



**UNIVERSITY
OF TURKU**

Turku School of
Economics

Exploring the Intrinsic Motivation of Experienced MMORPG Players: Case “The Elder Scrolls Online”

Information Systems Science

Master’s Thesis

Author:

Jussi Taipalharju

Supervisor:

PhD Samuli Laato

25.6.2025

Helsinki

The originality of this thesis has been checked in accordance with the University of Turku quality assurance system using the Turnitin Originality Check service.

Master's thesis

Subject: Information Systems Science

Author: Jussi Taipalharju

Title: Exploring the Intrinsic Motivation of Experienced MMORPG Players: Case “The Elder Scrolls Online”

Supervisor: PhD Samuli Laato

Number of pages: 79 pages + appendices 7 pages

Date: 25.6.2025

As video games have become an extremely popular form of entertainment, the business opportunities in the field are ever increasing. While motivation in video games has been extensively studied, reasons to continue playing a game in the long-term have not been thoroughly researched. Addressing this research gap is important not only for the academic value, but also for game developers who increasingly adopt methods of continuous development and subscription-based business models that rely on long-term player commitment. This thesis focuses on how experienced players are intrinsically motivated to continue playing The Elder Scrolls Online and how engaging in different in-game activities is reflected in the intrinsic motivation. The data from semi-structured interviews are connected to the Self-Determination Theory framework in an abductive analysis conforming to the Gioia method. The data contain a plethora of detailed player experiences that would be difficult to capture in quantitative studies. Key findings include a suggested interaction between the basic psychological needs for autonomy, competence and relatedness and a pattern in the order of satisfaction of the needs suggested by the participants' experiences. Implications for both academic research and practical game development are discussed.

Key words: MMORPG, video games, intrinsic motivation, Self-Determination Theory.

TABLE OF CONTENTS

1	Introduction	7
1.1	Motivation	7
1.2	Research Questions	9
2	Prior Research in Motivation to Play Video Games	10
2.1	Gaming in IS Research	10
2.2	Motivation in MMORPGs	11
3	Self-Determination Theory as an Intrinsic Motivation Framework	14
3.1	Cognitive Evaluation Theory	14
3.2	Organismic Integration Theory	17
3.3	Other Mini-Theories within SDT	20
3.4	SDT in Gaming Motivation	23
4	Methodology	28
4.1	Study Context	28
4.2	Data Collection	29
4.3	Data Description	31
4.4	Data Analysis	32
4.5	Research Evaluation and Ethics	33
5	Findings	35
5.1	Autonomy	35
5.1.1	Self-Actualization in a Virtual Environment Leads to Autonomy Satisfaction	35
5.1.2	The Freedom to Choose and Reach Goals Supports Autonomy	38
5.1.3	In-Game Adventure and Exploration as Quests for Autonomy	41
5.2	Competence	42
5.2.1	Sufficient and Fair Challenge as a Key Source of Competence Support	42
5.2.2	Perceived Competence Amplified by Constant Improvement	46
5.2.3	Competence Supported by Skill Utilization and a Sense of Pride	49
5.3	Relatedness	51
5.3.1	Maintaining and Establishing Connections in the Game Supports Relatedness	51
5.3.2	From Getting to Giving: Support and Collaboration as Keys to Relatedness	53
5.3.3	Finding a Role in the Community as a Source of Satisfaction and Frustration	57

5.4 Non-Intrinsic Motivation	60
5.4.1 Extrinsic Motivation: The Importance of Informational Significance	60
5.4.2 Other Aspects of Motivation: Routines and Passing Time Unexplained by SDT	64
6 Discussion	66
6.1 Key Findings	66
6.2 Theoretical Contribution	69
6.3 Practical Implications	70
6.4 Limitations and Future Work	73
References	75
Appendices	80
Appendix 1. Interview Form	80
Appendix 2. Interview Invitation	83
Appendix 3. Data Structure	84
Appendix 4. Data Management Plan	86

LIST OF FIGURES

Figure 1. Types of motivation according to SDT. Adapted from Ryan & Deci (2017).18

