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WHY TO PLAY?

What motivates players to participate in orthogamic trading card game play

ABSTRACT

Vilma Matilda Virtanen: Why to play – What motivates players to participate in orthogamic trading card game play

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The thesis examines what motivates players to engage in trading card game (TCG play), how the motivations compare to other genres like MMORPGs, and how gender affects the motivations for the play. As there has been little prior research on player motivation in TCGs and the subgenre of card games in general, the work builds a basis for possible future research of TCGs. The thesis seeks to understand the overall motivations for the TCG play, as while some of the play happens in an orthogamic way, there is also part of the play which happens outside of the actual orthogamic play.

The online quantitative survey conducted in February 2025 gathered over 300 responses, which were analysed utilising exploratory factor analysis (EFA). After EFA, the extracted factors were compared to the results of existing research on player motivation for MMORPG play. The possible difference between genders was analysed by comparing male and non-male respondents' answers using Chi-Square analysis.

The findings indicate five factors for TCG play: competitiveness, escapism, social, manipulation and design. While some of the factors were directly related to the orthogamic gameplay, some of the factors showed how TCG play is much more than the actual act of playing against other players. Some of the factors pointed towards the importance of social interactions both inside and outside of the gameplay, the stress-relieving aspects of the play, and how players could understand concepts outside of the gameplay, such as social interactions, through their play.

Two of those five factors, escapism and manipulation, were shared factors across the genres. While there can be multiple reasons for this, one of them could be the difference between gaming environments, as TCGs are played in physical environments, while MMORPGs are played in digital ones. The study also found that while there were differences between male and non-male participants, those were not significant enough to affect the motivations in great detail. Still, there were some differences in how different genders approached TCG play, such as the competitive aspects of the play.

Keywords: trading card games, card games, player motivation, orthogames

The originality of this thesis has been checked using the Turnitin OriginalityCheck service.

Preface

I want to thank my dearest friend J.H. because without him, this work wouldn't exist.
Thank you for being the glorious human you are.

27 April 2025

Vilma M. Virtanen

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1 INTRODUCTION

“When you aim to please everyone, you often please no one. Not all your players want the same thing out of your game. It's important to understand what different kinds of things your players want, so that you can understand what kinds of different players you have.”

- Mark Rosewater, head designer of *Magic: The Gathering*

The quote by Mark Rosewater (2016) is from the series of lessons he had learned in the twenty years of designing *Magic: The Gathering* (Wizards of the Coast, 1993), also applies outside of the singular trading card game. Rather than being a quote about the game, it tells how every player is unique. Even if players participate in the same game, they might view it from various points of view. One wants to win the biggest tournament the game offers, the next builds decks around the themes or characters they like, and the third participates in the play to meet their friends. They all share the same genre of games, yet their motivations for the play vary from one to another.

The main aim of the thesis is to explore the motivations of the trading card game (TCG) players, to learn about why they engage in the play, and what they want to gain from the play. The thesis also compares those motivations to the ones from other game genres, like in the case of this study, MMORPGs. The study also addresses the possible differences in player motivation between genders.

Previous research done in MMORPG (massively multiplayer online role-playing games) player motivations has shown that motivations for the play vary depending on the individual, but there have been distinguishable categories throughout the genres (Scheck et al., 2015; Yee, 2006; Yee, 2007). Other research has also suggested that motivations stay similar across the genres (Kallio et al., 2010). However, as these studies have been conducted on games played in digital environments rather than with games played in physical environments, researching TCGs allows me to discover the broader field of genres than what has been studied before. As TCGs differentiate from other game genres, for example digital games, by their playing environments and styles, it is also essential to consider how other factors, such as gender affect gaming motivations, as the physical environment does not allow similar anonymity to players as the digital one does.

The thesis's background and literature review chapters define and contextualise key concepts and existing research on the topic, and provide an overview of it. The literature review also goes through the limitations of previous research and how the thesis will contribute to expanding upon the existing player motivation studies and build new knowledge regarding TCG player studies. The chapters following the theory will present the data collection and analysis methods, followed by the results of the survey conducted on TCG players. After that, I will discuss how the survey findings can help to understand what factors motivate players to participate in TCG play. Finally, the key findings will be summarised, and strengths and limitations will be addressed to build a basis for further research on the topic.

2 BACKGROUND AND KEY CONCEPTS

This chapter goes through the background and key concepts of card games, TCGs, their orthogamic nature, and the competitive and social elements that set TCGs apart from other card game subgenres. The chapter also discusses the concept of player motivation and the various cognitive, emotional, and social factors that drive individuals to engage in games.

2.1. Playing with Cards

The origins of card games can be traced to around the 9th century in China. However, they have developed significantly over the centuries, and by the 1400s, the 4-suit, 52-card deck format had become popular in regions such as Persia, the Middle East, and Europe (Engelstein & Shalev, 2022, p. 527). Even though a deck similar to the one in the 1400s is still used in various games, from Solitaire to Poker, TCGs utilise different kinds of cards in their gameplay.

Trading card games can be categorised in many different ways. Because there is no one categorisation of how card game subgenres are divided, it is something that needs to be addressed from the start to avoid confusion related to the terminology. Table 1 shows how the games will be divided in the context of this thesis to help distinguish the subgenres from each other.

Table 1. Card game subgenres

Card game type	Publishing type	Revenue model	Gameplay / Orthogame	Examples
Trading card game (TCG)	New card set every couple of months	Booster packs / loot boxes	Yes/Yes	Magic: The Gathering
Collectible card game (CCG)	New card set every year	Booster packs / loot boxes	No/No	F1 Turbo Attax
Board game with cards	Single-time release	One-time payment	Yes/Sometimes	Dominion
Digital card game	New card set every couple of months	Booster packs / loot boxes	Yes/Yes	Hearthstone
Party game	Single-time release	One-time payment	Yes/No	Cards Against Humanity

TCGs are classified as collectible card games (CCG) in some academic texts, although they do not belong in the same subgenre, but are two different subgenres of games. This differentiation will be looked at more in-depth in the subchapters card collecting and trading card games. However, as seen in Table 1, in this thesis, TCGs are the subgenre of card games which includes gameplay, whereas CCGs do not have gameplay but are rather something people collect. Overall, the different naming systems from one article to another make tracking the existing research on the topic harder than necessary as of the current date, as not even all of the game manufacturers seem to know whether to call their game a TCG or CCG, as was seen on the survey responses where some TCGs had CCG in their title.

Although not in the focus of this thesis, it is still important to acknowledge the existence of the card game subgenres apart from TCGs. Unlike TCGs, where players acquire cards from randomised booster packs that resemble loot boxes, board games with cards and party games offer a different monetisation method. Games such as *Dominion* (Rio Grande Games, 2008) and *Cards Against Humanity* (Cards Against Humanity LLC, 2011) utilise cards as their main component for the gameplay, although the goal of the game might vary from winning to simply having fun depending on the game and the gameplay situation¹. For the players who want to play the game and do not want to trade or buy the cards to participate in the play at the level they want, CCGs offer a solution by giving the player all the necessary components (Virtanen, 2023, p. 24). Because of the differences between subgenres, this research needs to define which games qualify as TCGs in the study overall, as the motivations to play games which have cards as components but are not necessarily competitive are most likely motivated differently from playing TCGs.

While digital card games are the closest genre to TCGs, they are still differentiated from their physical counterpart because of their playing environment. This difference also affects the motivations for the play, which is why, in this thesis, they are considered as different subgenres of card games. These differences are discussed in more detail in the subchapter 2.2.

¹ Unlike with TCGs, which are played in competitive environments, party games are often played in more leisure-orientated environments, such as get-togethers between friends.

As seen in Table 1, TCGs form only a part of the card game genre. However, in the context of the thesis, narrowing the research down to just TCGs allows more focused research on the motivations of the play and, therefore, also makes the data more reliable. Because of this, the thesis will not go into more detail on motivations of other card game genres but instead focuses only on motivations to TCG play.

2.1.1. Orthogame

If asked to name a card game, people who play card games most likely name a game such as *Solitaire* or *Poker*, as those are some familiar games played with the 52-card deck. Those games are, however, closer to board games than TCGs, as they do not have the card trading element and new game pieces every couple of months, as stated on the previous chapter. Rather than getting a new expansion to *Solitaire* a couple of times a year, the deck has stayed the same since the game's development.



Figure 1. *Yu-Gi-Oh!* card Blue-Eyes White Dragon and *Magic: The Gathering* card Manifold Mouse

When discussing TCGs, such as *Magic: The Gathering* or *Yu-Gi-Oh!* (Konami, 1999), the cards used are not the regular deck of cards consisting of hearts, diamonds, clubs and spades, but cards unique to each different game, as seen in Figure 1. Each game also has its winning conditions and rules for play; even though they share the core elements, TCGs vary by how they are played. Still, what all of TCGs share is that they can be viewed as “orthogames, a category of games where two or more players play a game with rules that provide a clear ranking or evaluation of the players and where there is both a winner and a loser in the game” (Elias, Garfield, & Gutschera, 2012, p. 8). Even though Elias et al. (2012, p. 8) state that orthogames are played as entertainment, this does not mean that

competitive gaming disqualifies games for being an orthogame. Rather than that, it excludes games such as military simulators which are played for learning, or on the other side, casual games such as *Dungeons & Dragons* (Wizards of the Coast, 1974) which are played for entertainment, but not in orthogamic way.

However, the definition given by Elias et al. (2012) is not the only possible way to view orthogames. By the definition of Carter, Gibbs and Harrop (2012, p. 14), orthogames refer to “what players see as the right and correct game”. When compared to the definition given by Elias et al. (2012), the way Carter et al. (2012) view orthogames disregards the motivation of why people play the game and the aspect of competition. By their definition, orthogames do not need to have a winner or loser as long as players agree that they are playing the game as intended. It also raises the question of whether *Dungeons & Dragons* can be an orthogame, as the game has an official rulebook which players follow while also roleplaying. However, as there is no right or wrong way to roleplay, it can be argued that *Dungeons & Dragons* does not qualify as an orthogame, as different players might view the roleplaying component differently.

Going back to TCGs, both of the definitions would include the subgenre of TCGs as orthogames. Whether going by the definition of winner and loser or playing the game right, TCG play is guided by the game's rules, and not following them makes the game unplayable. Whether the rules are the game's core rules or the specific rules enforced on occasion, such as restricting cards in tournament play, the gameplay requires both players to follow them to be able to play. If both of the definitions are combined, viewed from the point of TCGs and the origin of the word orthós (greek for “straight, correct”), what orthogame is in the context of this thesis can be defined to help understanding what is and is not an orthogame. When viewed from the angle of the TCG subgenre, orthogames can, therefore, be defined for the purpose of this study as a game where two or more players follow the rules of the specific game and playing environment to define the outcome, which includes ranking players based on the game’s winning conditions.

By the definition given above, players agree to follow the ruleset given at the time and place to determine the game's outcome. This agreement allows them to play the game the right and correct way, while the way is agreed based on the playing environment. When playing in the tournament environment, rules are defined by the tournament organiser, and while in the more casual setting, such as game store play, the rules can be agreed on the spot by the participants.



Figure 2. Two *Magic: The Gathering* cards not legal for tournament play, although for different reasons

The reasons for limiting the card usage can vary depending on the situation. While *Magic: The Gathering* card Katerina of Myra's Marvels (Figure 2, left) would not necessarily break the game's balance, it limits the deck-building process and is printed for more of a casual playing experience in a card set not legal for the tournament play. On the other hand, Shahrazad (Figure 2, right) makes players play a subgame² of game of *Magic: The Gathering* to resolve the card's effects, which consumes time, which is one of the reasons why it is not allowed in competitive gaming environments. However, if all players agree to allow cards that are not usually allowed to play by the game's official rules, they are still playing an orthogame, regardless of if the decision is against the official rules. As long as the players agree on the game's rules and winning conditions, the core orthogamic nature of the game stays as it is.

The definition of orthogame given above states that players follow the rules to determine the game's outcome. This not only helps to understand what types of games are discussed in the thesis but also to focus on the gameplay and not the components, the trading cards themselves. Because TCGs can also be viewed as a collecting hobby, it is essential to define which kind of play with cards is focused on the thesis. The definition of orthogames allows to limit the playing motivations to certain kind of gameplay where

² As stated in the card text: Players must leave game in progress as it is and use the cards left in the libraries with which to play a subgame of *Magic*. When subgame is over, Players shuffle their cards, return them to their libraries, and resume game in progress, with any loser of subgame halving his or her remaining life points, rounding down. Effects that prevent damage may not be used to counter this loss of life. The subgame has no ante, using less than 40 cards may be necessary. (Scryfall, n.d.)

there is an aspect of winning and losing, which helps to guide the research. If all kinds of gameplay, and the lack of, such in the cases of collectible hobbies, would be considered, the research would need to take into account also the card collectors, which are not the group the study focuses on, which is why understanding what orthogame is is one of the most important definitions of the thesis. However, as card collectors are a player group within card game genre, they must be discussed briefly. Even though in some cases their collectible items, playing cards, may resemble TCG cards, they either focus on the collectible aspects of the game and not the gameplay, like in *Pokémon TCG* (The Pokémon Company, 1996), or collect cards which might resemble TCG cards but do not have actual game or rules to play despite the similar visuals, like in *Topps Formula 1 Turbo Attax* (Topps, 2020).

2.1.2. Card collecting

As stated above, card games as a hobby do not necessarily involve playing with cards, but can also just involve collecting them. Some people simply enjoy collecting cards, be they about Pokémon characters in *Pokémon TCG*, or Formula One drivers in *Topps Formula 1 Turbo Attax*; there are multiple games where collecting the cards is the central point rather than playing the game itself. Similarly to collectable toys, which collectors do not view as something to play with but something to collect as is the view pushed by the toy industry (Heljakka, 2018, p. 242), collectable card hobbyists do not necessarily see the cards as something to play with.



Figure 3. Collectible cards of Formula One drivers

While some cards meant for collecting mimic trading cards, such as *Formula 1 Turbo Attax* cards in Figure 3, the game does not have an active player base in orthogamic sense,

as there is no actual gameplay tied to the cards. People who collect said cards do not engage in competitive play; they simply collect the cards and possibly trade them to other collectors. Even though cards have numbers such as attack and defence values, they are just decorative elements instead of something relevant to gameplay. Therefore, the card games where the cards are acquired from the randomised booster packs but do not include gameplay in an orthogamic way can be viewed as *collectible card games* (CCGs). Those games are focused around the collecting aspect rather than competition and deciding the winner, which is why they are not TCGs, but rather, their own subgenre within the card game genre. However, even if the player plays with cards of one game, they might collect other games, so being part of one group does not necessarily exclude the player from being part of the other one.

In her article, Heljakka (2018, pp. 247–248) discusses how adults might view their play activities from a serious viewpoint rather than from a leisure perspective, which is why they refer to themselves as collectors rather than hobbyists. While this might be the case with, for example, doll collectors, card game players often call themselves hobbyists when engaging in card gameplay, which is a factor that distinguishes the individuals collecting cards from those playing with them. Although both groups might use the same pieces to engage with their hobbies (such as Pokémon hobbyists), the engagement in the play is what differentiates them from each other, which is important to take into account in the context of the thesis. As long as the individual engages in the play with cards in orthogamic manner, they are classified as a card game player. If they simply collect the cards and view themselves as the collector, they are not engaging with the play, and therefore, they are excluded from this work, which specifies orthogamic play as a component of the study.

To summarise the chapters 2.1.1. and 2.1.2., the thesis focuses on TCG play, which is orthogamic and the play rather than collecting the game pieces, in this case, trading cards. However, while what is qualified as a TCG play has been defined before, it is also necessary to define what a TCG is, as not every card game is a TCG, and excluding games and other subgenres does not define the TCG subgenre itself. Cards have been used in various types of games, from board games to party games, and as discussed in Chapter 2.1., not every game that utilises them as part of a game counts as a TCG.

2.2. Trading Card Games

Card games generally include elements like a concealed draw deck, a public playing area, and a discard pile, each with its specific rules for interaction, and the gameplay often centres on goals such as collecting or discarding cards, acquiring resources from opponents, winning multiple rounds, or aligning with predetermined bids (Virtanen, 2023, p. 19). These games follow the rules on hand limits, card acquisition and usage, discard methods, turn order, and deck structure (Engelstein & Shalev, 2022, p. 527).

In other words, and to summarise everything stated above, a trading card game (TCG) is a type of game where players use custom-built decks to compete against each other according to specific rules and objectives unique to that specific game played in a physical gaming environment. TCGs, while varying how they are played and which components they consist of, still follow the same logic. For example, to participate in a game of *Magic: The Gathering*, the player must first build a deck consisting of *Magic: The Gathering* cards and find a person to play with. Similarly to *Yu-Gi-Oh!* play, the individual has to build a deck using cards of that game and play against a person who wishes to engage in *Yu-Gi-Oh!* gameplay following the rules of *Yu-Gi-Oh!* agreed between participants.

On the other hand, to participate, for example, in party games *Cards Against Humanity*, the players do not need to pre-build the deck of cards, as long as one of the participants owns the game, so the others can join the gameplay. In the case of CCGs, the participants do not engage in the gameplay but rather just view each other's cards and possibly engage in the act of trading the cards without the aspect of play. This makes the orthogame aspect essential for the TCG play and what divides them from party card games and CCGs.

However, if both deck building and orthogamic play are considered, the question of whether the playing environment matters raises to the surface. Some TCGs, such as *Shadowverse* (Cygames, 2016) and *Hearthstone* (Blizzard Entertainment, 2014), are played in digital environments rather than in physical ones, which technically qualifies them as TCG even though they are also their own genre. As the playing environment and, therefore, communication are different from the regular TCG play, it can be argued that they should be viewed as separate subgenres and, therefore, excluded from the study. Because some of the motivations of the play are connected to social interactions (Yee, 2006), and the digital environment might not allow them in the same way physical ones do, in this thesis, digital TCGs are considered as their separate subgenre and therefore not

included in the study. That being said, they are still part of the overarching genre of card games and, therefore, would allow possible studies of how the playing environment affects motivations to play.

Because TCGs can be defined as orthogames, they also allow broader research across the subgenre without focusing only on one singular game as long as games are compared to each other, which can make the research data more reliable. TCGs and how they are played allow a unique base for player research and how different motivations affect how they play said games in different gameplay situations from casual to competitive play, and in different situations outside of gameplay. It is, however, important to note that the competitiveness in TCGs in this thesis' context is not limited to tournament play but to all trading card gaming, which are orthogames by their nature. While TCGs might have thousands of cards printed over the years, competitive trading card gaming usually adds additional rules to the play. In competitive TCGs, there are multiple sanctioned play formats, each with specific rules about which cards can be used. Official tournaments may restrict play to cards from a particular cycle or set of expansions. Within that selection, certain cards may be entirely banned or limited to fewer copies than typically allowed (Engelstein & Shalev, 2022, p. 549). This practice not only allows changes in the metagame but also preserves the game's competitiveness, as without additional rules, some tactics might be too powerful for a competitive environment.

