further thoughts on their experiences playing MOBA games, then the interview was concluded and the recording stopped.
4.4 Data Analysis

After each interview they were transcribed with the help of the recordings, and the transcriptions were printed to make data coding easier. In the process of coding and grouping the interview transcripts, an iterative approach to thematic analysis was used. Initially, the responses of each participant to the first question were examined to identify common themes, proceeding similarly with subsequent questions. This method was applied consistently across the data set, allowing for emergence, refinement and expansion of themes as the analysis progressed. Through this approach, four main themes emerged: Game Mastery and Progression, Emotional Competitive Teamplay, Teamwork and Communication, and Game Balance and Dynamics. Each of these primary themes was further explored to identify subthemes, providing a detailed understanding of the diverse player experiences in MOBA games. This analysis ensured a thorough examination of the qualitative data, aligning closely with the study's objectives to explore the socio-psychological aspects of player experiences in MOBAs. The themes identified were cross-referenced with the interview data to confirm their accuracy and relevance, ensuring that the insights drawn from the analysis were true reflections of the participants' experiences.

In conducting this research, it is important to acknowledge the role of the researcher as a tool in the qualitative analysis process. My extensive experience playing League of Legends, along with participation in various other MOBA games and amateur esports events, brings both depth and potential bias to the study. This extensive engagement in the gaming community has provided a nuanced understanding of the player experience, albeit with the inherent risk of subjective influence on the data interpretation. To mitigate this and ensure the credibility of the study, a participant validation approach was employed. One of the study participants was asked to review the results and the accompanying analysis. Their agreement with the findings gives some credibility to the conclusions drawn, though it must be noted that relying on participant validation can introduce its own set of biases and limitations.

Furthermore, the qualitative analysis was conducted with a rigorous approach to thematic coding, ensuring that themes emerged organically from the data, reflecting the true essence of player experiences in MOBA games. This process, while meticulous, is subject to the limitations inherent in qualitative research, including potential researcher bias and the scope of interpretability. These factors were carefully considered throughout the analysis to present a balanced and authentic representation of the MOBA gaming experience.

4.5 Research Ethics

Throughout the execution of the methodology good research practice and careful consideration of ethics was taken into account. Starting with the recruitment post, transparency and honesty towards participants are shown as it covers some background of the study and researcher, and mentions that participation is voluntary, that no personally identifiable information would be collected or shared, as well as the option to opt out of the study at any time. Furthermore, the screener that was sent out to those who were interested in participating included questions on participants' basic information such as age and gender which was collected anonymously, and their discord username was asked for as a requirement for conducting the interviews. A serious,
but enthusiastic approach was used throughout to maintain mutual respect with participants and to ensure that they would be comfortable with sharing their thoughts and insights.

Before each interview participants were thanked for participating, and a short background on the research topic and purpose was shared, and participants were given an estimate of the time it would take to conduct the interview. Participants were also given the chance to ask any initial questions to the researcher, to ensure that they were comfortable and ready to begin. Before beginning the interviews, participants were informed of their rights as participants, including voluntary participation, the option to withdraw, and the fact that responses would be kept confidential and anonymous in any reports or publications resulting from the study. As the interviews were being recorded, each participant was also asked for consent to participate in the study and consent to be recorded for the purpose of data analysis. Being recorded can make anyone slightly uncomfortable, so it was important to be transparent in disclosing who’d have access to the recordings and for what purpose they were taken. Furthermore, as only participants' age, gender, and country of residence was asked for in the screener, no personally identifiable information would be at risk if someone unauthorized should gain access to the recordings or transcriptions. Closing out the interviews, participants were thanked for their time and for sharing their experiences.
5 Results
Presented below are the results from the semi-structured interviews.

5.1 Game Mastery and Progression
One of the main recurring patterns in the interviews was how much MOBA players enjoy improving, progressing and achieving mastery in the game, as all participants emphasized this in some way. The satisfaction from improving their skills in order to climb the ranked ladder seems to be one of the main motivators for coming back to the game. There is a strong connection between mastery of the game and the overall enjoyment and satisfaction players get from it. A central part of skill improvement as a core motivation lies in the opportunity to improve, whether it be with a champion, at a role, or general game knowledge. For Respondent B, it is crucial, as they wouldn’t play the game if there was no more room to improve.