Figure 2. ESO characters in Vivec City, Vvardenfell. 28

Figure 3. The autonomous selection of activities to satisfy different needs. 67

LIST OF TABLES

Table 1. Demographic data of the participants. 31

Table 2. Game design guidelines based on the interview data. 70

1 Introduction

1.1 Motivation

Video games combine technology and sophisticated design elements such as visual graphics, sound and storytelling into complex digital products (Chueca et al., 2024). In 2023 the global video game market value was nearly 400 billion U.S. dollars, and it is projected to surpass a trillion dollars in 2032 (Inkwood Research, 2024). The growth is in part explained by the widening range of gaming platforms. In 2022, the revenue from easily accessible mobile games was higher than the revenue from console and PC games combined (gamesindustry.biz, 2022). New technologies are also emerging, such as virtual reality gaming, where the global revenue is expected to grow at a 44 % compound annual growth rate (Newzoo, 2022). The business models in the gaming industry have shifted from selling physical copies of games towards subscription service models and micro-transactions. For example, in 2021 the majority of all gamers in the United States subscribed to at least one gaming service (Morning Consult, 2021). In the past, several academic studies have mapped out reasons for playing video games (Boyle et al., 2012; Martucci et al., 2023; Yee, 2006), but as (Kahraman & Kazançoğlu, 2023) point out, not many studies have focused on the motivation to continue playing the same game for a long period of time. This research gap also leads to a lack of information for game developers looking to increase customer lifetime value. Information systems (IS) research would also benefit from this information, since motivation and engagement related to gaming have sparked the interest of many IS researchers interested in leveraging them in other contexts to develop educational games and gamified applications (Krath et al., 2021).

The adoption and use of IS has been a popular topic of research with models like the Technology Acceptance Model (TAM) attempting to explain the factors involved (Davis, 1989). Venkatesh et al. (2003) combined several models into a Unified Theory of Acceptance and Use of Technology (UTAUT). While trying to cover a wide variety of different systems, the models rely on very general factors to explain technology use. The research leading to the conception of these models also focused on systems designed for business use, where the most essential factors explaining the use of technology are the perceived usefulness or benefits of said technology (Davis, 1989; DeLone & McLean, 2003; Venkatesh et al., 2003). The growing popularity and variety of IS designed for consumer use and entertainment purposes has led to research that classified such systems as hedonic information systems

(HIS). Van der Heijden (2004) proposed that while perceived usefulness is still a factor in explaining the use of HIS, perceived enjoyment gains importance in the use of consumer-oriented systems that are more often used at home for leisure than at the workplace for productivity. The UTAUT model was also revised to better explain consumer-oriented systems as UTAUT2, which includes a factor of intrinsic (hedonic) motivation and takes into account that the users pay for the systems that they use voluntarily instead of being told to use corporate systems acquired for them (Venkatesh et al., 2012).

The importance of intrinsic motivation in the use of HIS has also been reported by Wang & Scheepers (2012). In their meta-analysis, Wu & Lu (2013) discovered that intrinsic motivation has a stronger effect on the use of HIS than utilitarian systems. Ryan & Deci (2000) define intrinsic motivation as a willingness to take on challenges and to explore and learn because the activity is interesting to and valued by the individual, as opposed to being externally pressured or controlled (i.e. extrinsic motivation). They argue that intrinsically motivated individuals

have more interest, excitement, and confidence, which in turn is manifest both as enhanced performance, persistence, and creativity and as heightened vitality, self-esteem, and general well-being. (Ryan & Deci, 2000)

While focusing on a narrower segment of systems, the research on HIS still covers a wide range of systems. Even in studies on video games specifically, the general factors like the division between the perceived usefulness for utilitarian systems and perceived enjoyment for HIS seem blurred. Meta-analyses (Hamari & Keronen, 2017; Wu & Lu, 2013) show that both factors have an effect, and that different games can be placed on different points of this continuum. For this reason, Hamari & Keronen (2017) call out for research on narrower categories of games to find more specific variables affecting video game play. This Master's thesis thus focuses on a segment of games where some players are motivated to continue playing for several years, namely Massively Multiplayer Online Role-Playing Games (MMORPGs). The findings may not be generalizable to all games but provide deeper and more detailed information about the segment in question. This approach should also provide a clearer picture of the motivation driving customer behaviour for game developers working on games within the segment. When setting goals for a game development project, well defined key performance indicators (KPIs) that allow for a data-driven understanding of game performance among players are more helpful and efficient than "making the game more enjoyable". This is especially important as game development is now commonly a continuous

project without a set endpoint, and project goals are adjusted along the way (Chueca et al., 2024). In addition to the game industry, the field of general IS research, as well as disciplines such as psychology and human–computer interaction (HCI), could benefit from more detailed insight into the motivational elements regarding the continued use of specific systems.