Defining what game counts as TCG is not an easy task. While some scholars refer to all games played with cards as CCG, some refer to the same game as TCG and others simply as a card game, causes challenges with terminology and which games are part of the same subgenre. Because these differences in categorisation from one work to another, in this thesis, TCGs are not their own genre but rather a subgenre of the games which utilise cards as their main gameplay piece. This limitation allows more reliable analysis of player motivation, as the games are compared with each other, be it because of their gaming environment or the game's goal.

2.3. Player Motivation

There are many ways to play games and equally many reasons why people play them. While some gamers like to focus on the story, others find joy in optimising, so the gaming experience is almost always unique from one player to another. Players might have varying motivations for playing the game, from killing time to socialising, but especially

with orthogames, their goal is to win even when playing to satisfy multiple motivations (Elias, Garfield, & Gutschera, 2012, p. 10).

In the context of this thesis, the factors mentioned above mean that while there are many ways and reasons to play TCGs, nobody plays them to lose the game, which allows the research to focus on the more delicate aspects of player motivation. This is also important as not all of the TCG play is equally competitive, and, for example, in some lower-level tournaments, players might have a more casual attitude towards the play, even though they are playing to win. Players might socialise during the gameplay or have motivations besides competitiveness, which is why viewing the play through the orthogamic view rather than differentiating competitive and casual play allows a broader view of the player motivation.

One reason for researching player motivations is to gain an understanding of the audience of the games. This research is also partly driven by commercial needs for developers to understand game appeal and retention factors but also because of the desire for deeper knowledge about the cognitive, emotional, social, and spatial processes underlying various player types and play styles (Kallio, K. P., Mäyrä, F., & Kaipainen, K., 2010, pp. 328–329). While some gamers prefer the competitive aspects of the games and do not care for the story and world-building, some require background information alongside the game itself. This aspect makes card games an interesting case within the game studies, as the stories are often not told during the gameplay. However, they are voluntary extra content for players to engage with if they choose. Those elements might tell a story of the characters, reveal more about the world, or give players more ways to engage with the game, yet at their core, they are unnecessary for the gameplay itself, yet players choose to interact with them. To consider all the points, player motivation can be defined as the set of cognitive, emotional, and social aspects that influence why and how players engage with games, including goals such as competition, socialisation, immersion, and strategy (Kallio, K. P., Mäyrä, F., & Kaipainen, K., 2010). As player motivation is a broad topic, the existing research around it is looked more in-depth in the following chapter.

3 LITERATURE REVIEW

The following chapter goes through existing research on player motivations to provide a foundation for understanding why individuals engage with games in different ways. By examining models such as Nick Yee’s Daedalus Project and Gamer Motivation Model, as well as how studies have implemented personality studies to the player research, the chapter highlights factors which influence player motivations in previous studies. The literature review in this chapter serves as a basis for research on player motivations in TCGs.

3.1. Daedalus Project and Gamer Motivation Model

Possibly the most widely known research on player motivations has been conducted by Nick Yee, where on his Daedalus Project, over 40,000 massively multiplayer online role-playing game (MMORPG) players participated on the survey between the years 2002 and 2009 (Yee, n.d.). In his project, Yee discovered that MMORPGs attract a wide demographic of players, and that those players have different motivations for their play (Yee, 2006). As seen on the Table 2, Yee (2006) divided players into five different categories based on their main motivations for play.

Table 2. Five motivations to play MMORPG’s (Yee, 2006)

Motivation	Explanation
Relationship	Building friendships and connections with other players of the game
Manipulation	How much player enjoys deceiving and controlling other players
Immersion	Engaging with the world and creating identities within the game
Escapism	Using the game to relieve or avoid real-life stress or escape it
Achievement	Power, status and recognition within the game by accomplishments

As seen from Table 2, players do not always play for the same reason, and the reasons one player engages with the game might feel not so important to another. In his initial

studies, Yee (2006, p. 324) discovered that female players often played because of social interactions and immersion, whereas male players were more often motivated by achievement and competition. Later, Yee continued his research and created Gamer Motivation Profile with Nicholas Ducheneaut. Gamer Motivation Profile is an online app where gamers can answer a 5-minute survey to get their personalised gamer profile (Yee & Ducheneaut, 2018, p. 487). This data helps to determine motivations of online gamers across genres.

Action "Boom!"	Social "Let's Play Together"	Mastery "Let Me Think"	Achievement "I Want More"	Immersion "Once Upon a Time"	Creativity "What If?"
Destruction Guns. Explosives. Chaos. Mayhem.	Competition Duels. Matches. High on Ranking.	Challenge Practice. High Difficulty. Challenges.	Completion Get All Collectibles. Complete All Missions.	Fantasy Being someone else. somewhere else.	Design Expression. Customization.
Excitement Fast-Paces. Action. Surprises. Thrills.	Community Being on Team. Chatting. Interaction.	Strategy Thinking Ahead. Making Decisions.	Power Powerful Character. Powerful Equipment.	Story Elaborate plots. Interesting characters.	Discovery Explore. Tinker. Experiment.

Figure 4. Gamer Motivation Model (Yee & Ducheneaut, 2018, p. 487)

While there are similarities between Gamer Motivation Model and Yee's original research in Daedalus project conducted between the years 2002 and 2009, the Gamer Motivation Model (Figure 4) from 2018 shows new categories for the motivations to play compared to the model presented in the Daedalus project. Instead of manipulation and relationship, Yee & Ducheneaut (2018) have added creativity and action and split achievement into mastery and achievement. Especially in the achievement category, the split allows the differentiation between the players who want to master the game and the ones who want to complete it, as those people rarely share the same motivations and goals when gaming.

Yee's research, which spans over two decades, highlights the complexity and diversity of player motivations and shows how players are driven by a wide range of psychological needs and interests. Because of this, Yee's work provides a valuable framework to understand how different players engage with games, which is also why it has been used as a base for many other types of research on player motivation. However, as MMORPGs are not orthogames, and there is not necessarily a winner and a loser, the results do not tell about TCG players and what motivates them to play. Also, as MMORPGs are played online rather than in physical gaming environments, the difference might cause diversity

in player motivation. In chapter 4.1, the differences and similarities are discussed in greater detail, but the key distinction of whether the game genre is orthogamic or not is something to keep in mind throughout the whole thesis.

3.2. Player mentalities and motivations to play

As stated in the introduction chapter, gaming as a culture is a diverse topic, and therefore, the reasons why people play games vary from one person to another. Because of the varying motivations, studying players and their behaviour helps to also understand gaming culture. In their study, Kallio et al. (2010) invented a model which categorised player mentalities based on the intensity, sociability and which games were played, and in their study, they identified nine different gaming mentalities across three categories: social, casual and committed (Kallio et al., 2010). Their research builds upon existing information on player motivation and practices, but also the similarities to the player archetypes mentioned in Fullerton et al.'s (2008) work, as well as, for example, Yee's (2007) and Lazzaro's (2004) works. In their work, Kallio et al. (2010) focused on both casual and competitive players. While gamers with a casual mentality often play without high commitment and focus on short and accessible games to pass the time or to relax, social gamers use games to connect with others (Kallio et al., 2010, pp. 339–341). However, the committed players invest a significant amount of time and emotional involvement in the games and might play complex, story-driven games which require both skill and provide a sense of achievement (Kallio et al., 2010, pp. 343–344).

When thinking about players of TCGs, it is difficult to pinpoint one group of Kallio et al.'s (2010) research where they would fit in even when focusing on the group who plays the game orthogamically. Even though participants in the tournament play view the experience like a sport, similar to players who “game for fun”, the social aspects are also essential for the TCG players. In their research, Kallio et al. (2010, p. 340) found that social gamers usually play in the same space, be it physical or digital, which also applies to TCG players, but they also state that the people in this category rarely discussed the games outside the gaming situation. As a large portion of TCGs happens outside the game itself³, TCG players usually discuss the games outside the gaming itself. The orthogamic play itself, while the most visible part of the game, is only a part of the game experience,

³ These aspects are discussed in more detail in the following chapters, but include topics such as deckbuilding, theorycrafting and social aspects of TCG play.

and TCG players engage the game in various ways outside of it. As, for example, deck building is one of the key parts of TCGs, the players spend a lot of time focusing on this aspect, to the point where some players even calculate statistics and probabilities of cards and design which cards go to the decks based on the results. In some games, there are tens of thousands of cards to choose from, and when players can usually include 40 to 60 cards in their deck, they have to make multiple decisions before the gameplay itself. The TCG players also discuss the game openly in various forums, such as Discord or in their personal groups, to either prepare for the tournament or simply because they enjoy talking about the game while not even playing it. While most TCG players do not usually engage in creating fan content like art or writing stories about the game characters, they still actively engage with the game even when not playing as seen from examples. Be it the topic of the current metagame, building a deck, or upcoming changes to the game itself, TCG gaming is not limited to just the game itself, it also happens outside of it. There is no one category of motivational factors in the study where it could be hypothesised that the TCG players would fit into, which makes it an interesting study by Kallio et al. (2010) to take into consideration when thinking of different mentalities to play TCGs and which kind of decisions players make not only during the gaming but also when they are not actively playing.

Kallio et al.'s (2010) model of player mentalities provides a helpful point-of-view for understanding the diverse player motivations while building upon, for example, Yee's (2007) work. It is a good example of how the existing research can be utilised in genres that are not MMORPGs, while also proving that the findings are not tied to one type of game. The study also further highlights the findings of varying motivations to play, reinforcing the view that not all players play for the same reasons.

3.3. Personality traits and player studies

Personality means an individual's unique and relatively stable way of behaving and interacting in different situations (Larsen et al., 2021, p. 5). In the 5-factor Model of Personality, the five big traits are called extraversion, agreeableness, conscientiousness, neuroticism and openness (to experience) (Table 3), which are fundamental dimensions that capture the most essential variations in human personality (Larsen et al., 2021, p. 74). Each one of those traits has a set of markers, and the theory is based on Hans Eysenck's personality model, which is rooted in biology. He proposed three key traits which are

highly heritable and have a psychophysiological basis, those being extraversion-introversion, neuroticism-stability and psychoticism (Larsen et al., 2021, p. 68).

Table 3. 5-factor Model of Personality and what is associated with each trait (Nettle, 2007, p.29)

5-factor model of the personality type	High-scoring individuals	Low-scoring individuals
Extraversion	Outgoing, enthusiastic	Aloof, quiet
Agreeableness	Prone to stress and worry	Emotionally stable
Conscientiousness	Organised, self-directed	Spontaneous, careless
Neuroticism	Trusting, empathetic	Uncooperative, hostile
Openness to experience	Creative, imaginative, eccentric	Practical, conventional

In their article, Scheck, K., Lee, D. Y., and Pyo, K. B. (2015) study how players' personality traits influence their motivations for playing MMORPGs. They utilised the NEO-Five Factor Inventory (NEO-FFI) for player personality research, as well as Nick Yee's Motivations for play in MMORPGs for motivation (Scheck et al., 2015). The NEO-FFI is a short version of NEO Personality Inventory (NEO-PI-R) which is designed to measure five major domains of personality, extraversion, agreeableness, conscientiousness, neuroticism and openness (to experience) (Donnellan et al., 2006).

Achievement	Social	Immersion
Advancement Progress, Power, Accumulation, Status	Socializing Casual Chat, Helping Others, Making Friends	Discovery Exploration, Lore, Finding Hidden Things
Mechanics Numbers, Optimization, Templating, Analysis	Relationship Personal, Self-Disclosure, Find and Give Support	Role-Playing Story Line, Character History, Roles, Fantasy
Competition Challenging Others, Provocation, Domination	Teamwork Collaboration, Groups, Group Achievements	Customization Appearances, Accessories, Style, Color Schemes
		Escapism Relax, Escape from RL, Avoid RL Problems

Figure 5. Components and subcomponents of motivations for MMORPG play (Yee, 2007, p. 5)

In their research, Scheck et al. (2015, pp. 5–6) discovered that motivation, as shown in Figure 5 (Yee, 2007, p. 5), correlated to various personality traits of the 5-factor Model of Personality. While achievement-motivated players got high scores in extraversion and conscientiousness, social motivation correlated with extraversion and agreeableness and immersion motivation correlated with neuroticism and openness. Also, players motivated by immersion showed higher scores in openness and neuroticism. These findings indicate that personality traits such as extraversion can drive social engagement, while traits such as neuroticism may influence preference towards immersive experiences. While the studies focused on MMORPG players, the results can show how personality traits affect player motivation in other game genres, such as TCGs. While TCGs differentiate from MMORPGs by how and where they are played, they also share similarities, such as social aspects and communication within the game although the communication happens in physical environment rather than in digital one. Overall, the research of Scheck et al. (2015) suggests that there are relationships between player motivations and personality traits, but it also gives a broader view of player motivations as a topic. It also raises questions of how much individual can affect their motivations to play, and also questions of how other aspects, such as gender, affect them.

3.4. The player motivations and gender

When analysing player motivation in TCGs, it is essential to consider who plays the games of that subgenre, as this affects the data gathered from the respondents and, therefore, the study's results. Gaming, in general, is not limited to video gaming but also, for example, board gaming, which is a diverse field with many different players. Still, while gamers are a diverse group of people, they are often stereotyped as white, middle-class heterosexual and socially isolated men which goes against the idea of modern diverse player base of various genres (Harvey & Fisher, 2015, p. 578). However, as TCG players are male-presenting people by the majority⁴, the research on motivations has to consider the gender aspects, as they can help to understand possible results and why there is not so much diversity in TCGs as in other game genres, and also allows studying differences between genders.

⁴ Based on authors observations as a TCG player in the past twelve years in various gaming environments from casual gaming to international tournaments.

In his research, Yee (2007) discovered that men played in a more achievement-oriented way, while all genders played because of social reasons. As stated in the article by Williams, Consalvo, Caplan, and Yee (2009, p. 704) based on the research of Kidder (2002, p. 630), regarding the theory of gender roles, women are expected to take more caring roles while men are expected to be competitive, aggressive and ambitious. While not necessarily something that players think about all the time, this might be one reason competitive games are still male-dominated sports, and more often than not, other genders do not play as competitively as men (Niederle & Vesterlund, 2011). However, contrary to what could be imagined, women played more hours per week on average than men and showed higher dedication while simultaneously more likely under-reporting their gaming hours due to gaming being seen as a male-oriented activity (Williams et al., 2009, p. 716).

Even though approximately 40% of gamers are women, the actual percentage varies heavily depending on the genre, from 69% of Match 3 players to 2% of sports game players, while turn-based strategy games have 11% of female players (Yee, 2017). As the TCGs were not listed as their own category in the article, turn-based strategy games are the closest genre to look at when thinking about who plays said games. In conclusion, while the stereotype of the “average gamer” remains as a man, in reality, games and gamers are far more complex and diverse. Understanding gender dynamics is crucial to gain a view of gaming communities by challenging outdated stereotypes and considering motivations above gender, it is possible to gain an understanding of what motivates gamers to play, not only in TCGs, but games in general.

3.5. Motivations for tournament play

When people enter a TCG tournament, they often see a game store or a convention hall filled with tables. People sit at those tables, and at first glance, the demographic is far from heterogeneous, based on author’s personal observations. While some TCGs, such as *Lorcana* (The Walt Disney Company, 2023) and *Pokémon TCG*, have a more prominent female player base, it is not uncommon that *Yu-Gi-Oh!* tournaments have one or two non-male participants, making them closely resemble e-sports events where the majority of the players are male representing individuals, although TCGs, which unlike e-sports events, usually lack audience.

Like e-sports, TCGs do not require physical prowess like traditional sports. Despite that, many players who are not men do not participate in tournament play, even though they

might play with a competitive mindset in non-tournament environments, such as game stores. Similarly to how only 5% of professional e-sports players are female (Hilbert, 2019, as cited in Yan, 2024, p. 129), most tournament players in TCGs are male. Because the majority of players in the tournaments are male, it might be more challenging for non-male-representing individuals to join tournament play, even if they would like to, which reinforces the existing ideas that TCG tournaments are places where men compete against each other while other demographics stay in more casual settings, regardless on their mindset and motivations to play.

TCGs in competitive settings might also mirror e-sports during competition regarding player behaviour. As verbal communication is a significant part of gameplay and might directly affect the outcome of the game, the gameplay situations also offer a possibility for harassment and oppositional play, like what players encounter while playing video games. Yan (2024, p. 129) points out that 77% of female players had encountered gender-specific harassment, and 59% of women used non-female representing pseudonyms while playing online. As many TCG players also play video games, it can be speculated that non-male representing players might opt out of the tournament play because of their existing experiences or the possibility of getting harassed during the gameplay when there is no possibility for anonymity, like in online games. After individuals have got harassed without physical contact in online environment, they might not want to risk similar experiences in physical environments. When there is a possibility that similar behaviour, from unpleasant comments to threats to sexual harassment, which women face systemically and regularly when playing video games (Jenson & de Castell, 2013, p. 73), the experiences in other game genres might affect the participation of the individuals who do not necessarily fit into the majority.

As tournament play is a significant part of competitive play, and TCGs are no different, it is essential to take questions related to gender and experiences in gaming into consideration when researching the motivations to play. While tournaments are dominated by male players, it does not necessarily mean other demographics would not be motivated to take part, but that there might be other factors which limit their participation. Some of the reasons can be related to the existing player base, as TCGs do not offer the same anonymity as, for example, online games. If an individual feels like they would not fit into the same category as the other participants, they may not be confident enough to participate in the tournament play. For example, going to any place dominated by men as a woman might feel both physically and mentally taxing, which is

why some female-representing individuals might stay away from the tournament play regardless their motivations. These views only reinforce the stereotypes of women not participating in tournament play, making the tournaments even more male-centric.

4 RESEARCH METHODS

The following chapter will go through research methods used in the study. After analysing the existing literature and studies, the data collection method was chosen, and a pilot version of the survey was conducted in a small test group. Afterwards, a larger-scale survey was conducted, and the results of that survey will be analysed in Chapter 5.

This chapter will also explain the methodology used in the study and how the quantitative research was conducted. To collect more data than what, for example, interviews would have allowed, a survey was distributed to TCG players in Finland.