“I think it is one of the most important things when I play games otherwise I don't see a point. If I couldn't improve, I probably wouldn't play a game at all.”
Respondent B

Additionally, Respondent A reflects that their enjoyment of the game very much stems from the fact that they are improving and getting better at the game, but also the realization that they are improving. They also mention that the fulfilling feeling of success stems from the realization that they are good at the game compared to other players as well as their own skill level previously. It seems that for them, the game’s enjoyment and skill improvement are intertwined.

"It's a fulfilling feeling [...] when you play a game and you improve at it and master the required skill sets. [...] Being good at a game feels good. I think the answer is that simple."
Respondent A

Another underlying factor that drives the need to progress and achieve mastery is the ranked systems in MOBA games. This system typically employs a rating mechanism designed to pair teams and players of comparable skill levels. The ranking hierarchy in these games is usually segmented into various tiers, commonly labeled with designations like Silver, Gold, and Platinum. Each tier is further broken down into divisions, with the numbering generally starting at 1 for the highest division and proceeding to 4 or similar for the lower divisions. This structured ranking system is central to providing players with a clear progression path and matching them with appropriately skilled opponents and teammates. Additionally, it gives players a chance to continually rank up, or down, over years of playing, which in turn provides a powerful sense of accomplishment when a higher rank is achieved. Respondent B mentions that the time they reached one of the highest ranks in the game, they felt a tremendous sense of achievement, and their motivation to play peaked.
"Yeah, I think when I reached the master rank in the league for the first time, I was very happy. And I felt like I was on top of the world."
Respondent B

Achieving a higher rank than your friends can also bring these positive emotions, as Respondent E got a higher rank than their friends the first season of playing, and was rewarded with a unique sense of achievement and self-esteem. Additionally, after years of culminated effort, Respondent C achieved a rank they were proud of and felt accomplished, reinforcing the importance of setting and achieving personal goals. So it is not just achieving these personal goals that is motivating. Both Respondent A and Respondent C mention their drive and curiosity to see how far up the ranked ladder they can go, which makes it clear that the process of striving to achieve these goals can be just as motivating.

"My original goal was to reach Platinum rank, but as I'm Emerald 3 right now and I'm still improving, I wonder where is my peak. How high can I reach."
Respondent A

Personal challenges and goals are at the core of the competitive MOBA experience, and integral to players' experiences and feelings of accomplishment, highlighting the individualized nature of achievement in gaming.

Another aspect of mastery in MOBA games related to improvement is the importance of specialization of a specific character, or champion as they are often called. Respondent E mentions that mastery and improvement with a specific champion led to increased enjoyment and motivation to play. This enjoyment stems from the feeling of mastery from “main”ing a champion, meaning that the most time has been put into that character to get to know them inside and out and how their matchups work, but also the love players have for the champions they choose to play.

“I started maining a champion, which is like three months ago, and I started improving. I noticed how much I improved with that champion, which makes me happy because I love that champion.”
Respondent E

5.2 Emotional Competitive Teamplay

Another prominent aspect that was shown in the interview responses was the thrill and emotional intensity of competition in a team setting. There is a strong connection between these elements and participants' enjoyment of and engagement in the game. Respondent D expressed that they feel satisfaction from overcoming their opponents through individual skill and quick thinking. This underlines the emotional satisfaction and enjoyment players get from being superior to their opponents in the game.

“There'll be a time in game, where you make a play that is better than the opponents... and it just feels good.”
Additionally, Respondent B underlines the importance of the competitive nature of the game, where each match offers them new challenges and new chances to prove their skill and mastery of the game and their champion.

“Therefore, it will be challenging for both of us, and it will be fun.” Respondent 2

In the same vein, being good at MOBA games requires more than just individual skill, because to be good at the game it is also detrimental to be a good teamplayer. For Respondent E the ability to cooperate within the team is as important as individual skill, which points to the fact that success in MOBA-games is a balance between these two aspects.

“Of course, being a good team player also is part of being a good player.”
Respondent E

The intensity of ranked matches can also increase the emotional impact it has on players, as both Respondent B and D describe how close games contribute to the game experience. In these situations, each action or decision can be detrimental to the outcome of the game.