1.2 Research Questions

As discussed in Section 1.1, this thesis focuses on the intrinsic motivation for experienced players to continue playing MMORPGs. MMORPGs involve large crowds of players connected to a shared server with the possibility of adventuring together in a shared virtual world. An experienced player in this case is defined as someone who has played the game in question at least once per week for three or more years. MMORPGs are typically live-service games employing a games-as-a-service business model. The model can involve, for example, a subscription fee to access premium features in the game and microtransactions to purchase virtual goods using real money, which makes player retention a critical factor for games in this category (Debeauvais et al., 2011). To retain customers and their periodic subscriptions, many game developers have adopted a model of continuous development, where new content is constantly added to the same base game (Chueca et al., 2024). As new content, game modes, and customization options are added, many MMORPGs now offer several ways to play the same game, and different players may engage with completely different content. This can also lead to players developing different areas of expertise within the game and different roles within the player community. For these reasons, developing a successful game through creating engaging experiences for a wide audience requires understanding the sources of motivation for players with different approaches to an MMORPG. This leads to the formulation of the following two research questions:

RQ1: How are experienced players intrinsically motivated to continue playing the same MMORPG?

RQ2: How is focusing on different in-game activities reflected in the intrinsic motivation to continue playing the same MMORPG?

To answer these questions, a qualitative case study was conducted involving players of *The Elder Scrolls Online* (ESO). Chapter 2 includes a review of prior research and Chapter 3 discusses the theoretical framework related to intrinsic motivation. The methodology of the empirical study is discussed in Chapter 4. The findings are reviewed in Chapter 5 and discussed further in Chapter 6.

2 Prior Research in Motivation to Play Video Games

Games and related motivation have been studied thoroughly in several fields of research. A search for “motivation AND ‘video games’” on Scopus (June 11th, 2025) yields 2489 documents, 20.8% of which related to computer science, 18.1% to medicine, 14.8% to social sciences, 11.4% to psychology and the rest to 27 other disciplines, including business, management and accounting with a share of 1.8%. Arguably, a subject as multidisciplinary as gaming motivation is best approached from a perspective combining both human and technological elements related, such as IS research.

2.1 Gaming in IS Research

As described in Chapter 1, gamification, or the transfer of elements and mechanics from games to other contexts, is a topic of increasing interest in IS research (Krath et al., 2021). The definition used here reveals the intention of such research to take something from games to make a contribution elsewhere. Despite the huge growth in the gaming industry and its business potential, research published in top IS journals contributing to the knowledge about video games themselves is far from extensive (Berger & Hess, 2018; Hew et al., 2024). Gaming motivation is an even narrower slice of the research, even though motivation is what gamification generally aspires to evoke (Krath et al., 2021). Summarizing empirical research on HIS for their study on mobile games, Hew et al. (2024) listed mostly studies focusing on social media, which should not be assumed to apply to gaming.

Focusing on player engagement in digital games Boyle et al. (2012) reviewed early research and concluded that engagement is mainly viewed as a subjective experience explained by constructs such as enjoyment, flow, immersion, and arousal. The concept of flow, defined by the psychologist Mihaly Csikszentmihalyi as an experience of optimal pleasure while deeply absorbed in an activity of personal value, was an especially prominent concept aiding explanation. The studies reviewed by Boyle et al. (2012) were mostly quantitative surveys, and while some included physiological measurements such as heart rate, the authors stated that combining these findings was not straightforward. In addition to studies on momentary experiences of engagement, research on motivation was reviewed. Here, motivation was defined as both selection of and engagement in activities. Enjoyment, challenge and social play were found to be affecting motivation. Loyalty towards games was explained by similar

factors as motivation, although service mechanisms (fairness, security, and incentives) and perceptions of community cohesion had an additional impact. (Boyle et al., 2012.)