4.1. Attributes of games

TCGs, while sharing some characteristics with other game genres, also provide a set of unique characteristics that set them apart from game genres such as MMORPGs. Although previous research on player motivations has focused primarily on MMORPGs, analysing how those findings compare to TCGs can offer information when creating a survey for the TCG players. Unlike MMORPGs, where social interaction and online worlds are central to player experience, TCGs have physical gaming environments, which makes social communication different from the other genres and competitive gaming. In TCGs, communication is part of the gameplay, so both participants understand the flow of the game at any given time during the game. Also, one of the key differences between MMORPGs and TCGs is that TCGs are played as an orthogame where two people compete for the win, while MMORPG players do not necessarily play to win the game. However, while one person might play TCGs just for the sake of the game, the other might view the social aspects as important as the game itself, and because of that, players are a diverse group of gamers when it comes to motivations to play. By examining the results of the existing research and viewing them through the lens of the TCGs, it is possible to better understand how different elements influence player motivations. This can then help with the construction of the survey.

As stated above, it is essential to consider that the existing studies on player motivation are based primarily on players of MMORPGs and not TCGs and how the two genres compare to each other. While there will undoubtedly be similarities between these genres and their player groups, it is also possible that some findings from the existing studies

cannot be applied from one genre to another, which is why understanding MMORPGs is essential background research.

Attribute	Stand-alone games	Local and wide area network games	MMORPGs
Exemplars	<i>Solitaire, Snood, SimCity, Risk</i>	<i>Diablo II, Unreal, Age of Empires</i>	<i>EverQuest, Star Wars Galaxies</i>
Cost for player	Software	Software	Software + subscription
No. of players in world	1	1–16	0–2000
Persistent world	No	No	Yes
Mode of user agency	Direct/godlike control	One or several avatars	Personal avatar
Size/scope of world	Abstracted game board	Abstracted or limited worlds	Naturalistic worlds/galaxies, not abstracted
Player social interaction	None	Combat strategy driven	Rich, collaborative, social interactions

Figure 6. Attributes of Three Gaming Paradigms (Yee, 2006, p. 310)

As seen in Figure 6 (Yee, 2006, p. 310), MMMORPGs fall into a category of games different from TCGs. Although not mentioned in Yee's research, based on his categorisation, TCGs fall somewhere between local and wide area networking games, as they are played in a physical gaming environment. While MMORPG worlds might host thousands of players simultaneously, and all of them can communicate with each other, TCGs are usually limited to two or, in rare cases, four players in the same game instance. This explains further why one of the genres (TCGs) is considered an orthogame while the other genre (MMORPGs) is not. This does not, however, mean that TCG players do not have the possibility to communicate with each other, as especially in more laid-back gaming environments, such as non-tournament play, players usually converse with each other either during the game and between their matches, making the social aspect crucial for TCG playing experience. To get a middle point between TCGs and MMORPGs, digital card games have been added to Table 4 where the attributes of the games are compared to each other.

Table 4. *Attributes of TCGs compared to Digital card games and MMORPGs*

Attribute	TCGs	Digital card games	MMORPGs
Examples	<i>Magic: The Gathering, Pokemon TCG</i>	<i>Hearthstone, Shadowverse</i>	<i>EverQuest, World of Warcraft</i>
Cost for the player	Physical cards	Software + optional purchases	Software + subscription
No. of players in the same game instance	2-4	2	0- over 2000
Gaming environment	Physical	Digital	Digital
Player social interaction	Rich and essential to the gameplay	Minimal	Rich, collaborative, social interactions, but not always mandatory

Understanding the unique attributes of both TCGs in relation to MMORPGs and other genres is essential when designing a survey to research player motivation. While MMORPGs provide a framework for understanding player motivations and social interactions on a larger scale, to understand TCGs, and the existing data regarding player motivation cannot be directly translated from one genre to another. Research such as Yee's (2018) Gamer Motivation Model and Kallio et al.'s (2010) categories of player mentalities can provide a foundation for identifying motivations specific to TCGs, such as strategies, planning, social interactions and competitive motives for the play. By adapting the existing research to reflect the characteristics of TCGs, the survey can capture the motivations of said players and highlight the key motivations to play TCGs.

4.2. Research questions

To determine what motivates players to participate in TCG play, the following research questions were created for the thesis:

Q1. What are player motivations for trading card game (TCG) play?

Q2. How player motivations in TCGs compare to those observed in other gaming genres?

Q3. Does gender affect the motivations to engage in TCG play?

Each one of the research questions will be answered in the Results and Analysis chapter, and discussed further in the following Discussion chapter, where they will be reflected upon previous studies.

4.3. Quantitative online survey

Due to the large number of responses needed for the research, quantitative online survey was considered the most practical way to conclude the study. Although Braun et al. (2021) focus on qualitative online surveys, they still point out how online surveys are an effective method to gather answers from diverse perspectives across the population. As the aim of the survey was to collect data from a large group of players within the same subgenre, an online survey allowed a wider approach than, for example, interviews would have had.

A literature review was conducted before designing the survey to understand the topic, as that was essential to understand what to ask from the respondents and, therefore, to gather reliable information (Yaddanapudi & Yaddanapudi, 2019, p. 335). Because a similar survey was conducted by Yee (2006), the best approach was to use his work as the base for the questionnaire for the TCG players, although the items needed to be tweaked to fit TCGs because as stated above, the two genres have their differences.

Yaddanapudi & Yaddanapudi (2019, p. 335) also state that the survey should be piloted and validated before the larger scale research is conducted. As that was the recommendation, before the thesis project, pilot version of the survey was concluded to the small test group to see how the respondents would feel about it and ensure that it was suitable for a broader audience. The learnings of the pilot study helped to form the final version of the survey used in the thesis.

4.3.1. Pilot study

The pilot survey, which was conducted and analysed before the creation of the final survey, included questions related to age and gender to map the demography of the players of TCGs and player motivations assessment with 30 questions. The motivations assessment was formatted and shared via the internet using Google Forms, and comments

about the survey were gathered using Discord. The web address was distributed to TCG players in cities of Tampere and Lahti in Finland. Forms collected responses in a spreadsheet, which was later analysed using Principal Component Analysis (PCA) to understand various motivations for the play and to see how the survey could be improved in later research. The initial version of the survey also included a standardised Mini IPIP scale for personality trait assessment, which was cut from the analysis because of the small sample size and, therefore, its possibility of making the data less reliable. The analysis methods will be discussed in more detail in later parts of the study when discussing the final version of the survey.

Twelve people responded to the initial survey. All the respondents were male (12) and between the ages of 18 and 32. The most played TCG of respondents was *Yu-Gi-Oh!* (83.3%), followed by *Digimon Card Game* (Bandai, 2020) and *Cardfight!! Vanguard* (Bushiroad, 2011) each (8.3%). Because of the small sample size in the initial survey, the data might not represent the demographic and was, therefore, not suitable for proper quantitative factor analysis. However, it was still worth analysing to better understand the demography for the upcoming final version of the survey, and to gain opinions on the survey items which were refined for the final version. The results of the pilot survey can be seen in Table 5.

Table 5. *Motivations for TCG play based on the initial survey*

Motivation	Explanation
Community and personal growth	<i>Meaningful interactions with other players, friends and socialisation</i>
Game mechanics	<i>Strategy, deck building, understanding the game in deeper level</i>
Leadership and organising	<i>Event hosting and ensuring fair playing experience</i>
Solo playing and competition	<i>Personal experience, independence and distaste to rely on other players help</i>
Oppositional play	<i>Manipulating and taunting others during the gameplay, provocative playing</i>
Nostalgic play	<i>Discomfort towards complex games and nostalgic factors</i>

Despite the homogeneity of the sample, the results showed that the motivations of the play were diverse, but there were also some factors that could point towards similarities between MMORPG players and TCG players. Some of the similarities were in oppositional play and leadership, when differences rose in nostalgic play and the focus on game mechanics. In the survey, there were six categories of motivations, although confirming the results was impossible due the small sample size of the data. Therefore, more than anything, the initial data was simply something that was used to confirm that the items were understandable and conducting a larger scale survey was possible.

In the survey, as seen in Table 5, there were six motivations to play TCGs. The motivations share similarities to Yee's (2006) motivations for MMORPG play, possibly because the TCG survey was based on Yee's (2006) work. One of the interesting points which remained across genres is the oppositional play, as some TCG players viewed taunting others and provoking the opposing player as part of the game. Those players not only believed that manipulating the other player was acceptable but also did not find escapism an important aspect of the gameplay, suggesting that they view TCGs not as social games but as a game that just has social aspects, which players can utilise to gain advantage.

Overall, while not providing data that can be analysed in more depth, the pilot survey gave insights into player motivations, similarities and differences between TCG and MMORPG players and thus showed a possibility for more extensive research on the topic. The observed correlations between some player types, such as social players and players who enjoy game mechanics, aligned with findings from previous studies, which indicated that these traits may play similar roles across different gaming genres. By expanding the sample size and refining the question set based on these observations, the research on this thesis was able to build a comprehensive understanding of the motivations that make TCG players engage in the play.

4.3.2. Changes after the pilot study

While the pilot study provided valuable information to confirm that more extensive scale research could be conducted, the survey also required improvements before the final implementation. The pilot version of the survey consisted of questions regarding both player motivation and the personality assessment, so the scope of the study was too large for a larger-scale implementation because of the total amount of items (n=50). Also,

because of the additional questions related to the personality traits, the data could not be as reliable as with just the player motivation questions, as Yee's (2006) questionnaire did not include those items. This would have also made the comparative analysis between genres harder. After cutting the personality trait assessment, the scope of the study became more manageable for the master's thesis, as the number of items was also reduced from 50 to just 30 in total.

The removed questions also consisted of language which was ambiguous for the respondents based on the comments received from them, which could have also affected the quality of the data. However, as the Mini-IPIP scale used for personality assessments was standardised, there would not be a way to change those questions. It was better to remove it to enhance the quality of the answers both because of the scope, but also because of the time limitations. After the changes in the survey and after the approval from the supervisor, the final version of the survey was distributed to the individuals.

4.4. Final version of the survey

The quantitative survey was chosen as the method for the final version of the survey, as the initial version of it gained positive feedback and showed possible correlation from one genre to another, making it clear that there was a possibility to conduct research similar to Yee's (2006) MMORPG player survey with TCG players.

The final survey can be viewed fully in Appendices A and B, where Appendix A consists of the background questions, and Appendix B, the questionnaire about player motivation in TCGs.

4.4.1. Survey questions

The survey distributed to the respondents was based on the survey conducted by Nick Yee (2006) to MMORPG players, and the questions were modified to fit the TCG genre. The survey was implemented through Microsoft Forms and distributed in Discord servers related to TCG play. The survey gathered basic demographic information regarding gender, age, the TCGs respondent had played previously, and the TCG respondents played the most. The age and possibility of adding a game not listed as an item were the only open-ended questions of the survey, while all other survey items were implemented with a set of choices.

The survey questions regarding player motivation consisted of 30 questions, which respondents answered on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). In total, 360 survey responses were gathered during the duration of 19 days.

4.4.2. Participant recruitment

The final version of the survey was distributed to 12 different Discord channels related to card game playing. Out of those servers, 3 focused on *Magic: the Gathering*, 3 on *Yu-Gi-Oh*, 2 on *Lorcana*, and one on *Flesh and Blood TCG*, *Cardfight!! Vanguard*, *Pokémon TCG* and *Digimon TCG* each. As the survey was anonymous, the only requirement to participate was adequate proficiency in English and being over 18 years of age. Although the majority of people in the channels distributed were Finnish, it is not possible to know their geographical locations due to anonymity, yet most of the respondents were likely located in Finland. Although it was discussed whether to distribute the survey outside of Discord to gather a broader audience, it would also have possibly caused bias towards some of the represented games due many groups being limited to just one TCG and not all of the games in general, so ultimately, the survey was distributed only in Discord. The data-gathering process lasted 19 days in February 2025.

4.4.3. Participant demographic

79% of the respondents were male, 13% were women, and 7% were non-binary individuals. The rest, 1%, did not want to specify their gender. While the demographic data will be looked into in more detail in the later chapters, it is essential to note that the survey distribution platform might affect the demographic. As some people, especially the ones in minority groups, such as women and non-binary individuals, might not be part of the chosen Discord groups, it might affect the demographical data of the survey. However, as TCGs and card games, in general, are a male-dominated genre of games, gathering even 20% representation of female and non-binary respondents is more than what was hypothesised before the results of the survey.

4.5. Analysis methods

The analysis started with demographic analysis to address questions related to the heterogeneity of the respondents. After the demographic analysis, the responses to the 30 motivation questions were analysed using exploratory factor analysis (EFA). The

motivational differences between the different demographic sections, male and non-male respondents, were also analysed to see if there were changes across the respondent groups. The data was also compared to findings from the previous studies across the genres. This approach allowed to not only analyse the data within the TCG genre, but also to answer the research question of how the motivations compared across genres.

4.5.1. Exploratory factor analysis

Exploratory factor analysis (EFA) is a method used when a researcher has little to no prior information about the latent structure within the set of observable variants. EFA helps to uncover potential factor structures without enforcing predefined assumptions or constraints. (Finch, 2019, p. 5). As there was no prior research regarding the motivations of TCG players, and there was no certainty whether the same motivations apply to them as to MMORPG players, and the goal of the study was to understand the motivations of the players of the genre not researched in the similar way before. Therefore, EFA allowed the data analysis without prior assumptions, which made it a logical choice for the study as it was also used in Yee's (2006) study.

When conducting the study, the factor extraction method was maximum likelihood (ML). ML is one of the most commonly used factor extraction methods in EFA, and is designed to find parameter values that maximise the probability of observing the given data (Finch, 2019, p. 28). Common factors are latent variables which help explain the relationship among observed indicator variables (Finch, 2019, p. 15). In other words, common factors influence more than one measured variable or item, and the goal of the EFA is to uncover the underlying latent constructs that are believed to explain the correlations observed among the measured variables.

Using EFA can not only uncover latent constructs that explain the correlations among variables, but it is also useful to reduce a large set of variables into fewer meaningful factors to simplify the analysis (Finch, 2019, p. 94). As the survey in the study consisted of 30 questions in total, and there were over 300 responses, EFA can help to understand relationships among the variables. This is also why the quantitative method was chosen for the thesis, as analysing the same amount of qualitative responses would not have been possible in the given time frame.

Another benefit of EFA is that it enables the examination of latent or unobservable constructs, such as motivation and intelligence, which are frequently the focus of research

in the social sciences (Finch, 2019, p. 3). As motivation falls into the same category as the ones mentioned above, EFA can help to identify them. However, to determine whether the variables derived from EFA are meaningful and valid representations of the constructs which are studied, the existing theories need to be taken into account when conducting the analysis. Fortunately, although the existing studies on TCGs are lacking when researching player motivation, there is research done on the subject, and by reflecting on the studies conducted by, for example, Yee (2006; 2007) and Kallio et al. (2010), the validity of the results can be analysed more in-depth.

While EFA is a useful analysis method, it does not come without its disadvantages. As stated above, it needs to be tied to existing theories and research to determine whether the representations are valid. Also, when it comes to naming and labelling the variables, different researchers might interpret factor structures differently (Finch, 2019, p. 99). This means that depending on who is analysing the data, the researcher might, for example, retain different amounts of factors or use different methods to analyse the data. This might then lead to reproducibility issues, which is why the methods used for the analysis must be listed in detail to ensure that the study is as replicable as possible.

Another possible problem with EFA is that it depends on the sample size of the data. While there are many views on which sample size is a good one, the opinion of Lee (1992, as cited in Finch, 2019, pp. 101–102) is that over 300 responses would be considered a good sample size. When reflecting on this, the overall size of the sample data gathered for the study (n=360) is sufficient, but researching smaller portions of the sample using EFA, such as gender minorities will not be possible. Due these limitations, it is not possible to utilise EFA to every part of the research, yet however, it can be used to determine overall motivations for the play within the respondents, and to answer the main research question.

4.5.2. Comparative analysis

Comparative analysis is an analysis method which involves the systematic comparison of two or more cases to identify similarities and differences (Morin et al., 2021, p. 47). Comparative analysis between the study of the thesis and the Daedalus project (Yee, 2006) will aim to understand those factors between the game genres and to answer the research question of how the motivations of TCG players compare to the motivations exhibited by players of other genres, such as MMORPG players.

Comparative analysis can be useful in many ways, as well as at different points of the research process (Morin et al., 2021, p. 48). When comparing the results of two different studies utilising the same analysis method, in this case EFA, the comparative analysis aims to find if there are motivations across the genres. This information can be then used to craft future studies based upon the results of the thesis. As EFA is primarily an exploratory tool rather than a confirmatory method (Finch, 2019, p. 5), combined with comparative analysis, the results of the study can be used to build an understanding of the topic so it can be researched further either by conducting a confirmatory factor analysis or by gathering more qualitative data on the topic.

4.6. Ethical concerns

Before answering the survey, the participants were informed about the meaning of the study. They were also presented with a privacy notice, and they consented to partake in the survey. The participants also confirmed that they were over 18 years of age. The survey responses were gathered anonymously, and the survey consisted mostly of questions which were not open-ended. The only open-ended questions of the survey were the age of the participant, as well as the possible additional games not listed in the survey.

The data was stored in Tampere University OneDrive, as well as password protected computer which only the author had access to. The raw data was stored in Microsoft Forms servers accessible only by the author and the supervisor of the thesis.

5 RESULTS AND ANALYSIS

In the following chapter, the results of the study regarding demographics, game representation, and motivations of play will be discussed first, followed by data regarding motivations of play in TCGs, differences across genres and differences in motivations within TCGs across gender groups.

5.1. Player demographic

The player demographic data showed that while TCGs are a male-dominant game genre, there is still more variation than what, for example, some tournaments might suggest. Especially in the younger demographics (18-22 and 23-28), the representation of both female and non-binary individuals was more prominent than in older demographics (29 and over).