“I like the longer games where you're down at the last tower standing... One mistake can lose the entire game.”
Respondent B

But the emotions are not always positive, as respondent C talks about how the competitive setting can often lead to players getting angry or upset. Furthermore, respondent B mentions the high-stakes and emotional intensity involved, which are directly related to the challenges and triumphs of competitive team gameplay. These negative emotions can lead to players feeling stressed, as Respondent D says they sometimes have to take a break after an especially intense game in order to maintain a balanced and healthy game experience.

“High stakes. The emotions are on the top.” Respondent B

This chapter highlights the intricate connection between team dynamics, intense competition, and the emotional experience that follows. Together, these factors create a deep engagement and rewarding experience.

5.3 Teamwork and Communication

The appreciation for teamwork was apparent in the interviews, and became a recurring theme in participants' responses. Teamwork and cooperation with other players is a central part of MOBA games, and it is obvious this aspect is very important to many respondents. Respondent A and B expressed their enjoyment of the cooperation between teammates, and the feeling of well functioning, good teamwork.
"I find it exciting. I think it is fun to try to achieve a symphony with all the teammates."
Respondent B

Respondent D has a more nuanced take on teamwork, mainly because of their view of the community.

"Yeah, it can be fun. Like, I don't expect it to be fun most of the time because the community is so abrasive."
Respondent D

Respondent D describes the League of Legends community as somewhat abrasive, attributing this to frequent instances of negative behavior among players. They highlight that a notable number of their games feature players engaging in disruptive actions or negative communication. This includes behaviors like intentional game sabotage or unconstructive criticism towards team members. Despite this, respondent D acknowledges that there are still moments of enjoyment and positive team play, though these experiences are less common. Their perspective points to a challenge in competitive online gaming where the competitive spirit can occasionally lead to less favorable player interactions, negatively affecting the overall gaming experience. Still, they acknowledge that the sporadic times where you do get good teammates, teamwork in the game can be especially enjoyable.

"Every once in a while, you will find those one or two people who are on your team and they're like really nice. And it makes the game really enjoyable."
Respondent D

As one of the interview questions asked players about the importance of effective communication, their responses were quite uniform in that it is absolutely crucial to successful teamwork in the competitive MOBA game experience. Even if some players have learnt to focus on their own gameplay first, the communication between teammates is still necessary. Respondents A and C clearly state the importance of effective communication.

"Effective communication is absolutely crucial. It can decide the outcome of entire matches."
Respondent A

To complement the need for effective communication, respondent B wishes that the game developers had implemented features to support it, such as voice chat, instead of introducing unnecessary interface clutter with features like being able to vote on important in-game decisions.

"I think they should have at least experimented with voice chat with everyone...They could remove clutter at the interface."
Respondent B
The design of the communication tools definitely contribute to the social game experience in MOBA games.

5.4 Game Balance and Dynamics

Game balance, how matchmaking is perceived, and dynamics of the game are critical aspects that affect players' experiences and opinions on MOBA games. These themes make up another core part of the game experience that contributes to player engagement.

Fair game balancing is required for the game to not feel unfair, and for some respondents its central to enjoyable competitive gameplay and continued engagement. Respondent 1 highlights that some “broken” champions, meaning that they are unfairly balanced and overpowered, often lack counterplay. This creates a negative game experience and lessens the possibilities of strategically overcoming them.

“Never make fundamentally broken champions the meta...when champions are able to kill you in the matter of mere moments with no counterplay whatsoever."  Respondent A

Perceptions are also important for games to feel fair. Some players feel that matchmaking is another important aspect that shapes the game experience. Respondent E seems to have the perception that the game developer sometimes intentionally makes matches unfair for them, which seems to stem from their underlying mistrust of the matchmaking system.

"Riot managed it so that I win sometimes and other times I lose... They make it very unfair to make me lose..."  Respondent E

These themes give some insight into the feeling of fairness in MOBA games and how important it is that the game both has a good matchmaking system and that the champions are balanced.

5.5 Implications of Player Experience

The following section looks at the broader implications of the results. The insights gained from MOBA players' experiences can be of significance to the community, as well as game developers and researchers in the field of video games user experience.

The progression and mastery has proven to be central to the experience, which shows the need to carefully balance MOBA game ranking systems, difficulty, and reward ladders. It is especially important as each player's journey is individual and complex. Game developers should therefore consider designing systems that challenge players where they are in their skill level, but also reward individual achievement that feels meaningful to each player.