In a more recent literature review, Martucci et al. (2023) found that competition and social reasons have the biggest impact on gaming motivation. Males are generally more motivated to play video games and are more often driven by competitive aspects of games, whereas females more often value social aspects and relationships. Younger players seem to be more motivated, but research on players older than 35 years is lacking and the findings are not fully conclusive. A higher number of hours spent on video games was explained by the satisfaction of needs for social interaction, competition, escapism, achievement, autonomy, competence and relatedness. Coping was an additional reason for problematic gaming, while other factors were similar as for non-addicted players. (Martucci et al., 2023.)

2.2 Motivation in MMORPGs

Summarizing research on MMORPGs, Sourmelis et al. (2017) provide definitions for the game type. Breaking down the acronym, they connect the term Massively Multiplayer with the millions of players that may be involved with the game and Role-Playing with the association of a player to their virtual avatar through which they interact with the game world and other players. The word Online refers to a network-based design that allows for connections between the players and game servers. Sourmelis et al. (2017) list a narrative plot and the fact that the game continues online even when the player logs out as common features of MMORPGs. Another common feature they highlight is the process of leveling up characters through earning experience points (XP) by completing in-game activities, which then provides more powerful abilities and items for the characters. This process also leads a more difficult challenge as the player is progressing. Tracking the history of research on all types of role-playing games from 1986 to 2023, (Nguyen et al., 2025) noted that research activity has increased significantly from 2006 onwards and highlighted specifically the significance of World of Warcraft (WoW), a pioneering MMORPG released by Blizzard Entertainment in 2004. In 2025, WoW is still continuously developed and remains one of the most popular games in the genre (MMO Populations, 2025).

Tying the topic of this thesis to a broader spectrum of IS research, Harviainen & Rapp (2018) analyse MMORPGs' nature as IS. They view MMORPG gameplay mainly as information retrieval from a system created and controlled by the game service providers. This involves

the so-called retrieval core of the system, which in MMORPGs needs to be interconnected with an external system that includes the social environment and external information sources such as related videos or forums. In-game interactions with other real people are mediated by the system in a context provided by the system. While the player may understand that they are essentially interacting with a database utilizing algorithms, they feel more like fighting virtual demons or performing other such actions that the representations suggest. Harviainen & Rapp (2018) argue that this phenomenon, called cognitive absorption, sparks intrinsic motivation. Game developers design the systems in a way that reveals information at an optimal pace, which leads to optimal difficulty and supports player engagement. Thus, while ease of use is traditionally thought to promote usage and may be important for interface design also in games, in-game tasks are actually designed to limit ease of use and information availability in interesting ways. Additionally, MMORPGs provide an opportunity to retrieve information in ways not initially intended by the developers (i.e. open-world exploration). (Harviainen & Rapp, 2018.)

Yee (2006) introduced an influential classification of player motivations specifically in MMORPGs. He recognized that MMORPGs provide a number of ways to play the game and may therefore attract very different types of players with differing motivations. Since existing player type taxonomies were not empirically grounded, Yee (2006) conducted a survey and used factor analysis to reveal three main components and 10 subcomponents of player motivation. The components (and subcomponents) are achievement (advancement, mechanics, competition), social (socializing, relationship, teamwork), and immersion (discovery, role-playing, customization, escapism).

Utilizing the motivational categories by Yee in a longitudinal analysis, Billieux et al. (2013) found that game progression was predicted by motives related to advancement and mechanics, but those motivated by discovery and teamwork (i.e. joining an in-game guild) progressed with less effort. The same study found that for those focused more on playing against other players the motivational profile shifts and competition becomes the main driver, and for players motivated by immersion achievement and progression was generally less important. Dindar (2018) found that Yee's immersion was highly related to the experience of flow but concluded that flow is a stronger state within immersion or a "climax of immersion". The study also showed that social motivation predicts time spent on MMORPGs, while gamer loyalty is predicted by status seeking and some aspects of flow experience. The finding related to status seeking is especially interesting for the study at hand, since it reveals

the importance of extrinsic motivation for gamer loyalty. Dindar (2018) argued that MMORPGs provide players with a social environment and features for comparing their social rank (e.g. levels and possessions). The study showed that both intrinsic and extrinsic motivation predicted higher level progression but did not take into account aspects of well-being related to the types of motivation.