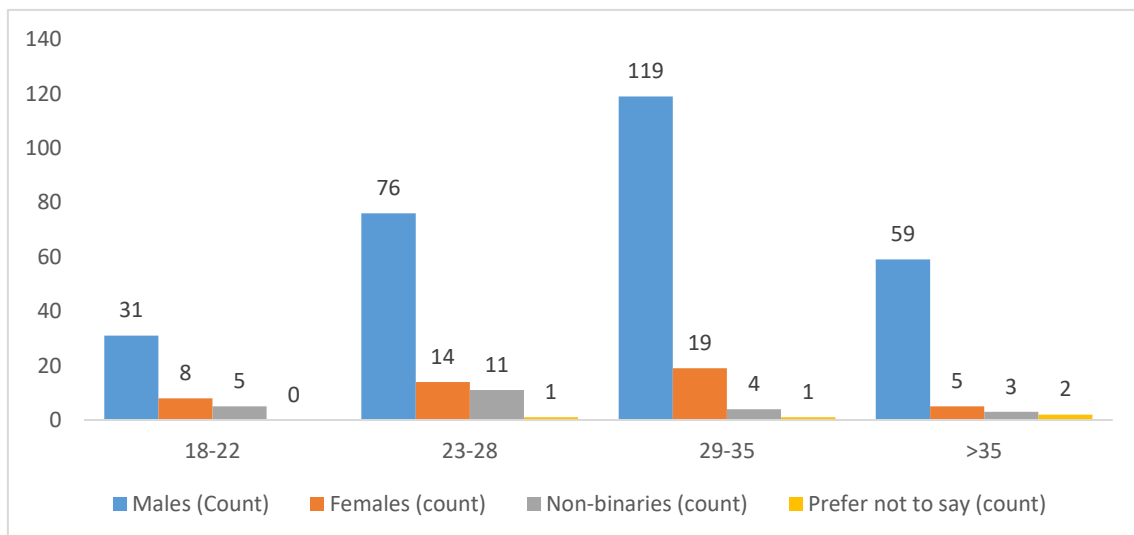


Figure 7. Age distribution by gender ($n(\text{male})=285$, $n(\text{female})=46$, $n(\text{non-binary})=23$, $n(\text{prefer not to say})=4$)

As seen in Figure 7, most of the respondents were male (79,2%, $n = 285$), while the rest of the genders and individuals covered just a small part of the respondents. The average age of the respondents was 30 years ($n = 267$, $SD = 6.7$), while the median was 30, with an age range from 18 to 52.

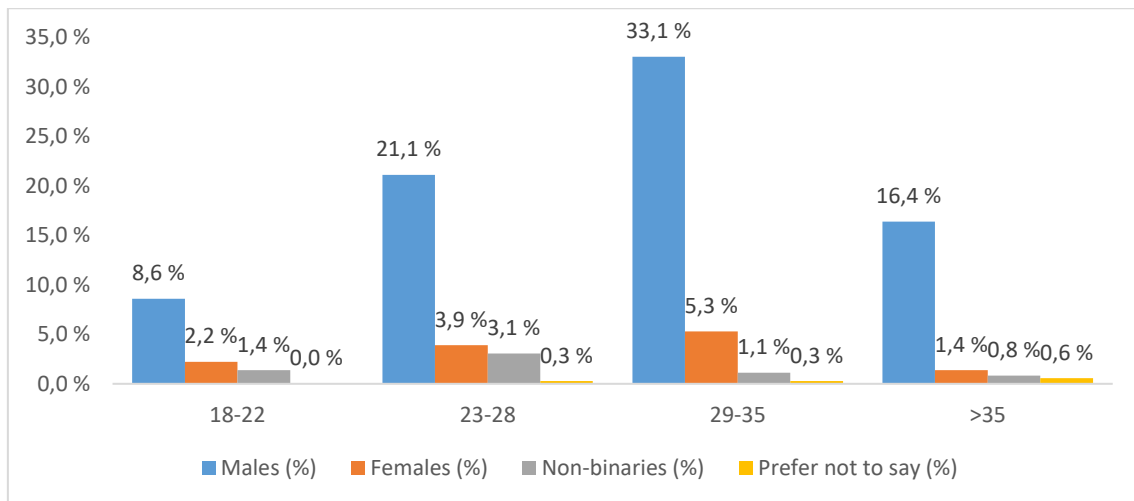


Figure 8. Age distribution by gender, percentages

The most prominent player representation was, as seen in Figure 8, in the male respondents in the 29-35 age range with 33,1% (n=119) representation. On the other hand, even though 20% of players being non-male individuals might seem like a low number, it is still relatively high compared to the stereotypical TCG players. Turn-based strategy games had 11% female representation (Yee, 2017), so it seems like the 13% female representation in this study aligns with the data acquired from previous studies, as turn-based games were the closest genre to TCGs in the compared studies. However, the study by Yee (2017) does not take into consideration non-binary identities, so TCGs might, in reality, be more diverse in gender representation than their turn-based strategy counterparts. To confirm this, the study would need a larger sample from various platforms. As said, the initial results show that a fifth of the players are non-male individuals, which is a positive change for a game genre with a historically homogenous player base.

5.2. Represented games

The respondents had played 60 different card games in total. Of those games, 44 different games qualified as trading card games, while the other 16 were digital card games or board games that used cards as their main gameplay components. The most notable game which was not included as a trading card game was *Hearthstone* (n=10); as stated in Chapter 2, it is played in a digital environment instead of a physical one.

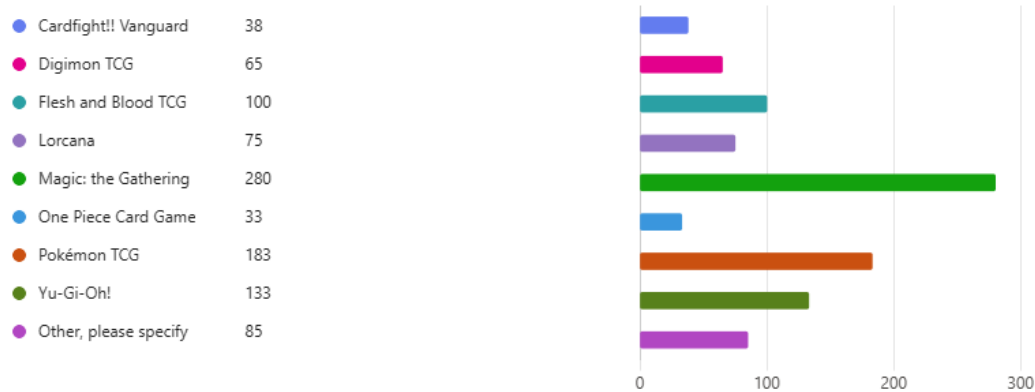


Figure 9. TCGs respondents have played

From the respondents, the majority ($n = 280$) had played *Magic: The Gathering*, followed by *Pokémon TCG* ($n = 183$) and *Yu-Gi-Oh!* ($n = 133$) (Figure 9). *Flesh and Blood TCG* (Legend Story Studios, 2019) ($n = 100$) was not far behind and has gathered an audience at a fast pace, which, taken into consideration the game started its publishing in 2019, is notable. Unlike the previous three games, which started publishing in the 1990s, *Flesh and Blood TCG* has gathered a noticeable scene in just a few years and seems to continue attracting new players with every new release, which could make it an interesting candidate for future TCG studies.

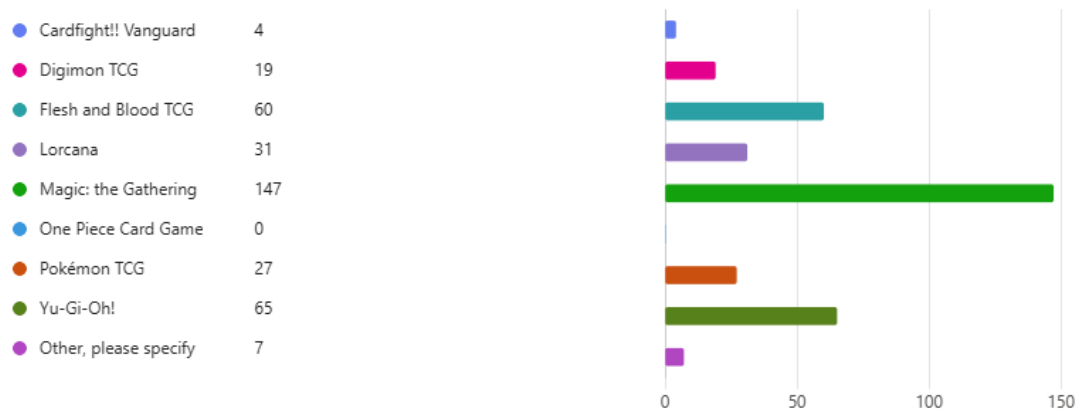


Figure 10. The games respondents are currently playing the most

However, when looking at the games respondents played the most as of February 2025 (Figure 10), the games appeared to be *Magic: The Gathering* ($n = 147$), *Yu-Gi-Oh!* ($n = 65$) and *Flesh and Blood TCG* ($n = 60$). What was interesting was that of all of the respondents, only 27 reported that they were playing *Pokémon TCG* as their most played TCG. Although it was the second most often played game overall, with over 50% of

respondents answering they had played it at some point, only 7,5% played it as their most often played game.

The reasons behind this can be hypothesised even though not confirmed. Because Pokémon is a well-known franchise and the cards are sold in markets, it is a game people might play as their first TCG. Whether the motivation to start playing *Pokémon TCG* is the franchise itself or the availability of the game pieces, it still acts as a game which people test before moving to other TCGs. The other reason for such a drastic change from playing the game to playing it most often might also be simply the sample itself. As the data was collected from Discord servers, it might be that the most active *Pokémon TCG* players are not part of these populations.

Although respondents mentioned games discontinued over 30 years ago, such as *Babylon 5* (Precedence Entertainment, 1997), none included party games, such as *Cards Against Humanity* or *Pick Your Poison* (Dyce Games, 2016), or CCGs, such as *Formula 1 Turbo Attax*, as TCGs they had played. The exclusion of these games as answers could indicate that when talking about TCGs, people do not necessarily think of the gaming environment or how the cards are acquired as long as the game plays like an orthogame. This reinforces the idea that TCGs are viewed as something people play to compete against each other rather than to spend time playing party games where the main goal is not to win the game.

Table 6. Orthogamic card game subgenres respondents included as TCGs in the survey

Card game type	Publishing type	Revenue model	Gameplay	Examples
Trading card game (TCG)	New card set every couple of months	Booster packs / loot boxes	Yes	Magic: The Gathering
Board game with cards	Single-time release	One-time payment	Yes	Dominion
Digital card game	New card set every couple of months	Booster packs / loot boxes	Yes	Hearthstone

Based on the games respondents had listed when asked about which *trading* card games they had played, it is sufficient to say that the definitions within the genre are as confusing to players as they are for games scholars. As seen from Table 6, in the data gathered from

the survey, people were listing games from three different orthogamic subgenres, most likely without thinking whether the games listed were TCGs or not. This might suggest that defining TCGs was a challenging task for the respondents due the ambiguities in naming convention within card game subgenres.

While some respondents reporting *Hearthstone* as a TCG they have played is not surprising, as digital card games are often similar to TCGs apart from their playing environment, the number of respondents who included board games which used cards as the main component was surprising. The inclusion of board games as TCGs, in respondents' opinion, could mean that for some respondents, TCGs did not necessarily have to include the trading element, as long as the game was played like an orthogame and the game included cards. Games such as *Netrunner* (Wizards of the Coast, 1999) and *Vampire: Eternal Struggle* (White Wolf Publishing, 1994) do not require players to trade cards to acquire all of the game pieces, and a single-time purchase, similar to board games, is enough to play the game.

To wrap up the represented games, all respondents (n = 360) reported that they had played at least one game which qualifies as a TCG in this thesis. Therefore, no responses were removed due to the game not being of the studied genre. Overall, the diversity of TCGs was wide and consisted of games from the modern day all the way to the early 1990s, and from European, American and Asian publishers.

5.3. Defining motivations

Survey questions regarding player motivation were based on the research by Yee (2006). The study's goal was to utilise EFA to identify the latent constructs, in other words, to determine motivations for TCG play, and the first step was to determine the suitable amount of eigenvalues for the study. The scree plot showed an inflexion point at eight components, and together, those eight components consisted of 53% of the total variance. However, as three of the components showed low Cronbach's alpha values (<.25) and/or consisted of only two items each, they were removed from the final components. The rest of the items had an acceptable Cronbach's alpha value (>.54), which is why five items were determined as the final amount of components in the study.

The data set had a Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) of 0.692. As the score of 0.60+ is considered suitable for factor analysis (Nkansah, 2018, p. 53), it

is still possible that a larger sample size would have aided in achieving an even higher values and therefore, made data even more reliable. However, with a $<.001$ significance value in Bartlett's Test of Sphericity, the data was deemed to be suitable for the research.

Competitiveness	Escapism	Social	Manipulation	Design
Tournament play, mastering the game, reaching goals, metagame, game mechanics	Immersion, stress-relieving, playing for the leisure	Chatting, interacting, playing together, making friends, organising	Oppositional play, achieving goals alone, taunting others	Creativity, community, tinkering, theorycraft, originality

Figure 11. *The factors motivating TCG play revealed by exploratory factor analysis*

The factors, as seen in Figure 11, as listed above, show five different motivations for TCG play. The motivations, competitiveness, escapism, social, manipulation and design, are not limited to only the TCG gameplay but also span outside of the game itself, making the genre different from many other game genres where the motivations are directly related to the gameplay.

In this study, as seen in Figure 11, five factors were found. Competitiveness factor included tournament play, progress and interest towards game mechanics, the serious play and desire to gain deep understanding of the game. Escapism factor, instead, included immersion and relaxing while playing the game, as well as forgetting the real-life worries and playing the game for leisure. Differently from the two mentioned before, social factor included meeting friends and playing together, but also organizing events and other activities within the group. Manipulation factor had oppositional play, playing against the norm, gaining advantage in-game, achieving the goals alone and Design factor included creating and thinking about decks and gameplay while not actively playing the game and theorycrafting possible scenarios.

The factors are described in more detail in their own subchapters. All of the factors, their respective items, alpha values and factor loadings are listed in Appendix C.

5.3.1. Competitiveness

One of the groups which also appeared in previous studies and was therefore something which could be expected across genres were players who participated in the game because of the competition and ranked play. Games across genres offer the possibility of determining ranking within the game, be it a traditional game such as TCGs or chess or a digital game like *League of Legends* (Riot Games, 2009) or *Hearthstone*.

Players interested in competitiveness were interested in tournament play, most likely because that is the version of the game that offers the clearest ranking system within the game. The ranked games are also the places where players can fully immerse themselves in the orthogame and where the whole definition of the term comes to life. In a tournament setting, the ranking between players is not defined only within one game but between every participant in the said tournament, which makes them a place where players with competitive motivations can play the game to the highest level.

14. 6. I like to play in competitive tournaments.



Figure 12. I like to play in competitive tournaments.

It should be noted that most of the respondents were interested in tournament play in some level. 29.2% of the respondents agreed they were interested in tournament play, and 38.3% strongly agreed with the statement (67.5% in total) (Figure 12). Meanwhile, only 15% of respondents were not interested in tournament play and either disagreed or strongly disagreed with the statement.

Because respondents were interested in tournament play, it could have been hypothesised that they would have also been interested in acquiring the best possible deck for the current metagame. Surprisingly, that was not the case.

17. **9.** It's very important to me to build the best deck for the current metagame.



Figure 13. It's very important to me to build the best deck for the current metagame.

When looking at the interest in building the best deck for the metagame, the respondents did not find it as important as participating in tournaments. 23.6% either agreed or strongly agreed that they found building the best deck possible important, while 55.2% either disagreed or strongly disagreed with the statement (Figure 13). The difference between tournament play, and deck building for the tournaments could indicate that while respondents were attracted to competitive play, they were not motivated by optimisation and deck building.

20. **12.** Game balance and metagame issues do not interest me.

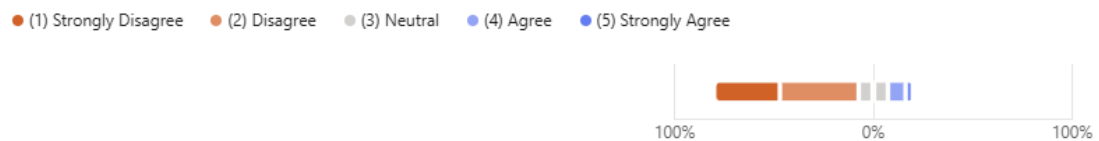


Figure 14. Game balance and metagame issues do not interest me.

Even though respondents did not feel like they were required to build the best deck available, they were interested in the metagame and the current best strategies for the game. As the item was worded as negative, it is essential to take into consideration that as answers widely disagreed with the statement, it means that respondents found game balance and metagame aspects of the game important. As seen in Figure 14, 72.8% of the respondents either disagreed or strongly disagreed with the statement. This means that almost three-quarters of respondents found those aspects of the game important.

Combined with the knowledge gained from the previous two statements, the motivation for competitiveness in TCGs seems to be tied to wider concepts regarding competitiveness and event participation rather than deck building and focusing on acquiring the best possible deck for the metagame. While the respondents were interested in dominant strategies and game balance, they were more interested in understanding the concepts rather than necessarily acquiring the best available pieces. As acquiring the best

gear is one of the motivations for playing in MMORPGs in the study of Yee (2006), this is one of the factors that will be discussed more when conducting the comparative analysis between TCGs and MMORPGs.

Overall, even though competitive motivations seem to stay across the genres, the deeper meaning of the competition changes. It can be assumed that TCG players do not participate in competitive play to dominate the game with the best possible deck, but rather to challenge others with their own strategies and to gain ranking within the tournament. This does not mean that the competitive players would not like to play competitive strategies, but rather that they do not necessarily feel like they need to constantly change to what is considered the best possible deck when the almost as strong option is still viable for the tournament play.

5.3.2. Escapism

While players who participated in the play because of competitive aspects aimed at mastering the strategies and to understand the metagame, the players who participated because of the escapism found motivations to TCG play from different aspects of the game experience than their competitive counterparts. The escapism motivated players participate in play to, for example, forget their day-to-day life and use the game to not think about problems or challenges outside of the game.

The players who were motivated by the escapism and immersion did not necessarily participate in the game because of the gameplay itself, but also because of the gameplay environment and what the game offered to them. While the aspects that motivate these players to play TCGs might include other people, the motivation comes intrinsically, unlike the socially motivated players, who play because of extrinsic motivators.

26. 18. I like the escapism aspect of the game.

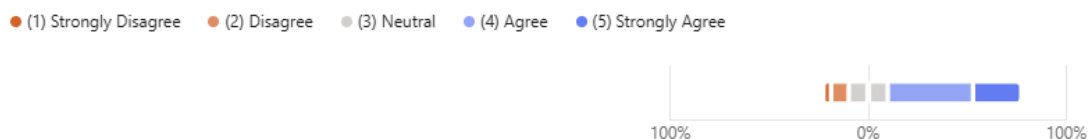


Figure 15. I like the escapism aspect of the game.

A vast majority of the participants found the escapism aspect of the game pleasant (Figure 15). 67.5% of participants either agreed or strongly agreed with the statement, indicating

that people participate in TCG play to escape their daily lives. They might find gaming relaxing and a situation or environment where they can focus on the game rather than other topics of their life.