Furthermore, the results show players strong emotional engagement in the competitive teamplay characterized by MOBA games. This underlines the social interactions in the games,
and shows that a positive social experience can be just as important to players as the gameplay itself.

In MOBA games, the impact of negative behavior and toxicity is a crucial aspect influencing player experience. The prevalence of such behavior detracts significantly from gameplay enjoyment and undermines the sense of community and teamwork. Addressing this issue through enhanced communication tools and effective systems to mitigate toxicity is essential. Implementing robust moderation systems and encouraging positive player interactions can improve the overall game environment. By focusing on reducing negative behavior and improving communication, game developers can create a more enjoyable, fair, and psychologically healthy gaming community.

Balance and game dynamics, such as matchmaking and the balancing of champions, also play a major role in players' perceptions. The feeling of fairness and balance is essential to players' engagement and satisfaction in MOBA games. These insights can guide future research and development, with a special focus on understanding and improving the game experience from a holistic perspective, where psychological, social, and technical aspects together make up the overall game experience.

5.6 Design Guidelines for MOBA Game Development

Based on the results of this study, this section focuses on drawing up design guidelines for future MOBA game development. These recommendations stem from the qualitative insights gathered from interviews and align with the themes of balanced game dynamics, effective communication, personalized mastery, and robust player support.

**Balanced Game Dynamics**
A critical aspect highlighted by players is the balance of champions and matchmaking algorithms. It is essential for developers to ensure a fair competitive landscape, as balance profoundly affects player engagement and satisfaction. This balance is not merely a technical necessity but a critical component in keeping players interested. A fair and competitive environment is key to the overall success of MOBA games.

**Enhanced Communication Tools**
The interviews emphasized the importance of communication in the MOBA gaming experience. Effective communication tools within the game are crucial and should be intuitive and efficient, fostering better team coordination. They should also aim to reduce toxicity, enhancing the positive social interactions that are fundamental to the MOBA genre. Such improvements can significantly enrich the overall player experience.

**Personalized Mastery Pathways**
Players expressed a deep connection with their journey towards mastering skills and achieving higher ranks. Thus, developers are encouraged to create ranking and reward systems that adapt to individual players' skills and mastery levels. These systems should recognize personal achievements, providing progression that feels meaningful and motivating.
Enhanced Player Support Systems
Robust player support systems are crucial. Immediate and effective responses to player concerns affirm that players are valued and their feedback is taken seriously. These systems should be capable of providing immediate and meaningful feedback to player issues, fostering a supportive environment that values player input. Addressing player concerns effectively can boost player satisfaction and enjoyment, especially in mitigating the negative experiences of in-game toxicity.

These guidelines serve as a foundational reference for MOBA game developers, enabling them to enhance key aspects of the gaming experience. The guidelines can be used as a complement to existing game design methods, focusing on the core of the MOBA player experience.
6 Conclusion

Looking at the core aspects of player experience in the competitive and emotional landscape of MOBA games, this study has found several important insights. The exploration anchored in the core themes of competition, teamwork, and mastery, has shown the nuanced dynamics that these elements introduce in MOBA games. This chapter highlights key findings, implications, and potential directions for future research.

6.1 Overview

Mastery emerges as a main source of motivation for players, as it is intrinsically tied to players’ satisfaction and engagement. The journey of getting better at the game in a multitude of ways is not a linear progression, but a mix of personal achievements and challenges set by the game or the players themselves. The ranked systems and their different ways of grading skill levels allows players to see their individual skill, while also being an integral part to the emotional and psychological engagement with the game.

Competitive team play is another cornerstone that highlights the emotional experiences that characterize MOBA games. Victories and defeats are not solitary experiences, but are interwoven with social team dynamics. The emotional intensity, the highs of winning difficult games, and the lows of defeats stemming from individual mistakes, are all amplified in the team setting. The emotional engagement, which can even cause stress and anxiety, emphasize the profound engagement players have with MOBA games.

The findings of this study also call attention to the role of teamwork and communication. Effective communication emerges as a crucial part of teamwork that not only enhances team performance and the outcomes of games, but also influences players’ enjoyment. Because of this, the design of effective communication tools within the game become instrumental to the game experience.