Boyle et al. (2012) noted that managing negative psychological states, such as escapism, boredom, loneliness and passing time, predicted high amounts of time spent on games more accurately than the experience of flow. The experience of flow might also lead to addiction and thus reduced enjoyment (Hew et al., 2024). Methods of time design in MMORPG development, such as altering in-game timers and parallel timelines in the game world, can be used to induce a state of flow through the distortion of time perception related to the experience (Rapp, 2022). MMORPGs have been criticized for using timers and social pressure to incentivize play, even when it is not enjoyable in itself (Deterding, 2016). These methods could be described as extrinsic motivation instead of intrinsic (Ryan & Deci, 2000). A game developer striving for social sustainability and better well-being for the players should focus on providing more positive experiences and less controlling pressure to incentivize gameplay. Although the phenomenon is complex and multi-dimensional, from one perspective the solution could be to promote design elements that lead to intrinsic motivation instead of extrinsic motivation. This leads us to the theoretical framework used in the study at hand.

3 Self-Determination Theory as an Intrinsic Motivation Framework

Krath et al. (2018) identified 118 theories used in gamification research, including frameworks such as Self-Determination Theory (SDT), flow-theory, TAM, and theory of planned behavior. In their review, SDT was the most popular framework. Tyack & Mekler (2024) concluded that SDT is a paradigm both in HCI gaming research and among game industry professionals. Motivation is a core concept in SDT, which also makes a clear separation between intrinsic and extrinsic motivation (Ryan & Deci, 2000). SDT was thus chosen as a framework for the empirical study, as it provides the means to evaluate the qualitative aspects of player motivation while also connecting the findings to a large pool of prior research utilizing the same framework. SDT suggests that intrinsic motivation, self-regulation and well-being are affected by the fulfilment of three basic psychological needs: autonomy, competence and relatedness (Ryan & Deci, 2000). The need for autonomy refers to the desire for self-regulation of experiences and voluntariness in activities based on genuine interest, the need for competence is a need to feel effective and skilled in activities that spark curiosity, and the need for relatedness is fulfilled by feeling cared for and having a sense of one's own social significance among other people (Ryan & Deci, 2017, pp. 10–11). In their book summarizing the SDT framework and the extensive field of research related to it, Ryan & Deci (2017) present the six mini-theories incorporated into the framework. A summary of the mini-theories and their application in gaming context follows, with special emphasis on the two mini-theories most relevant to this study.

3.1 Cognitive Evaluation Theory

The first mini-theory in SDT, Cognitive Evaluation Theory (CET), has a specific focus on intrinsic motivation. It is founded on the empirical evidence stating that in many contexts extrinsic rewards and punishments have a negative effect on intrinsic motivation. Intrinsic motivation is viewed as an inherent system in humans as well as other mammals and, to some extent, other organisms. Intrinsic motivation activates us to play, explore and manipulate our environment. This activity in turn leads to further development of our competencies. The core argument of CET is that positive perceptions of autonomy and competence enhance intrinsic motivation for an activity, while negative perceptions undermine it. CET further argues that perceptions of social connections and a sense of belonging, or a lack of these experiences, also affect intrinsic motivation. The effect of relatedness is more salient in activities that

include social elements, but both autonomy and competence play a critical role at all times. (Ryan & Deci, 2017, pp.123–124.)

CET was built upon the findings of (Deci, 1971) indicating that receiving rewards for an initially interesting activity lead to a diminished interest in continuing the activity. This was attributed to a shift in perceived locus of causality, a term used to describe the experienced origin of action (intrinsic or extrinsic; self or outside). In essence, the reason for engaging in the task shifts from intrinsic interest and enjoyment towards the extrinsic reward. From the CET perspective, this shift is interpreted as a decline in autonomy. While tangible rewards such as money contributed to this decline, verbal rewards (i.e. positive feedback) in certain contexts increased intrinsic motivation. In CET, this is attributed to the positive effect on the perception of competence. Whether the effect of a reward such as praise for performance on intrinsic motivation is positive or negative depends on the individual's interpretation of its functional significance. The same feedback could be interpreted as competence supporting (informational aspect) or autonomy thwarting (controlling aspect). Feedback could also be interpreted to simultaneously undermine competence and the value of the result (amotivating aspect). (Ryan & Deci, 2017, pp. 125–131.)