For people motivated by escapism, the topics of participating in play, such as playing to relieve stress and talking about their struggles, also rose to be a relatively common reason for the play. While respondents might not complain directly about their issues while participating the gameplay, based on the survey responses, they might find participating in TCG play to help them distract themselves from the stress they might be experiencing.

28. **20.** Playing the game lets me vent and relieve stress from the day.



Figure 16. Playing the game lets me vent and relieve stress from the day.

75.5% of the respondent either agreed or strongly agreed that playing the game let them relieve stress from the day (Figure 16). The respondents also agreed that the game let them forget the real-life problems they were experiencing. The stress-relieving aspects of the game could indicate that individuals do not view the game as something they have to win or lose like they usually would when a game is played as an orthogame, but more as an environment where they can express themselves. While the goal of the gameplay might be to win, everything happening outside of the game itself is equally important to the escapism-motivated players.

29. **21.** Playing the game lets me forget some of the real-life problems I have.



Figure 17. Playing the game lets me forget some of the real-life problems I have.

Overall, the data clearly suggested that escapism was one of the motivations to participate in TCG play. It also suggested that people view the aspects outside of the gameplay as important to the orthogamic play, which raises the question of which of those aspects of

the gameplay itself play a significant role in the overall TCG playing experience and can these even be separated. Whether people who played because of the escapism factor were more interested in getting a break from their daily lives or using card games to relieve stress, the overarching theme of playing not because of the orthogamic gameplay but to focus on the game instead of everything else happening in their lives. Because of this, when looking deeper into TCGs as a whole, every aspect of the game is something to keep in mind when TCGs are compared to other game genres.

5.3.3. Social

There are many reasons why TCGs can be viewed as games where social aspects are integral to the gameplay, as stated in the previous parts of the work. From in-game interactions to the outside-of-the-game social aspects, people participate in TCG play for a multitude of reasons. Seeing how social motivations to play rose as one of the factors to participate in TCG play, similarly to relationship motivations for MMORPG play in Yee's (2006) research, was somewhat expectable. However, when looking at the singular items within the category, the social aspects of friendship are more prominent than the themes related to supporting other players through the issues they were facing in real life, unlike they were in Yee's (2006) research. The social aspects also differed from the escapism aspects, as instead of avoiding possible real-life problems, people who played because of social motivations were more motivated by friendships and seeing people while participating in the game, unlike intrinsically-motivated escapism players.

11. 3. I have made some good friends in the game.



Figure 18. I have made some good friends in the game.

A vast majority of the players felt like they had made good friends in the game (Figure 18). 86.4% of respondents agreed with the statement, while only 3.6% disagreed with it. As TCGs are played in physical gaming environments such as game stores, forming friendships might be easier than in digital environments where players often use avatars and text chats to communicate with each other. Also, in most physical gameplay

environments, people talk about topics unrelated to the game they are playing, so they might form connections and friendships because of shared interests outside of TCGs.

Another reason people might feel like they have made good friends in the game can be related to the type of people who play TCGs. When visiting game stores, which are often seen as environments where people share an interest in not only TCGs but also other topics which might seem nerdy, people might feel like they can express themselves more authentically than they could in other environments. Some of the interests, or even communication patterns, such as communicating directly or not judging a person because of their individuality, which might lead a person to be judged in other environments are often not viewed poorly in game stores, so they feel safe in forming friendships.

12. 4. Friends in the game have offered me support when I had a real-life problem or crisis.



Figure 19. Friends in the game have offered me support when I had a real-life problem or crisis.

However, as TCGs and their physicality offer a place to form friendships, it also might limit the level of communication to some individuals. As players do not have the same kind of anonymity as when playing in digital environments, some people might be hesitant to share parts of their lives. While most of the players had made friends in the game, the number of individuals who felt like the friends they had made in the game had supported them when they had real-life problems (Figure 19) was not so high. Still, around half of the respondents (53.6%) agreed that they had received support from their friends made in TCGs, while 17.8% disagreed with the sentence, and 28.6% were neutral about the topic. The difference between sharing real-life issues from the escapism motivation and getting support for them could indicate that while TCG players like to unravel their possible problems to other players, they are not expecting answers to them from their peers, but instead just expecting to have a place to not think of them for a moment as they are playing.

Whether the change from making friends to sharing feelings with them was because respondents rather reached out to other people or if they felt like they have not had any problems they would have liked to share is something that cannot be checked in the data.

As a whole, the social aspects of the game seemed to lean more towards positive interactions than seeing other players in the game as individuals who share negative aspects of life.

Because of the gaming environments, the social aspects of TCG play were linked to communication and spending time together. When going to the game store, it is not unusual to see people just chatting either about the game or non-game-related topics and not actively participating in the game. In some ways, especially in those scenarios, TCGs become something that people share but do not necessarily think actively when socialising with each other, even when spending time in places where the game is actively being played. The possibility of TCGs acting as a part of creating something larger than an orthogame, like also mentioned when discussing escapism aspects, is something to keep in mind.

One aspect of socially motivated play for TCGs was related to tournament and organised play. Similarly how some players enjoy leading guilds in MMORPGs (Yee, 2006), and some TCG players enjoy hosting organised play and tournaments. Even though those individuals do not necessarily view themselves as leader figures similar to guild leaders, they are still the ones creating opportunities for other players. These aspects make organisers an essential part of the people motivated by the social aspects of the play.

To summarise the social motivations for TCG play, the game might not be in the centre of the players motivated by social aspects, but rather offer a place where individuals connected by the game socialise with each other. Whether the reasoning for social play is meeting friends, talking outside of the game itself or hosting organised play, social motivations are clearly part of why people might participate in TCG play.

5.3.4. Manipulation

One of the, if not the most interesting motivation to play TCGs was the motivation related to manipulation and domination. Although the words themselves might have a negative feel in them, this does not mean that people who participate in the game because of manipulative motivations are the ones who cheat and play in unpleasant ways, but rather that they want to achieve the goals by themselves and gain advantage within the game. Instead, those motivations should be called oppositional play rather than manipulative and dominating play patterns. In general, while oppositional play might include traits such as manipulating the gameplay situations to one's advantage, it

does not mean breaking the rules or harming other players' gaming experience while participating in the game. Rather than that, it centres around individuality and wanting to achieve the game's goal by utilising the environment and communication in advantageous ways. In TCGs, where communication during the gameplay is a large part of the game, oppositional play can mean anything from words to handling cards in certain ways, such as constantly shuffling the cards in one's hand, to other forms of non-verbal communication benefiting the player.

33. **25.** I like to manipulate other people so they do what I want them to.



Figure 20. I like to manipulate other people so they do what I want them to.

The oppositional motivations for the play also offered the most divided answers from the respondents in singular items within the dataset. While 54.2% of respondents disagreed with the statement that they like to manipulate other people to say what they do, 20% agreed with the statement (Figure 20). However, as manipulation can be a strong word and viewed in a negative light, some respondents might have disagreed with it because of that. Another reason could be that in tournament play, manipulating another player verbally is not within the game's rules and might result in disqualification, so players might resort to other tactics of oppositional play in those environments. Such tactics can be, for example, nudging another player towards the unfavourable gameplay interaction or asking them to play faster or slower to gain an advantage in some situations.

35. **27.** I like to taunt or annoy other players during the gameplay.



Figure 21. I like to taunt or annoy other players during the gameplay.

The statement of players not wanting to affect the gameplay by using negative verbal communication is backed up further by the item where most respondents disagreed that

they like to taunt or annoy another player during the gameplay (Figure 21). 76.9% of respondents disagreed with the statement, while only 10% agreed with the statement. The finding further backs up the idea that people want to focus on the dominance and oppositional play within the gameplay itself, and not as something they do outside of the gameplay interactions. In other words, while playing TCGs, players might behave differently while playing the game and outside of the gameplay, even though they communicate with the same person.

34. 26. I like to dominate other players during the gameplay.



Figure 22. I like to dominate other players during the gameplay.

While players did not find annoying opponents verbally something they agreed with, they did, however, like to feel like they were dominating others during the gameplay. In these cases, they found the oppositional behaviour more acceptable than when asked about taunting or annoying other players. Some behaviours that fall into this category are, for example, questioning another player's gameplay decisions, asking about the current situation within the game⁵, or simply seeing that they are in a favourable position in the game. As seen in Figure 22, 42.5% disagreed with the statement, while 28.4% agreed with it, and 29.2% were neutral about the topic. While the high amount of neutral people can be because the respondents were neutral about the topic, it can also be because of the wording of the item. While some might view the item as related to in-game behaviour, others might find it confusing.

While many items in the manipulation and oppositional play category were something respondents disagreed with at the item level, it is also clearly a motivation to play TCGs. The motivation also shows a shift in genre; ten years ago, toxic verbal behaviour in-game was not as commonly viewed negatively but rather, as part of the game, to the current date, where the majority of players judge such behaviour. However, this is not to say that some negative parts are still part of oppositional play, but that rather than cheating in-

⁵ Such situations can be, for example, but are not limited to, asking about life points, the number of cards in the players' hands, or other information which correlates with the respondent being in an unfavourable position in the game.

game, the motivation has shifted to include more in-game dominance and controlling the situation rather than being rude and manipulative towards other players.

5.3.5. Design

As stated in the earlier chapters, a significant portion of TCG play happens outside of the orthogamic gameplay itself. TCGs are not simply played at the moment when players enter the game store or tournament, but they have done work towards the gameplay even before acquiring the cards or playing with them. That means some players might enjoy the parts mentioned more than the gameplay, and they prefer to focus on those instead of playing the orthogamic game. Because of those factors, the design and theorycraft were clear motivations to participate in TCG play.

22. **14.** I like to think of possible decks to build.

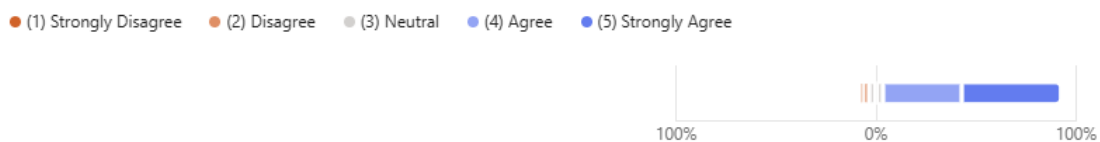


Figure 23. I like to think of possible decks to build.

If the respondents agreed on one thing, it was that they enjoyed thinking about the decks to build and, therefore, the game, even when they were not playing. 89.1% either agreed or strongly agreed that they were interested in thinking about decks, and only 3.9% disagreed with the statement (Figure 23). The vast majority of respondents agreeing with the statement solidifies the hypothesis that the gameplay is merely a part of the TCG play experience. While some people might view deck building as a mandatory part of the gameplay they simply have to do to participate in the gameplay, it still does not remove the interest towards thinking about decks to build. Players do not necessarily build every deck they think of, but they do think about the game and possible scenarios outside of the gameplay, making the design possibly even more important than the orthogamic gameplay itself.

19. 11. I research everything about the deck before building it.



Figure 24. I research everything about the deck before building it.

The claim that players think about theorycrafting and possibilities of what decks to build is further backed up by the item regarding the research going to the deck building. As players think of decks to build and immerse themselves in theory, they do not necessarily research every part of the deck before building it. While some players agreed with the statement (37.2%) the almost equal percentage (41.4%) disagreed with it (Figure 24). The divination between two player types could mean that while some players think of one deck and focus on every aspect and matchup of the said deck, others think of multiple decks and are not interested in the small details of deckbuilding. The difference between the methods for deckbuilding puts players in two categories who still share the same motivation for play; they like to design and create, but while one half focuses on one deck, the other half wants to get a variety of decks. While the variance with decks is often more common in more casually orientated gameplay, some tournament players like to build multiple decks, too, so the two player types are not strictly divided between leisure-orientated and serious TCG players. As decks consisting of cards are the only pieces used for the gameplay that a player can actively design, players who play because of design aspects usually gain deep knowledge of the subject.

18. 10. I'm fascinated by the game mechanics, and love charts and tables.



Figure 25. Item 10. I'm fascinated by the game mechanics, and love charts and tables

As a large portion of the deck building process is deciding what cards go and do not go in the deck, many players are also interested in game mechanics, charts and tables (Figure 25). While some players utilise tools such as probability calculations to build their decks, for some players, the charts might mean listings of which decks have been dominant in

specific tournaments. This further points out how broadly the topic of the question can be viewed, but also how all of those points fall into the same category of motivations. Overall, a majority of respondents (72.8%) agreed that they liked game mechanics, charts and tables, while 7% of respondents disagreed with the statement. While some people view the question from different angles⁶, it still highlights the importance of play outside of the gameplay and how essential it is for TCGs.

23. 15. I would make guides on how to play a deck if they weren't available.

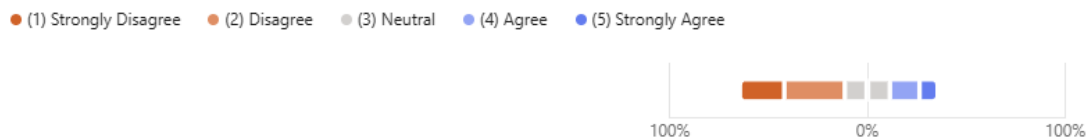


Figure 26. I would make guides on how to play a deck if they weren't available

However, as much as players were interested in thinking about theory and deck building, they were not so interested in providing the information to others. 24.2% of the respondents agreed that they would make guides to other players, while 53.1% disagreed with the statement (Figure 26). While for some players, this can be because they would not be willing to share the information with other players because they would like to keep it to themselves, for some, the disinterest in creating guides might be because of the lack of interest, time or other similar factors.

The design motivations for the TCG play consist of many topics from outside of the orthogamic gameplay itself, yet some of the parts of the factor are something almost all of the respondents shared. Unlike in many other game genres, where players do not necessarily think about the game excessively outside of the gameplay, it can be hypothesised that the majority of the TCG play actually happens outside of the orthogamic gameplay and is as important, if not more important part than the orthogame, and should be considered when researching card games overall, which is why the topic is looked at more in-depth in the Discussion chapter.

⁶ Those can be anything from being simply interested in game mechanics to following metagame deck distributions from multiple tournaments or even regions to utilising statistics while building a deck.

5.4. Comparative analysis across genres

To answer the research question of how motivations to play TCGs compare to other genres, the responses of the study were compared to the study of Yee (2006). As both studies utilised the same analysis methods, the results can be compared to each other. Although it would be possible to compare singular items, comparing the whole factors to each other will offer a more overarching comparison, which is why the singular items were not viewed. Also, as there were minor changes to make the survey work from one genre to another, comparing the overall factors instead of items makes the analysis more reliable.

The study of TCG playing motivations in this thesis showed results similar to Yee's (2006) study on MMORPG players. In Yee's (2006) project, the number of respondents was 2821, whereas in the study on TCG players, the respective number was 360. The difference in the amount between the two studies might, in part, explain the differences in Cronbach's alpha values, as seen in Table 6. In the table, the motivations which shared items and resembled each other the most are listed next to each other, as they are also analysed together later when they are compared to each other. For example, although relationship and social motivations shared some items, there were also differences which makes them not overarching from one genre to another, unlike the two factors which were represented in both genres.

Table 6. Motivations to MMORPG and TCG play

Motivation, Yee (2006) (n=2821)	Cronbach's alpha	Motivation, TCG play (n=360)	Cronbach's alpha
Relationship	($\alpha = .76$)	Social	($\alpha = .59$)
Manipulation	($\alpha = .73$)	Manipulation	($\alpha = .59$)
Immersion	($\alpha = .63$)	Design	($\alpha = .54$)
Escapism	($\alpha = .62$)	Escapism	($\alpha = .71$)
Achievement	($\alpha = .67$)	Competitiveness	($\alpha = .79$)

In the Table 6, the factors are listed in the same order as in Yee's (2006) original study. MMORPG and TCG play shared motivations of escapism and manipulation, but they also had motivations which differentiated them from each other. While some of them, such as relationship and social motivations, might sound similar, they still had differences, which will be looked deeper into the following subchapters.

5.4.1. Relationship and social motivations

While TCG players were motivated by social aspects such as friendships, they were also interested in other social aspects, such as hosting events and tournaments for other players. Meanwhile, MMORPG players focused more on conversations and talking about their real-life problems with other players. In Yee's (2006) study, items such as "*I find myself having meaningful conversations with others.*" and "*I talk to my friends in the game about personal issues.*" rose as an important part of relationship motivated gameplay. While somewhat similar to the items related to TCG players' social motivations, the ones MMORPG feel more personal than TCG players. For TCG players, the social motivations are more about group dynamics and being part of a community.

One of the reasons for the different views on how MMORPG and TCG players look at relationships and social motivations within the game is the gaming environment. While MMORPGs are played online, and players communicate through their characters, TCG players communicate directly with other people in real-life settings. Direct communication not only allows players to share their feelings and opinions more accurately than in virtual environments, but they can also utilise non-verbal communication. Overall, the physical playing environment offers wider communication, although it will not come without its own problems.

Some issues with physical playing environments, and therefore direct communication, are related to anonymity. For some players, avatars in MMORPGs offer anonymity and help them express themselves differently from real-life scenarios. For example, Williams et al. (2009, p. 704) suggest that women were more likely to play as a way to maintain relationships. However, in a digital environment, where a player can use their character to communicate, players who are not willing to share their issues in real-life scenarios might do so in-game.

The different views on social interactions between TCGs and MMORPGs do not mean that one genre would be superior to the other. Instead, it highlights how a gaming

environment affects communication and how physical communication changes the ways of interacting with other players. Although it cannot be said that one genre allows for the formation of deeper friendships and social connections than the other, both games foster their own style of relationship and social motivations for the play.

5.4.2. Immersion and design motivations

Possibly, the biggest difference between the motivations for MMORPG and TCG play comes from immersion and design. As players use custom-created avatars to play MMORPGs, the character creation, role-playing and being part of the story are some of the key motivations for people to participate in MMORPG play. As pointed out in Yee's (2006) research, questions such as "*I like to try out new roles and personalities with my characters.*" and "*I like the feeling of being part of a story.*" raise as key factors for players motivated by the immersive aspects of the game.

The main reason for the difference between the two genres is the orthogamic nature of TCGs. While some MMORPG play, such as role-playing within the game world, is not orthogamic, TCGs do not allow similar immersive experiences. However, as TCGs are revolved around cards and decks, they allow players to design their own versions of the final game pieces, their decks. Whether players modify the decks currently in the metagame by adding their personal touches or come up with their own unique decks and, therefore, strategies, the players focus on designing aspects of TCGs.