Lastly, game balance and dynamics emerge as a core part of the MOBA game experience by emphasizing the importance of fairness and strategic depth influencing players’ perceptions and experiences. The balance of champions and the perceived fairness of the matchmaking systems are pivotal in shaping players’ engagement and their overall gaming experience.

In summarizing these insights, a holistic understanding of the aspects of teamwork, competition, and mastery in MOBA games can be identified. Based on the findings of this study, it is a complex combination of individual skill, team dynamics, emotional engagement, and the overarching game environment. Each component is linked and together they provide a multifaceted view of player engagement that is both deep and expansive. For game developers and researchers these findings offer a way to not only enhance the gaming experience but to delve deeper into the complex combinations of emotional, social and technical factors that shape the player experience. It opens up to an approach where the game’s technical design is balanced with the emotional and social aspects that together shape a holistic view of the experience.

In the grander perspective, the evolving MOBA gaming experience has each player shaping their own journey, which is a combination of individual skill, teamwork, and the game dynamics made up by the technical systems. The insights highlighted by this study are not a
definitive conclusion, rather they act as a platform for further exploration and understanding of the continually changing nature of the MOBA game genre.
7 Discussion

In this chapter, the findings of the study are examined further and discussed alongside existing literature. The goal is to uncover the relationship between players’ mastery and the social dynamics of teamwork, and the emotional competitive landscape. The nuances of these aspects of player experience are explored in further detail and, together with the insights gained from the results of this study as well as established theories, offer a comprehensive understanding of competition, mastery, and teamwork in MOBA games.

Additionally, the methodologies applied in this study are critically assessed, focusing on how effective and reliable they were in understanding the player experience of MOBA games better. In the ethical discussion, the focus is on the ethical considerations that were maintained throughout the study, as well as participant consent, privacy, and the overall integrity of the research process. For the future research section, gaps in current knowledge are highlighted and future research directions are suggested to gain further knowledge of this topic.

7.1 Interpretation of Findings

Mastery
In this study, mastery emerged as a core aspect of the MOBA player experience. This echoes Johnson, Nacke, and Wyeth’s (2015) insights, and its prominence in this study shows the multifaceted role it has in shaping players' experiences. The nuances of mastery, as described in Chapter 2, plays a significant role in players' psychological and emotional condition, as well as affect their identity and shape their social interactions they experience in the gaming community. This study highlights the profound impact of mastery, in line with the theoretical framework provided by Johnson, Nacke, and Wyeth (2015), where the role of mastery and skill improvement is not just an individual endeavor, but also has a strong connection to team success. This collection of individual and team effort resonates with Mora-Cantallops & Sicilias (2018) observations, and establishes a nuanced view on mastery as journey players’ undergo personally as well as together. They explore player experience in ranked League of Legends, clarifying that the player experience varies across different skill levels. Adding to these findings from previous studies, this study also found that each player's journey is individual, and should be supported by ranking systems, difficulty, and reward ladders adapted to players' individual skills and experience. It is important that these systems meet players where they are in their journey towards mastery, whether it be with a champion, the ranked ladder, or any other aspect which can be improved upon.

Abbasi et al. (2022) offer a complementing narrative by looking at the multifaceted emotional and psychological aspects of players' experiences. They highlight the role of emotional and imaginal experiences in shaping the players’ journey to mastery, an aspect that this study also found to be pivotal in the MOBA game context.

Teamwork
The study by Aaltonen (2023) supports our findings on teamwork by underscoring the increasingly social nature of online gaming, and the fact that in-game communication enhances player experience. Aaltonens' study as well as this one underscores the role of in-game
communication, not as a simple tool but as a vital part of shaping the player experience. This study adds to this by emphasizing the need to continue to develop intuitive and efficient communication tools. This is in line with previous research (Iosup et al. 2014; Shores et al. 2014; Tyack, Wyeth & Johnson 2016), which discuss the importance of social interactions in MOBA games.