While the design aspects of TCG play are most often tied to the end goal of participating in orthogamic gameplay, there are some cases where TCG play components, for example, cards, have been used in a similar way to MMORPG elements. Like MMORPG players who role-play inside a game, TCGs can expand across genres, and cards can be used in multiple ways. One example of blurring the lines of what is achievable with TCG cards is a Turing machine created by Churchill et al. (2019). By utilising the interactions between the cards, researchers were able to create a scenario where a deck specifically built for that purpose was able to be used to perform calculations that a computer could theoretically do (Churchill et al., 2019). While this deck would not be viable for orthogamic play, it was still technically a legal deck to play rules-wise, which shows how TCGs can be complex enough to allow gameplay mechanics which blur the lines between genres, similar to MMORPGs.

Although TCGs do not allow players to immerse themselves in the game world, that does not mean they lack depth. Instead, the creative elements of TCGs are simply different from MMORPGs, and they are exhibited in different scenarios. Rather than having avatars representing the players, they use decks to represent themselves, and depending on the player and the environment, they might stretch the limits of the game's core mechanics and purpose.

5.4.3. Achievement and competitive motivations

In orthogames, determining the competition is a relatively straightforward task. Players compete to win or lose, either in singular games or, in the case of tournament play, across multiple games. However, while some aspects can be viewed as "winning the game" in MMORPGs, such as completing the toughest challenges the game offers, they are not necessarily important for MMORPG players or follow the orthogamic nature. As in MMORPGs things to achieve vary from completing the dungeon to creating the most beautiful outfit, when determining the motivations for play, MMORPG players were motivated by achievement (Yee, 2006) rather than competition.

In TCGs, the outcome of the game is decided during the gameplay, even though players prepare for the play itself before participation. In competitive and tournament play, they have done their planning and research in advance, and the play is more about execution than coming up with new game plans on the spot. MMORPG players might participate in the game because of the achievements, which can be anything from parts of the game, including other players, to single-player achievements, such as collecting all of the available items or personal achievements, such as reaching the maximum level for their character. Rather than seeing themselves in win-lose-situation, MMORPG players create their own goals, and work towards them in their personal way. In TCG play, the competition comes from other players, which is one of the most significant differences when looking at the motivations across the genres. In TCG competition, the orthogamic component is always present, and the competition involves other players, unlike in MMORPGs.

In Yee's research, achievement included items such as "*I try to optimize my XP gain as much as possible.*" and "*Doing massive amounts of damage is very satisfying.*" While, for example, doing massive amounts of damage is possible in TCGs, the game's winning conditions stay the same. If the winning condition is, for example, doing 20 damage to

the other player to win, there is no difference between 20 and, for example, 2000 damage when it comes to the game's outcome. Instead, in TCGs, the competition factor consisted of items related to game balance, metagame and tournament play.

While MMORPG players found their achievement within their own gameplay by doing damage and progressing in the game and not from the game mechanics, TCG player's competition came from understanding the game and how to win against other players. The MMORPG players' motivations in the category revolved around themselves, and the themes of the game and its balance, mechanics, and achievements of other players were absent, whereas, in TCGs, personal achievements were closely tied to others. One reason for this can be the nature of the gameplay. MMORPGs are not orthogames, and to some players who do not participate in multiplayer content even though they play in the shared world, the achievement might not be tied to other players' achievements and competitive ideas. In TCGs, which are most often played in ways where two players compete against each other in an orthogamic way, and one player wins means that the other player loses, the motivation is closely tied to the game. To win the game, TCG player must understand not only their own deck but also the game, its mechanics, and what strategies are the most successful in a given time.

Because of the differences across the genres, it is sufficient to say that achievement motivation in MMORPG and competitive motivation in TCGs are not comparable to each other, even though both of the categories aim to master the game. Because of the different goals of the game and what players aim towards, achievement and competitive motivations differentiate the two genres from each other, even though they might seem similar at first glance.

5.5. Gender and motivations for the play

While it is possible to compare the motivations to play across genres such as MMORPGs and TCGs, it is also possible to look at the motivational differences across genders within the singular genre. By comparing the most significant gender representation (male) to other represented genders, it is possible to determine whether players' gender affects their TCG playing motivations. Due to the small amount of female (n=46) and non-binary (n=23) respondents, it is not possible to conduct a factor analysis of those groups. However, the data of these groups can still be viewed to gain some understanding of the topic. By using the Chi-square test, which can be used to test whether there is an

association between two or more groups, populations or criteria (Rana & Singhal, 2015, p. 69), the possible differences between male and non-male respondents ⁷can be analysed even with smaller sample size. The possible motivational differences can be analysed when comparing the two groups' answers.

Although, due to the small sample size, the data might have some unreliable factors, it can still offer some insights into whether gender affects the motivations to play TCGs. When using the Chi-square analysis, it is possible to determine whether the variables are associated but not the strength or direction of the association (Rana & Singhal, 2015, p. 71). However, after analysing the data with the Chi-square analysis, determining the P-value of the items, and selecting items with a value lower than 0.05, which means that there is a statistically significant association (Rana & Singhal, 2015, p. 70), the answers can be looked in more detail by examining each item rather than whole factors. This allows more in-depth analysis of the possible differences between genders.

Chi-square analysis revealed six items where the P-value was lower than 0.05. Three of those items were in competitiveness factor, two in social factor and one in escapism factor. After analysing the differences within the items, the section aims to explain how gender might affect the motivations to participate in TCG play. The six items which showed variation in the Chi-square test were combined into groups based on the motivational factors determined earlier in the study and will be analysed in the following subchapters.

5.5.1. Competitive motivations across genders

Throughout history, women have been seen as less competitive and more of a nurturing type, even within gaming communities. They have been seen as not interested in competition, not only by male gamers but also, sometimes, by other women (Taylor, 2002, p. 99). While some women dislike the concept of competition, this cannot be standardised for every woman in gaming, as some women and people who do not identify as the dominant gender in the gaming field (male) view competition as an important part of their participation in play. Because of the existing studies from across genres and general assumptions regarding competitive gaming, seeing competitive motivation as the most differentiating motivational factor to TCG play was not surprising. However, it is

⁷ Due the size of the non-male respondent groups, female (n=46) and non-binary (n=23) respondents were combined (n=69) when Chi-square analysis was conducted. While not ideal, due the sample size, it was chosen to produce the most reliable results.

essential to analyse and understand the differences in motivations across genders, as results might raise further questions to be analysed.

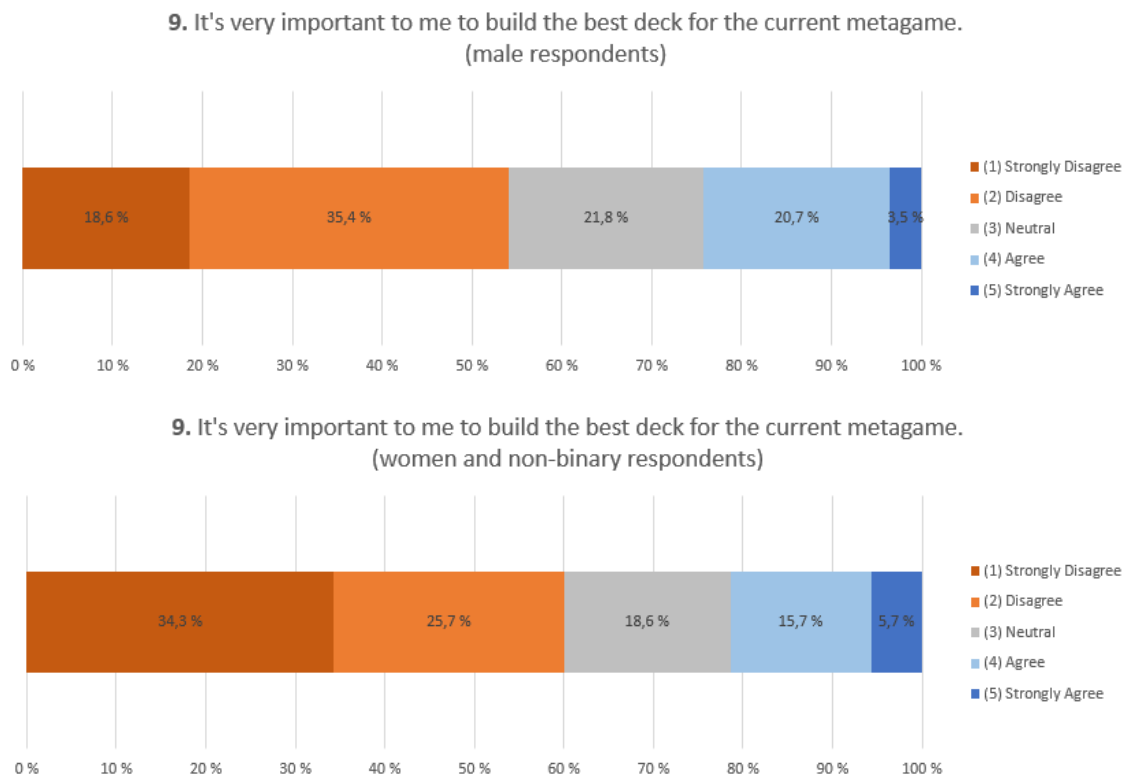


Figure 27. Item 9. It's very important to me to build the best deck for the current metagame (p-value 0.047, male (n=285) upper picture, female and non-binary (n=69) lower picture)

While 54.4% of male respondents said building the best deck for the metagame was unimportant, the corresponding amount for female and non-binary respondents was 60% (Figure 27). A similar pattern was visible among respondents who agreed with the statement, which was 24.2% for males and 21.4% for female and non-binary respondents. By themselves, the differences are not that significant, being just under a P-value of 0.05; combined with other items of the same category, they give an overarching view of the competitive motivations for TCG play.

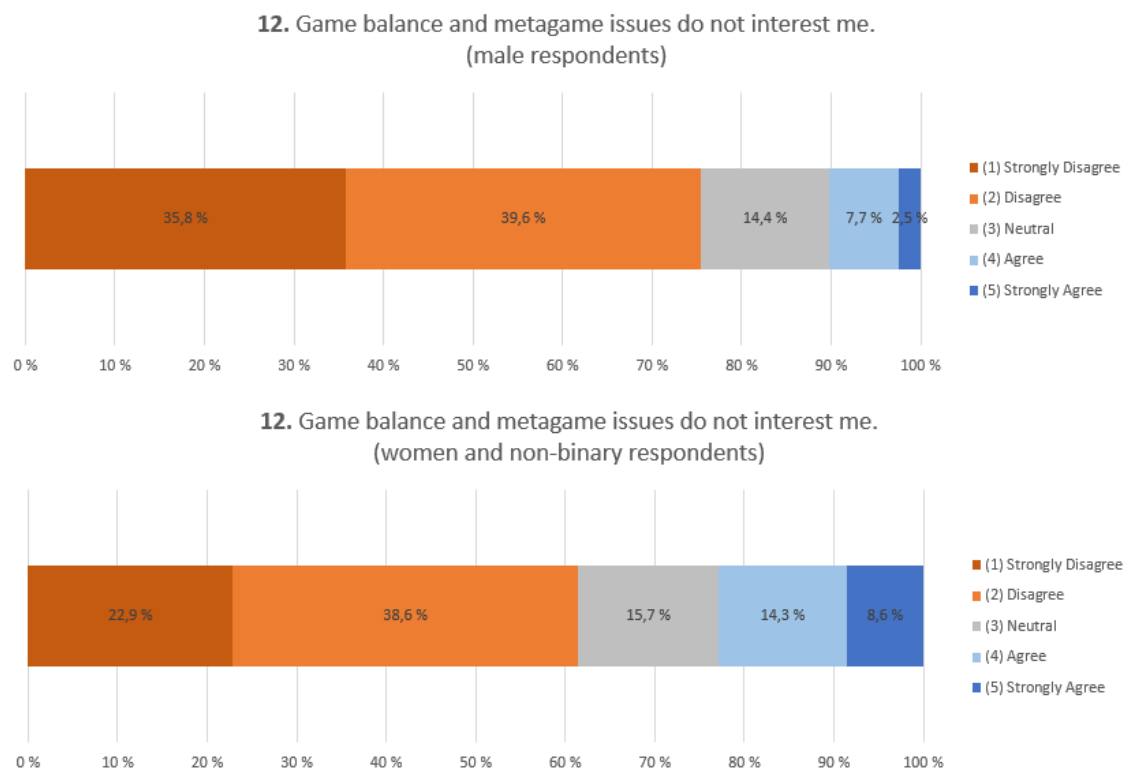


Figure 28. Item 12. Game balance and metagame issues do not interest me (p-value 0.023, male (n=285) upper picture, female and non-binary (n=69) lower picture)

As female and non-binary respondents were less interested in building the best deck, they were less interested in game balance and metagame issues. While 75.4% of male respondents disagreed with the statement, the corresponding number for female and non-binary respondents was 61.5% (Figure 28). While the differences in building the decks for the metagame were not that different, the difference between genders in game balance was significant, which pegs the question of whether male respondents are more interested in competitive TCG playing than players of other genders.

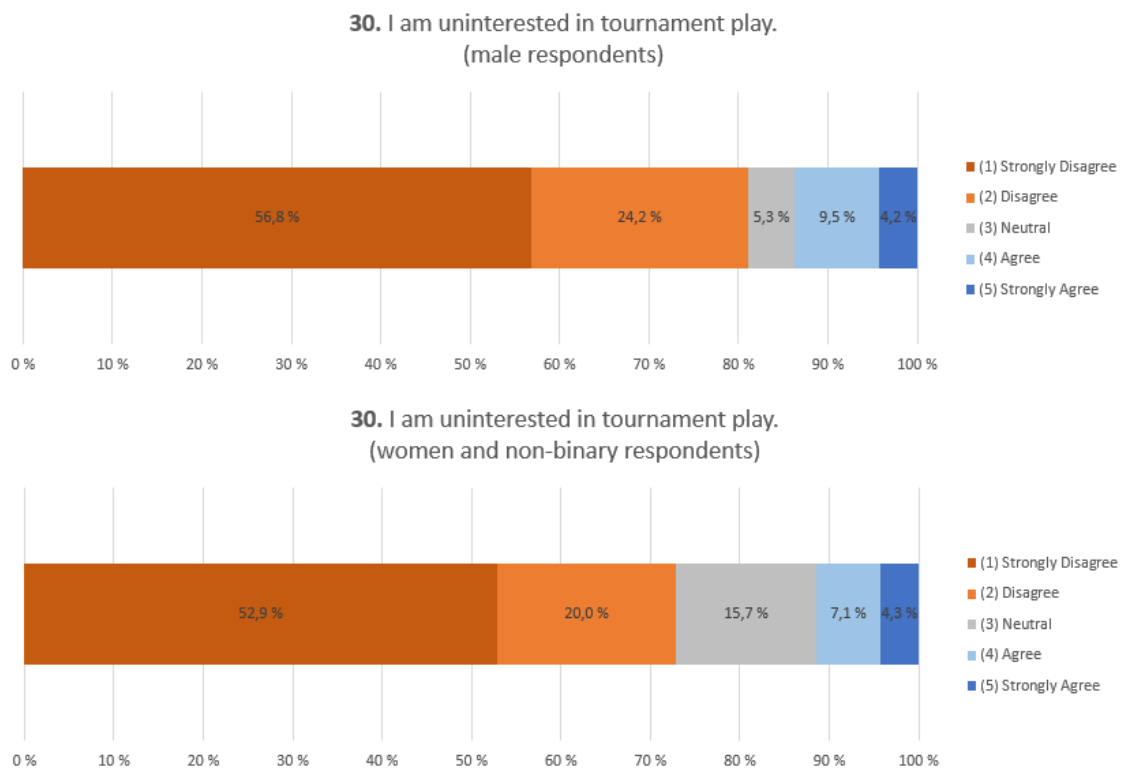


Figure 29. Item 30. I am uninterested in tournament play (p-value 0.05, male (n=285) upper picture, female and non-binary (n=69) lower picture)

Competitive play does not necessarily need to happen in tournaments, but it can also mean that an individual plays with a competitive mindset in a casual playing environment, such as in a game store. That being said, female and non-binary respondents also showed less interest towards tournament play, with 72.9% of respondents stating they disagreed with the statement. In contrast, for male respondents, the corresponding amount was 81% (Figure 29).

When combined with the previous two statements, women and non-binary individuals show less interest in tournament and competitive motivation than male respondents did. At first, the possible explanation could be choice in TCGs, and because of that, the data regarding which games the minorities gravitated towards needs to be looked closer.

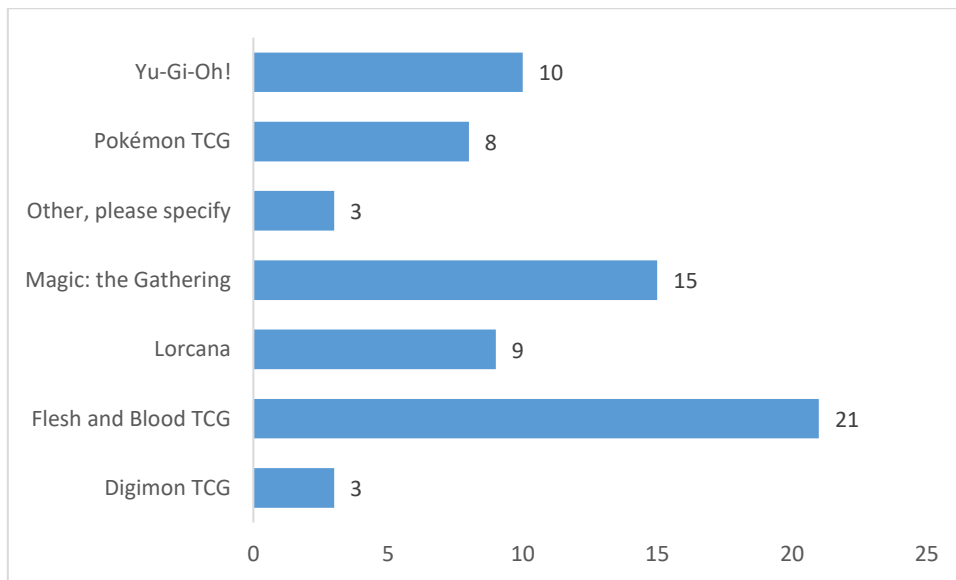


Figure 30. Most played games of female and non-binary respondents

Even though female and non-binary respondents were not as interested in competitive and tournament play, they still played a variety of TCGs. The most played game, as seen in Figure 30, was *Flesh and Blood TCG* (n=21), followed by *Magic: The Gathering* (n=15) and *Yu-Gi-Oh!* (n=10). While female and non-binary respondents have higher percentages in games with bigger casual playing audiences, such as *Lorcana* and *Pokémon TCG*, the highest amount of players was still in *Flesh and Blood TCG*, which is often viewed as one of the most competitive TCGs⁸.

Because both groups (male and non-male respondents) played similar games, it cannot be said that competitiveness would be tied to the represented games. Rather than that, the competitiveness can possibly be linked to motivations that come from outside of the game choice. Although women and non-binary individuals were not as interested in competitive and tournament play as much as their male counterparts, a portion of players were still motivated by those factors. While women and non-binary individuals were not so interested in competitiveness as much as male players, it is possible that they still enjoy the game, but rather than competing, they enjoy other factors of the game, such as playing with friends, building decks and spending time with their friends while playing TCGs.

⁸ One of the reasons for the game being seen as the most competitive one can be its pro tour tournament series with price pools worth over 1.5 million dollars (Legend Story Studios, 2024).

5.5.2. Social motivations across genders

As stated in the previous chapters, a digital gaming environment offers anonymity to players of minority groups and might, therefore feel safer than physical gaming environments. The digital environment can protect them from the harassment they face when playing, as the players can use, for example, gender-neutral nicknames while playing (Yan, 2024). TCGs, which are played in a physical playing environment, do not have the same possibilities, which is why the social motivations for the play might look different across the genres. However, if looked at from a different point-of-view, the lack of anonymity might also limit harassment as it can be pointed out more easily in physical gaming environments. In the Chi-square analysis, two items presented P-value < 0.05, one related to support in life situations outside of TCG play and another related to group dynamics.

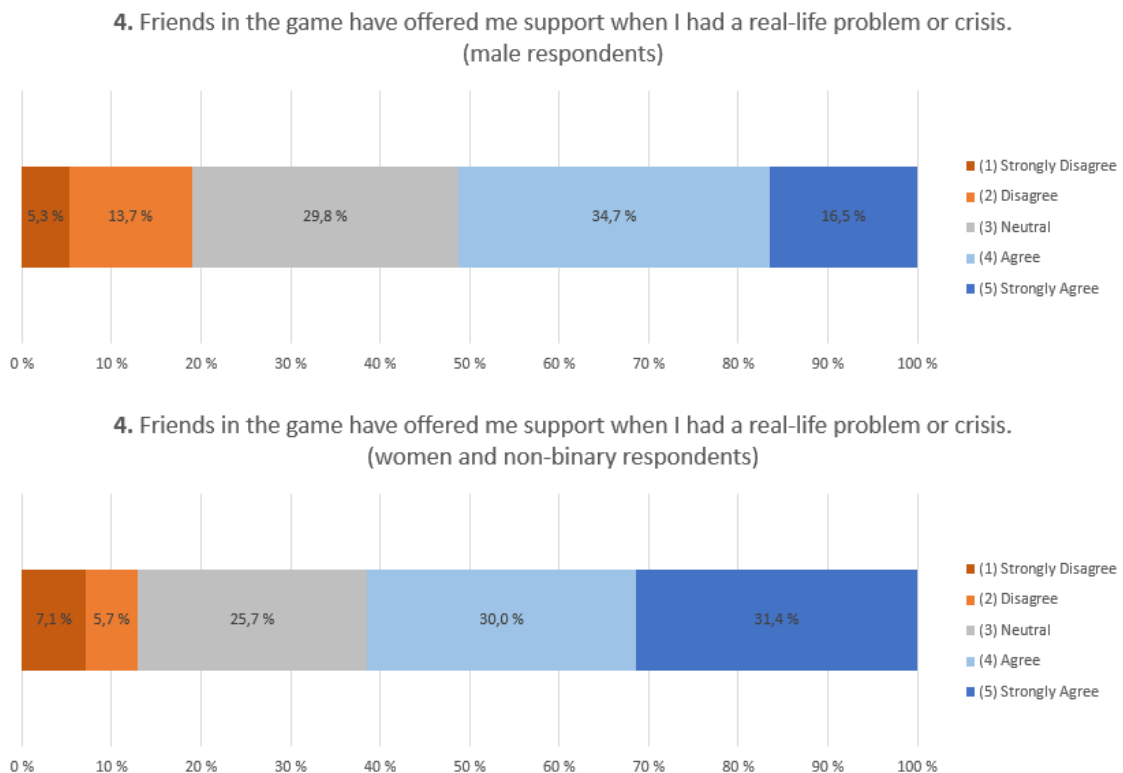


Figure 31. Item 4. Friends in the game have offered me support when I had a real-life problem or crisis (p-value 0.033, male (n=285) upper picture, female and non-binary (n=69) lower picture)

When looking at the support participants had received for their problems outside of the game (Figure 31), female and non-binary respondents agreed with the statement stronger

than their male counterparts. While 51.2% of male respondents agreed with the statement, 61.4% of female and non-binary respondents agreed with it. The most significant change is in the group that strongly agreed with the statement, with a 14.9% larger representation of female and non-binary respondents than of males.

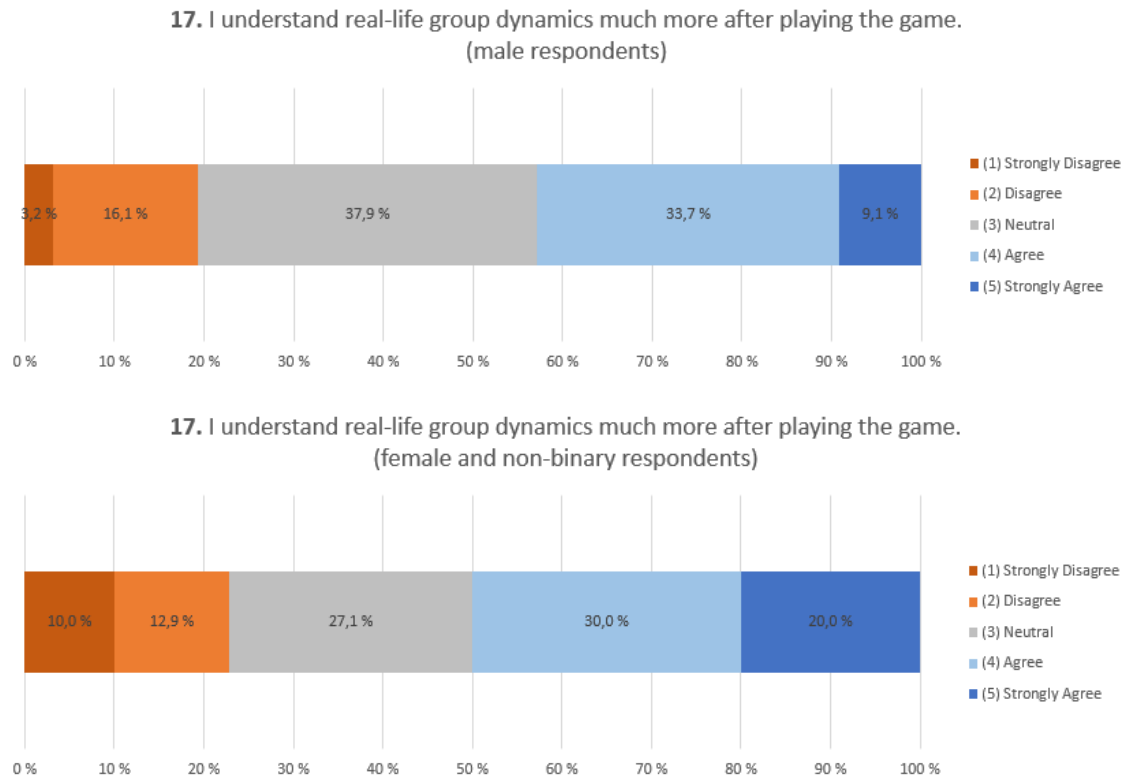


Figure 32. Item 17. I understand real-life group dynamics much more after playing the game (p-value 0.006, male (n=285) upper picture, female and non-binary (n=69) lower picture)

Simultaneously, female and non-binary respondents also reported less neutral responses when asked whether they felt they understood group dynamics more after playing the game (Figure 32). While male respondents reported 37.9% of neutral responses, female and non-binary respondents' corresponding number was just 27.1%. Because of the difference in neutrality, female and non-binary respondents disagreed with the statement more strongly than male respondents (22.9% to 19.3%), they also agreed with it more (50% to 42.8%).

When looking at the two items, it seems like female and non-binary respondents agree more that they have received support outside of the game but also respond more strongly when asked about group dynamics. Combined with the lack of anonymity that many other genres offer, it can be hypothesised that players who belong to minority groups when it comes to gender have stronger views than their male counterparts. Even though the items

do not strictly relate to each other, both of them consist of topics outside of both the gameplay and friendships themselves. When it comes to making friends within the gaming community, TCG players did not show differences across the genres. Combining all of the factors mentioned above, it can be said that while TCG players form social connections regardless of their gender, the kind of connections vary across genders.

Although the Chi-square test cannot tell the direct causes for the differences, some of the reasons for different views can be related to different socialisation patterns, where players belonging to the smaller gender representation group place more emphasis on emotional and communal support. Studies in coping behaviour have shown that women are more likely to seek social support during emotion-orientated situations (Tamres, 2002, p.15). While men might view their problems as something they must solve internally, women and non-binary respondents might be more open to seeking support from other individuals. Some of these individuals might be from shared communities, such as TCGs, as they offer not just games but also a place to form friendships and share thoughts in a safe space with like-minded individuals.

Overall, while there are some differences in social motivations to play TCGs, the differences are related not to the game genre or subgenre but to the communication outside of the game. While non-male respondents tended to lean more towards social interactions when facing real-life troubles and less neutral opinions regarding group dynamics, it is safe to say that TCG players are social creatures regardless of their gender, and they present social motivations towards the play, although in different ways.

5.5.3. Escapism motivations across genders

While most of the differences between male and non-male respondents were in the motivations regarding social and competitive aspects of the game, one item from the escapism factor rose with its P-value of 0.009. As that shows a strong change between gender groups, it must be considered when discussing motivational differences across genders. While there was no significant difference between items regarding being immersed in the game or stress-relieving aspects of the game in the data as a whole when asked whether TCGs let respondents forget their real-life problems, the difference in responses was significant between the genders.

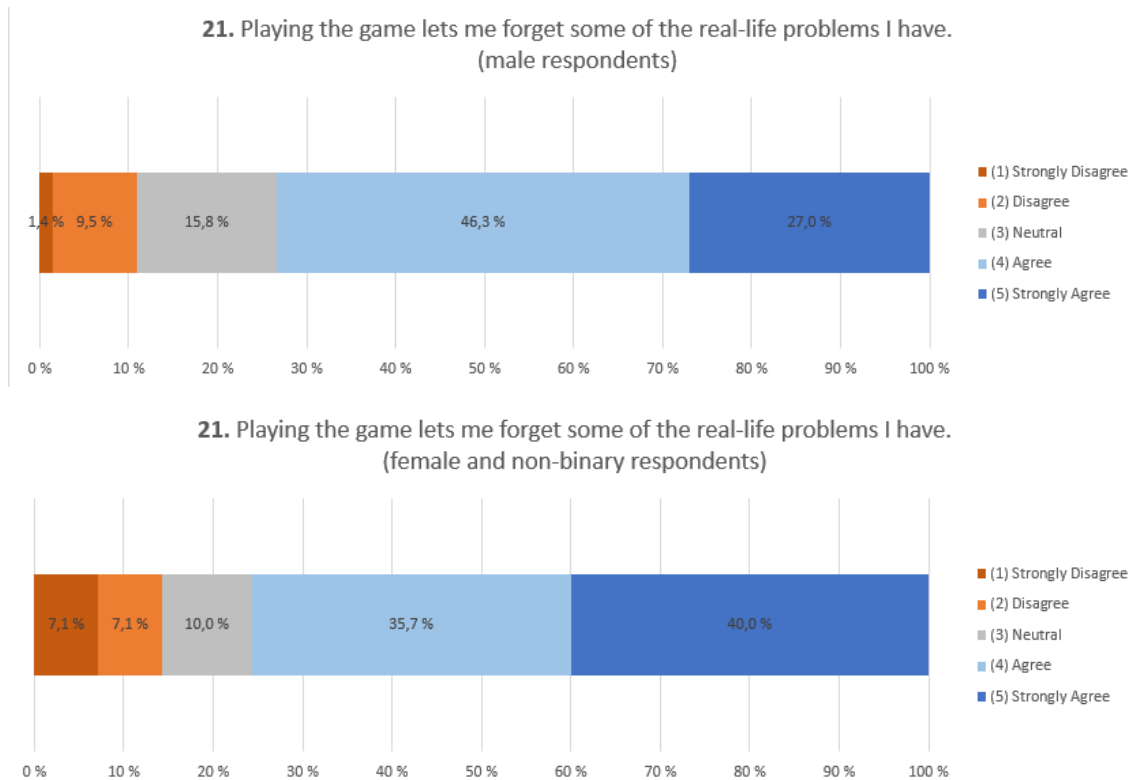


Figure 33. Item 21. Playing the game lets me forget some of the real-life problems I have (p-value 0.009, male (n=285) upper picture, female and non-binary (n=69) lower picture)

As seen in Figure 33, the majority of respondents, regardless of gender, agreed that games let them forget about their real-life problems (73.3% and 75.5%), but women and non-binary respondents strongly agreed with the statement 40% of the time. That being said, there was also a shift in the other direction, with 14.2% of female and non-binary respondents disagreeing with the statement, compared to 10.9% of male respondents.

One of the reasons for such a change when it comes to strongly agreeing with the statement might come from emotional engagement with the game. Similarly, as mentioned in the previous subchapter, when discussing social support when dealing with real-life problems, women and non-binary individuals might also be open about acknowledging their stressors and problems. In her research, Tamres (2002, p. 16) states that women engaged more in emotional reasons and avoidance than male respondents. While playing a game to forget real-life problems does not necessarily mean that an individual is avoiding the problem, it still aligns with previous studies regarding behaviour, which allows arguing that women are not only more aware of their possible

problems but also that there are differences in problem-solving styles across genders. TCGs can offer a place and time for individuals to escape their possible problems, regardless of gender. That being said, it also seems like, when looking at female and non-binary respondents, the theme appears even more significant, both positively and negatively.

Overall, as seen through the three categories consisting six items analysed above, there are slight differences in motivations across genders. However, the changes inside TCGs between gender groups are not as drastic as across the genres, which is why it is possible to say that gender is just a small portion of what affects the individual's motivations to participate in the play. Even with the differences in singular items, overall motivational factors still resemble each other across genders, and there were no significant differences even on the singular item level apart from singular item in the escapism factor. Because of the similarities, when discussing motivations, the overarching factors are more important than the singular item-level differences between the groups, which is important to keep in mind when discussing the motivations as a whole in the following chapter.

6 DISCUSSION

The purpose of the master's thesis was to research motivations for TCG play and to answer the three research questions. Additionally, the study explored trading card games in a way the subgenre had not been studied before and utilised the existing research in player motivation to build a base for further research on the genre. On the following chapter, the findings are summarised by each research question, and afterwards, the significance and limitations of the study, as well as possible future research on the topic are discussed to give an overarching view to the topic.

6.1. Motivations for TCG play

The first part of the analysis was to determine the motivations for TCG play. By utilising Yee's (2006) questionnaire of MMORPG players, which was modified to suit the trading card game genre, it was possible to determine five factors for the play. As Yee's Daedalus Project, which the questionnaire was originally from, has been used in various other studies related to player motivation, it was a logical starting point for TCG motivational factor research in this thesis. Although Yee & Ducheneaut (2018) later expanded their survey regarding motivational factors to create the Gamer Motivation Model, as that model focuses on digital games, it was safer to utilise the older questionnaire base. That was because Yee's (2006) original study has been used as a reference for studies by, for example, Kallio et al. (2010) and Scheck et al. (2015), as it had been tested in other research projects before the project on this thesis.

After distributing the survey and analysing the data, the study found five motivational factors for the play; competitiveness, escapism, social, manipulation and design. While those motivations align somewhat with Yee's (2006) research findings, there are also motivations unique to the TCG play, such as the parts of the play that happen outside of the gameplay, like deckbuilding and socialising with other players.

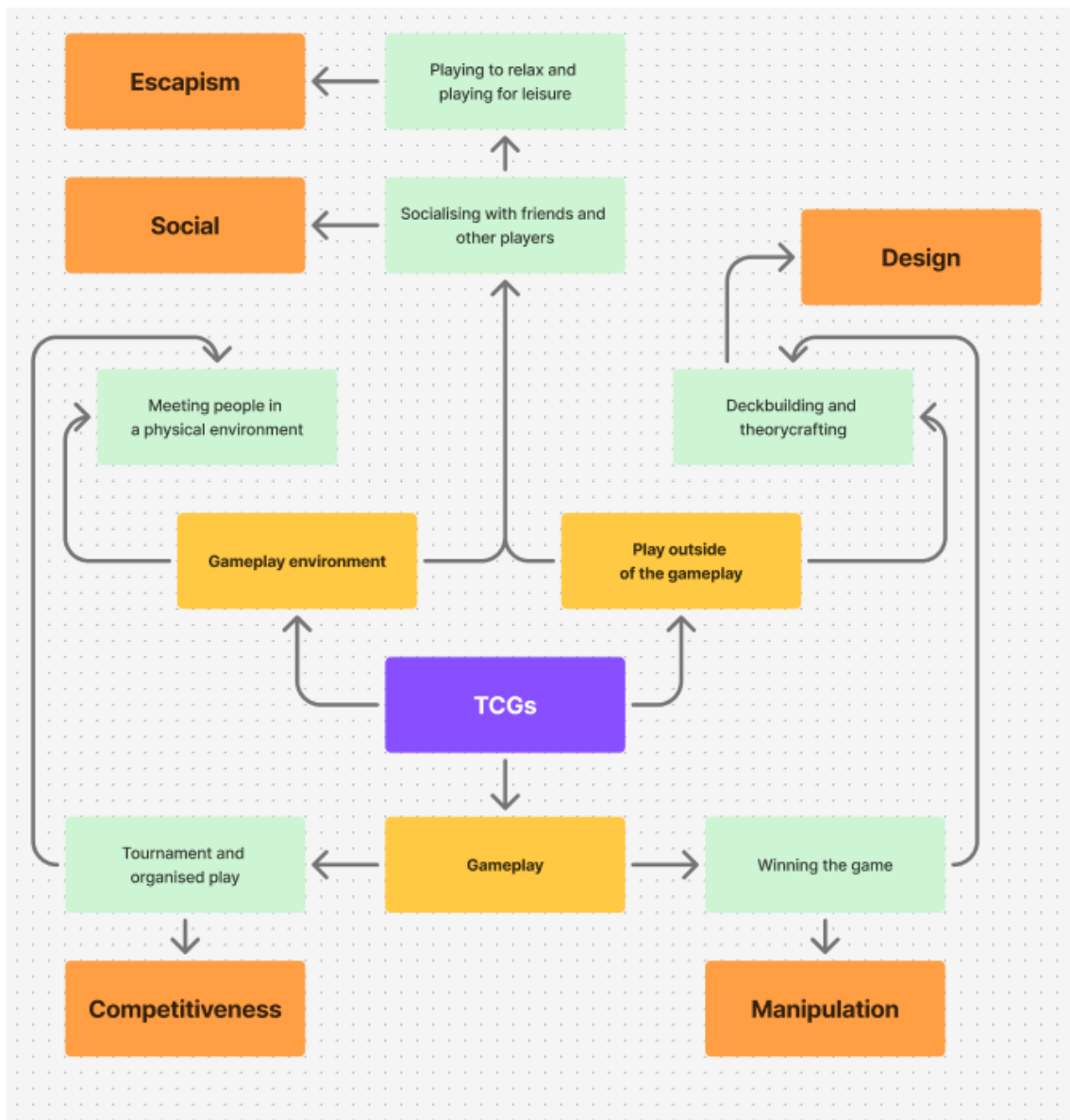


Figure 34. Motivations to play TCGs, mapped out by the areas of play.