This study also looked at the strong emotional connections that players form during the game. It was clear that emotions play a big part in how players interact with each other in MOBA games, which link closely with Li’s (2021) work on emotions in MOBA games. Both studies show that players feel a wide range of emotions, which in turn make games more intense and engaging. Additionally, this study found that the emotional intensity is at its peak when the games are close, and a single mistake can mean the game is lost. Aaltonen (2023) also talked about how being able to chat and connect in the game makes the experience better for players. This study builds upon this by highlighting how, when strong emotions and chatting mix, it can be both good and bad. Players often feel close and satisfied when they win together, but can experience more negative player behavior when losing.

Johnson, Nacke and Wyeth 2015 found that the pressure and tension in these competitive games can also lead to negative social interactions. This study had similar findings in that players often talk about the toxicity and negative player behavior in MOBA games, and how it impacts their experiences. Aaltonen (2023) provides another important insight which has to be considered, that chat abuse can be a serious problem, but that removing the communication features was found to negatively impact player experience. This study suggests enhanced communication tools as a design guideline, which could be a way to facilitate coordination, mitigate toxicity, and improve the positive social experiences in MOBA games. These improvements could not only reduce instances of frustration and negative interactions but also foster a more respectful and inclusive gaming community. The societal impact of such improvements could extend beyond individual games, contributing to a healthier online culture and setting a precedent for positive communication in digital spaces. By highlighting positive player behavior and encouraging constructive teamwork, such tools can shift the focus from individual competition to collaborative play, which is essential in reducing toxicity and enhancing the overall player experience in MOBA games. These improvements reflect the responsibility of game developers to establish gaming environments that ensure safety and inclusivity for all players.

**Competition**

Li (2021) offers an emotional lens to view competition, highlighting the emotional states elicited by MOBA gameplay. Our findings resonate with Li’s insights, bringing up the connection between competition, emotional states, and the overarching player experience. The competitive aspect of MOBA games is not an isolated component but is intimately connected to the players’ emotional and psychological experiences. One such component is the feeling of fairness, which was found by this study to be a crucial aspect of how players perceive the competitive landscape of MOBA games. This perception can deeply impact players' engagement and satisfaction, as well as cause mistrust in the game itself. Building on this, this study discovered that game balance and the perception of balance as an important part of making sure the game feels fair.
7.2 Method Discussion

In evaluating the methodology applied in this research, it is imperative to critically assess its robustness and potential limitations. The method used offered a window into the intricate emotional and behavioral aspects of players, which may not be easily captured by quantitative methodologies. Despite its strengths, the methodology, consisting of semi-structured interviews, has intrinsic limitations. The pool of five male participants, while diverse in nationality, still represents a narrow demographic. This limitation could potentially skew the findings and may not capture the diverse experiences of the broader MOBA player community.

Furthermore, given the qualitative nature of the study, the findings, though rich and deep, are largely anecdotal and may lack the generalizability that quantitative data offers. Patton (2015) highlighted the risk of errors in single-method studies, which is notably relevant here where the data is based on interviews, bringing forth issues of subjectivity and potential biases. While the semi-structured format allows for consistency and flexibility, there is a potential risk of varied interpretations and responses based on the participants’ individual perspectives.

Although the qualitative method adopted in this study provided a deep dive into the player experience, a mixed-method approach in future research could offer a balanced view, incorporating both the depth of qualitative insights with the breadth and statistical robustness of quantitative data.

7.3 Ethical Discussion

The ethics of the research were adhered to meticulously, with participants’ rights as a core focus. Transparency, voluntary participation, and confidentiality were upheld as per ethical guidelines. The recruitment and consent process, especially during the interview conducted via Discord, were structured to ensure participants were well-informed and comfortable.

However, the digital nature of the interviews and the potential sensitivity of the topics discussed bring to light the careful balance of extracting deep insights while respecting the participants’ psychological comfort and privacy. Ensuring anonymity and confidentiality in the digital age, especially within the context of gaming communities where players often have a public persona or avatar, is a delicate matter. When collecting data it is also important to consider data security, an intricate part of ethical considerations. The stored digital interviews need to be managed in a way that participants’ privacy is not compromised. These difficulties were mitigated in this study, as very little personal information was collected, and no real names were used or personally identifiable information gathered for the interviews.

The study’s participant base was male-dominated, emphasizing the ethical need for broader gender representation to capture a variety of experiences and perspectives in the MOBA gaming community. In summation, this study was anchored in ethical standards, balancing data gathering with the protection of participants’ rights and well-being. Every ethical aspect, from consent to representation, is integral in ensuring both the credibility and ethical integrity of the findings. Future studies should focus on evolving and adapting ethical practices in the dynamic world of online gaming research.
7.4 Future Research

The exploration of MOBA player experiences in this thesis unveils several ways to continue and improve the findings of this study in future research. The dynamics of player experiences, influenced by the aspects of competition, teamwork, and mastery, are continually evolving and an integral part of gaming culture.

This study primarily revolved around a specific demographic subset - male players aged 18 to 34. Future studies could potentially benefit from an inclusive approach, embracing a diverse participant base to ensure a wide range of experiences and perspectives. Gender diversity, broader age brackets, and varied cultural backgrounds can make sure the research is rich and deep, in order to capture the full nature of MOBA player experiences.

Game design and technological advancements present a profound impact on player experiences. Explorations into how evolving game design principles and innovations, including AI and machine learning, influence player engagement, satisfaction, and overall experience could be important in future research. By using insights from this study, future research can focus on developing tailored game features that enhance competition, foster teamwork, and facilitate mastery.

The way players interact within these games and the emergence of toxic behaviors are not just individual issues but reflect broader societal attitudes and values. Future research should, therefore, delve into the societal implications of MOBA gaming, particularly focusing on communication dynamics and player behavior. This includes examining how in-game interactions and the prevalence of toxic behavior in MOBA communities mirror larger societal issues. Ethical considerations in game design should also be a focus, including how they can potentially shape player behavior and promote a more inclusive and respectful gaming culture. Addressing the ethical and societal aspects of communication in MOBA games is essential for a complete understanding of player experiences. This encompasses exploring how online behaviors reflect and impact societal norms, as well as how game design and community management can contribute to positive social change.

Building on the findings of this thesis, and exploration into the psychological and emotional aspects of MOBA gaming is warranted. Cognitive, emotional, and social impacts of gaming need further exploration, especially in the context of competition, teamwork, and mastery. As this study found very close connections between these aspects they are undoubtedly interlinked, and research into these areas can offer nuanced insights into how they affect the player experience.

While this study has the depth of qualitative insights, the integration of quantitative data can provide a balanced and comprehensive perspective. Statistical data, behavioral analytics, and empirical evidence can complement the insights from the semi-structured interviews conducted in this study, and thereby offer a more holistic view of player experiences. Additionally, it is recommended that future research explore additional aspects of player experience to build a holistic understanding of engagement, motivation and satisfaction in MOBA games. It is also recommended that future studies take a look at the aspects of competition, teamwork, and mastery in more genres of games.

The role of online communities and social interactions in shaping player experiences is another area worth exploring. The social fabric of MOBA games, including communication
dynamics, community engagement, and social learning, can be investigated to learn about their impact on player satisfaction and engagement.

Putting these recommendations for future research together, it is clear that more research is needed to bridge the gaps identified in this study. By being more inclusive with the diversity of participants, exploring psychological and emotional aspects, integrating technological innovations, and adopting a mixed-methods approach, future studies can offer enriched, balanced and comprehensive insights into MOBA player experience. The journey ahead is not just about adding layers of knowledge but also about refining and updating our understanding of the ever evolving MOBA gaming landscape. Each insight and exploration help build towards a more nuanced understanding that is as dynamic and evolving as the world of MOBA gaming itself.
References


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https://doi.org/10.1016/j.ijhcs.2019.102370

Appendix A - Interview Guide

Competition:
1. What do you enjoy about the competitive aspect of [game name]?
2. Can you share a time when competition really stood out or made a game memorable for you?
3. How do you handle the outcomes of games, especially when you win or lose?

Teamwork:
4. How do you find the experience of playing with a team in [game name]?
5. How important is effective communication when you’re playing [game name]?

Mastery:
6. How important is getting better at the game to you (achieving mastery)?
7. How does getting better at the game change how you feel about it?
   a. For example: Do you enjoy the game more or less as you get better at it?
8. Describe a time you felt significant achievement in [game name] and its effect on your motivation to play.
   a. For example: If you won a particularly difficult game because of something you did, or if you achieved a new peak rank.

General:
9. What keeps you coming back to [game name]?
10. What do you love the most about the game?
11. If you could suggest one major change to make [game name] more enjoyable for players, what would it be?