However, many motivations were linked, as seen in Figure 34. When studying how TCGs are played, three main areas of play, gameplay environment, orthogamic gameplay and play outside of the orthogamic gameplay (yellow in Figure 34) that affect the five motivational factors (orange in Figure 34) helped to map out the genre overall. Like many other genres, TCGs have a gameplay element, which consists of playing the game, in the case of TCGs, in an orthogamic manner, in either a tournament or casual setting. The motivations related to orthogamic parts of the gameplay were competitiveness, which revolved around tournament play, metagame and game balance, and the outcome of the orthogame (winning the game), which included motivations regarding manipulation. Although the term manipulation might sound negative, it included topics of achieving the goals alone and utilising communication to gain an advantage while playing.

As seen in Figure 34, winning the game requires the player to gain knowledge about the game and deck building. Because custom-built decks are the key gameplay element of TCGs, design was a motivation for the play. Individuals who enjoyed the game due to that factor wanted to not only build decks but were also interested in game mechanics, charts and tables.

However, building decks is not the only area where TCG plays outside the orthogamic gameplay. As games are played in physical environments, such as game stores, players are also motivated by social and escapism aspects. While social motivations were about friendships, meeting other people outside the orthogamic gameplay, and building relationships, escapism motivations revolved around leisure and playing to relieve stress and relaxation.

While there were five motivations for TCG play, many of them intertwined with each other, and players were rarely motivated by just a single factor of the game. This highlights the difference between TCGs and, for example, games played in digital environments such as MMORPGs, which is why comparing TCGs to other genres was an essential part of the study.

6.2. Motivational differences across genres

To answer the question of how motivations to play TCGs compare to other gaming genres, the most logical comparison was to use Yee's (2006) Daedalus project. As the study in the thesis utilised a similar questionnaire and the same data analysis method, the results were comparable with each other. Similarly to Yee's (2006) study, there were five different motivational factors for the play, and the comparative analysis revealed that TCGs and MMORPGs shared two motivational factors, while three were different from each other.

The two motivational factors the genres shared, manipulation and escapism, consisted of items related to stress-relieving factors and oppositional play. While players motivated by manipulation factors displayed the want to progress with as little help as possible regardless of the genre. Also, regardless of the genre, players motivated by escapism used the game to relieve stress and not think about negative aspects of their day-to-day lives.

While MMORPG players had a clear motivation to play because of immersion when they lived a separate life through their in-game character (Yee, 2006), TCG players did not have similar motivations due to the different kinds of gameplay involved in the game. As TCGs are played in physical environments, and players conduct orthogamic game instead of immersive experiences like in MMORPGs, their creative motivations differed from their TCG counterparts. Instead of creating scenarios and living through their characters, TCG players were motivated by design instead of immersion. As decks, which consist of cards, are the main gameplay component for TCG play, players were motivated to not only build decks but also to think about them and research them. They were also interested in game mechanics, charts, and tables, as well as analysing the decks before the final decisions to build them. While both motivations revolve around creativity, they were still different from each other.

Similarly, even though other players were a motivation for participation in the play regardless of the genre, the types of interaction were different across genres. While MMORPGs were about building friendships but also having conversations and talking about personal issues (Yee, 2006), TCG players were more interested in peer-support and group dynamics. The aspects of hosting events and tournaments were also seen as social motivations, unlike in Yee's (2006) project, where those aspects were not part of the relationship-motivated play. Still, both social and relationship motivations consisted of themes of collaboration, unlike the last differentiating motivations, achievement and competition.

The achievement motivation in MMORPG consists of multiple different views to progress in the game and achieve the goals. Those were, for example, optimisation with gear and XP and the feeling of being powerful inside the game (Yee, 2006). Instead of those aspects, the competition motivated players in TCGs played to win the orthogame, either in the casual or competitive setting. While both of these motivations consisted of achieving things during the gameplay, the ways to achieve those things varied from one genre to another.

Overall, the study showed that while there were similarities between the two analysed genres, there were also differences. While some of the differences, such as the ones in relationship and social factors, were tied to the players themselves, it was not the only reason for the differences. As TCGs are played in physical environments, and MMORPGs in digital environments, some of the differences could be related to that. Another

differentiating factor was that while TCGs are orthogames, MMORPGs are not, although some might contain orthogaamical elements. One of the possible ways to expand the research in the future would be to consider those factors and compare TCGs to, for example, board games, which is why the topic is discussed more in the upcoming subchapter titled Future work.

6.3. Gender and motivations for TCG play

Like the playing environment and the type of gameplay, which were aspects that affected player motivations, the study also addressed whether there were differences in player motivation within the TCG subgenre when genders were compared to each other. In the study, non-male respondents were compared to male respondents to determine differences between genders, and the Chi-square analysis was used to see differences in singular items when the two gender categories were compared to each other.

In the research, six different items from three different motivational factors, competitiveness, social and escapism, were found. While three items were on the competition factor, two were in social and one in escapism. Interestingly, none of the items that showed differences between genders were in factors that stayed the same across genres, but all of the differences were in factors unique to TCGs.

The overarching theme in competition-motivated TCG play was that women and non-binary participants were not as competitive as their male counterparts. However, there were no differences when choosing what TCGs participants played, and none of the games were significantly more popular with female and non-binary participants, although games such as *Lorcana* and *Pokémon TCG* were slightly more represented than on the overall game breakdown. The results do not mean that women and non-binary respondents would not be competitive at all; only when the group is viewed as a whole were they motivated by competition less than male respondents.

Unlike in competitiveness, where one group was interested in it more than the other one, in the social motivations, the changes can be hypothesised to be in the communication style rather than interest towards it. As, for example, MMORPGs are played in digital environments and offer anonymity to players of gender minorities, TCGs do not offer a similar kind of protection when it comes to communication. In the study, TCG players seemed to form connections regardless of their gender, but women and non-binary

individuals had stronger opinions from both ends of Likert scale of the social motivation-related items. This could be because of different social patterns across genders in various emotional situations. Similarly, the one item in the escapism motivation factor was related to real-life problem-solving. For example, in terms of social motivations, the differences can be related to different socialisation patterns, and there is a possibility that women and non-binary individuals are more open to talking about their non-game-related problems than male players.

However, although there were differences between gender groups, it did not affect the motivations to play TCGs on a large scale. Overall, all of the players were motivated by the same factors regardless of gender, and while there were differences in singular-item level, they were not necessarily tied to the genre but to other factors unrelated to TCGs. Still, it was essential to analyse the differences between genders, as it could have provided information that could have been utilised in future studies, if there had been significant motivational changes across genders.

6.4. Significance of the study

While there has been prior research on card games and their possible use cases in especially machine learning and mathematics (Gielis et al., 2021; Jaffe, 2013; Konishi et al., 2018) and as educational tools (Fernandes et al., 2023; Kopf et al., 2023; Marks et al., 2024; Wilson, 2019), there is little research about specifically trading card games. While there have been studies regarding the themes and stories in TCGs (Papišta, 2022), there has not been a TCG study which has focused on player motivation. As Yee's (2006) work has built a base for player motivation for many studies to follow, it allowed a reasonable starting point for an understudied part of the card game genre.

Even when looking at the naming conventions of card games, there is an apparent lack of research, specifically in TCGs. While some scholars call the subgenre collectable card games (CCGs), others refer to TCGs simply as card games and thus put them into the same game category as, for example, *Solitaire*, *Cards Against Humanity* or *Balatro* (Playstack, 2024). However, when looking at the game, they differ from each other not only because of their gameplay but also because of the motivations of why people participate in the play. Because of these differences, the study aims to clarify the genre of card games, as well as its subgenres, by focusing on the particular subgenre of TCGs instead of labelling each game which utilises cards as only a card game.

The significance of the study lies in its way of filling out the gaps in knowledge in the card game genre. The study also utilises knowledge from multiple disciplines, such as game studies, statistics, psychology, and gender studies. By utilising an interdisciplinary view, the study can provide a comprehensive look at the topic. The study is also one of the largest quantitative studies about TCG conducted as of April 2025. Because of the size of its dataset, there is a possibility of expanding the study in the future, either by utilising the existing dataset or by expanding upon it.

6.5. Limitations of the study

Limitations of the study are related to the research material. As the research of motivations for TCG play utilised the survey created by Yee (2006) for MMORPG players to allow comparative analysis across the genres, there is a possibility that some of the motivations were not included due to the survey questions. Especially aspects related to environmental and orthogamic game factors should be researched further. However, the questions included not only the motivations for the gameplay but also the motivations for the play happening outside of the gameplay, which reinforces the idea that the survey captured a reasonable variance of motivations for the TCG play.

Another limitation of the study is that people might be motivated by the learning aspects of the game. After answering the survey, some participants reported that they would have liked to see that aspect of the game. Points such as learning new things not only about the game but also how TCGs can be used to form connections between areas of interest either in-game or outside of it, and how they are used as learning tools. This is an interesting point, as other kinds of card games have been used for educational purposes (Fernandes et al., 2023; Kopf et al., 2023; Marks et al., 2024; Wilson, 2019), so there is a possibility that TCGs could be used in learning. There is still a possibility that the learning would revolve around individuals own interests instead of how gamification has been used in learning in the past. Still, there is a possibility that people are using TCGs for learning, whether they do it consciously or not.

Another limitation of the study comes from the data analysis method. As exploratory factor analysis does not offer answers to the hypothesis or confirmation to the final amount of factors, but instead explores the possible factors (Finch, 2019, p. 5), the confirmatory factor analysis would need to be concluded to get proper conclusions. However, even though the number of responses was sufficient for the study, to get as

accurate results as possible, it would be beneficial to gather more responses and analyse the data again to confirm the findings of the study. This is, however, not necessarily a flaw in the study, as it offers a clear starting point for the possible future work. Another possible limitation of the study, but also a clear gap in the research, as well as the reason why EFA was used to analyse the data, was the lack of existing research on TCG player motivation. EFA can be used when there is little or no prior information on the factors (Finch, 2019, p.5). Although there have been studies of other genres regarding player motivation, there were no existing studies for TCGs, which is why EFA was used to explore the factors. While this might seem like a limitation for the study, it also points a clear path for the next steps for the research, as the study built a strong base for future research on the topic.

6.6. Future work

As stated in previous parts, the study gives a solid base for future research. Those possibilities relate not only to the data gathered in the study and how it can be analysed further with confirmatory factor analysis (CFA) to confirm the findings of the study but also to how the subgenre of TCGs can be studied further by both quantitative and qualitative methods. CFA could be utilised to see how well the hypothesised latent variable model could fit the observed data and how possibly future models could be compared to each other to see which one fits the data the best (Finch, 2019, p. 6). This means that CFA could be used when a clear idea, such as the EFA conducted in this study, would act as a base to confirm the findings.

Especially when discussing the differences between genders or represented games and how motivations to play vary because of those factors, qualitative methods such as interviews or qualitative surveys could be used to explore the topic further. The qualitative approach could also offer more data on the singular items on which respondents had strong opinions, such as, for example, the topics around game mechanics, social aspects and oppositional play.

Another possibility would be to expand the research on other card game subgenres and see how the motivations for the play vary from one subgenre to another. For example, even though both TCGs and digital card games play in a similar manner regarding gameplay, their environments are different. By researching other subgenres of card games, it would be possible to see how the playing environment affects the motivations

for the play. This knowledge could be further used not only to build further understanding of the genre but also to help both players and game developers understand not only the genre but also which factors affect players and should be taken into consideration in the game design process.

By considering the possibilities listed above, as well as solutions to the current limitations of the study, can be said that there is a opportunity for vast research on TCGs, a subgenre of card games which has not been researched as much as other card game genres. While future studies could fill gaps in the area of the study, they could also build an understanding of the different subgenres of card games, so both consumers and scholars would be better equipped to understand the differences between the various game genres that utilise playing cards as their main gameplay elements.

6.7. Usage of AI in the work

Grammarly and ProWritingAid were used to language check this work. However, artificial intelligence tools were not used to generate the content for the work. Still, as they were used in the process in any shape or form, I am aware that I am totally responsible for the entire content of the thesis, including the parts generated by AI, and accept the responsibility for any violations of the ethical standards of publications.

7 CONCLUSION

The motivations to play TCGs are vast, and while some players are motivated by the elements directly related to the gameplay, for some players, the factors outside of the game are as important, and in some cases, even more important than the gameplay itself. Based on the study, it is safe to say that TCGs are an understudied subgenre of games in player studies, even though they combine orthogamic gameplay with physical gameplay environments and offer rich social interactions both during and outside of the game. The five motivational factors for TCG play; *competitiveness*, *escapism*, *social*, *manipulation* and *design* showed the depth of the topic, and built a new understanding of TCGs by utilising existing research on player motivation across genres. The study also utilised an interdisciplinary approach to the research questions, which helped to provide a broader look at the subject.

To conclude, while the study created a base for future research on TCG player studies, there is still much more to research. Because of the vastness of the topic, combined with the relatively little researched subgenre of the games, the study aims to show that TCGs are much more than shiny cardboard rectangles people trade with each other and use to play against each other. More than game pieces, TCGs offer a unique blend of orthogamic gameplay, social interaction and play outside of the orthogamic gameplay, where players design their decks and understand the depths of the game mechanics.

Trading card games are more than just their gameplay. Players participate in the game not only because they want to compete against other players but also because of various factors, from meeting friends to designing their unique decks and strategies outside of the actual gameplay. TCGs are places where people meet each other and create meaningful friendships, as well as to escape the stress and problems of the real world. They are not just cardboard rectangles but much, much more. And so are the ones who play those games.

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APPENDICES

APPENDIX A. Background items

Age verification

1. You have to be 18 years old or older to participate in this survey. Please confirm your age.
 - I am over 18 years old
2. Gender:
 - Woman
 - Man
 - Non-binary
 - Prefer not to say
3. Age:
 - _____
4. Which of the following trading card games have you played before?
 - Cardfight!! Vanguard
 - Digimon TCG
 - Flesh and Blood TCG
 - Lorcana
 - Magic: the Gathering
 - One Piece Card Game
 - Pokémon TCG
 - Yu-Gi-Oh!
 - Other, please specify
5. If you chose other, please specify:
 - _____
6. Which trading card game do you play the most?
 - Cardfight!! Vanguard
 - Digimon TCG
 - Flesh and Blood TCG
 - Lorcana
 - Magic: the Gathering
 - One Piece Card Game
 - Pokémon TCG
 - Yu-Gi-Oh!
 - Other, please specify
7. If you chose other, please specify:
 - _____

APPENDIX B. The 30 items used in the motivations data

1. I find myself having meaningful conversations with others during the gameplay.
2. I usually don't chat much during the gameplay apart from gameplay interactions.
3. I have made some good friends in the game.
4. Friends in the game have offered me support when I had a real-life problem or crisis.
5. I would rather organise events, such as tournaments, than play in them.
6. I like to play in competitive tournaments.
7. I constantly try to set and reach goals.
8. I can't stand those people who only care about building new decks.
9. It's very important to me to build the best deck for the current metagame.
10. I'm fascinated by the game mechanics, and love charts and tables.
11. I research everything about the deck before building it.
12. Game balance and metagame issues do not interest me.
13. Card games are too complicated.
14. I like to think of possible decks to build.
15. I would make guides on how to play a deck if they weren't available.
16. I have learned things about myself from playing the game.
17. I understand real-life group dynamics much more after playing the game.
18. I like the escapism aspect of the game.
19. I like to be immersed in a game.
20. Playing the game lets me vent and relieve stress from the day.
21. Playing the game lets me forget some of the real-life problems I have.
22. The way I am during the gameplay is the way I am in real life.
23. People who role-play during the gameplay bother me.
24. I keep the decks I've played with as memories even if they are not playable anymore.
25. I like to manipulate other people so they do what I want them to.
26. I like to dominate other players during the gameplay.
27. I like to taunt or annoy other players during the gameplay.
28. I scam other people out of their valuable cards if they don't know their price.
29. It's important to me to achieve things with as little help from other people as possible.
30. I am uninterested in tournament play.

APPENDIX C. Factor loadings of items on the five factors

Factor	Item	Loading
Competitiveness		
$(\alpha = .79)$	I like to play in competitive tournaments.	0.88
	I constantly try to set and reach goals.	0.61
	It's very important to me to build the best deck for the current metagame.	0.61
	Game balance and metagame issues do not interest me. (R)	0.56
	I am uninterested in tournament play. (R)	0.87
Escapism		
$(\alpha = .71)$	I like the escapism aspect of the game.	0.74
	I like to be immersed in a game.	0.55
	Playing the game lets me vent and relieve stress from the day.	0.75
	Playing the game lets me forget some of the real-life problems I have.	0.86
Social		
$(\alpha = .59)$	I have made some good friends in the game.	0.75
	Friends in the game have offered me support when I had a real-life problem or crisis.	0.85
	I would rather organise events, such as tournaments, than play in them.	0.45
	I understand real-life group dynamics much more after playing the game.	0.44
Manipulation		
$(\alpha = .59)$	I like to manipulate other people so they do what I want them to.	0.76
	I like to dominate other players during the gameplay.	0.69
	I like to taunt or annoy other players during the gameplay.	0.73
	I scam other people out of their valuable cards if they don't know their price.	0.41
	It's important to me to achieve things with as little help from other people as possible.	0.39
Design		
$(\alpha = .54)$	I'm fascinated by the game mechanics, and love charts and tables.	0.62
	I research everything about the deck before building it.	0.60
	I like to think of possible decks to build.	0.56
	I would make guides on how to play a deck if they weren't available.	0.62