Summarizing studies related to events affecting autonomy, Ryan & Deci (2017, p.150) conclude that they are most likely to undermine intrinsic motivation when they involve rewards that are salient, expected and depend on performance. On the contrary, intrinsic motivation can be supported by providing freedom in choosing what activities to engage in and how to execute them as shown in the meta-analysis by (Patall et al., 2008). The CET-based explanation to these findings is that freedom of choice supports the perception of internal locus of causality and thus the need for autonomy. The theory also suggests that the need for competence can be supported by not only providing experiences of skill mastery but, more importantly, opportunities of growth and development. This means that while showcasing mastered skills may provide extrinsic reward, enhancing and stretching abilities in the context of optimal challenges drive intrinsic motivation. Since both needs are constantly present, to invoke intrinsic motivation these challenges need to be undertaken autonomously. Supporting this claim, (Danner & Lonky, 1981) showed that schoolchildren exercised their freedom of choice by choosing activities that provided an optimal challenge to support their development. (Ryan & Deci, 2017, pp. 150–157.)

The interpretation of the functional significance of events like feedback, threats of punishment and deadlines affects intrinsic motivation. However, these events usually involve other people giving feedback, threatening, setting deadlines and so on. Therefore, intrapersonal elements such as the perceived intention of others and the general interpersonal “climate” of the environment affect whether the interpretation has an informational or controlling aspect. For instance, feedback in a certain situation could be interpreted as autonomy supporting or controlling, but on a larger scale these interpretations affect the interpersonal climate and others in the community through a mechanism called social contagion. (Ryan & Deci, 2017, pp.158–165.)

Perhaps a more important intrapersonal factor is the third basic psychological need described by SDT, relatedness. Countering a claim that autonomy is not important in collectivistic cultures, (Bao & Lam, 2008) found that both intrinsic motivation and task performance were indeed higher when Chinese children were free to make decisions. However, they also showed that even in low-autonomy situations, where someone else made the decisions, intrinsic motivation was less diminished when the individual felt secure and trusted the decision maker. CET posits that an autonomy supporting approach involves taking other people’s perspective, which relays a sense of caring, and an environment high in this kind of relatedness supports the need for autonomy and the need for relatedness simultaneously. While autonomy and competence are classified as the proximal needs for intrinsic motivation, relatedness is involved in many interactions, according to the theory. For example, a person might be intrinsically motivated to engage in a solo activity, but at the very least they are usually supported by a cultural frame of reference that gives meaning to the activity. Secure relations are thought to provide a context for autonomous exploration, as suggested by attachment theory. (Ryan & Deci, 2017, pp. 165–167.)

While CET emphasizes the social context of motivation and the role of interpersonal events, it also acknowledges the effect of intrapersonal events. Task involvement, which is characterized by interest and desire for mastery in the activity itself, is contrasted to ego involvement. Ego involvement is related to a striving for status or appreciation within a social group that the individual belongs to or wants to belong to. The perceived threats to self-esteem or esteem by others leads to performance pressure that diminishes autonomy. This type of functional significance in regulation of behaviour can create an internally controlling state even when external control is not present. Internally informational events, on the other hand, increase intrinsic motivation by supporting the needs for autonomy and competence.

While an intrinsically motivated individual carries on an activity out of interest and enjoyment, an ego involved individual might persist in the absence of enjoyment in order to prove their worth and receive positive affirmation, especially after facing negative feedback. Competitive environments where comparative evaluation is salient tend to diminish intrinsic motivation and increase internal control through ego involvement, which leads to persistence without enjoyment. (Ryan & Deci, 2017, pp.167–173.)

CET, and therefore SDT on a larger scale, is based on the findings that extrinsic rewards and punishments reduce intrinsic motivation in certain contexts. However, this does not lead to the conclusion that all rewards have a negative effect at all times. For example, (Hewett & Conway, 2016) found that, in an organizational context, salient positive feedback undermined intrinsic motivation related to complex tasks but not simple tasks. As the effect of rewards on behaviour became a heated topic generating lots of experimental research, (Deci et al., 1999) conducted a meta-analysis to draw conclusions. They found that verbal rewards in the form of positive feedback have positive effects more often than tangible rewards that tend to diminish intrinsic motivation. The meta-analysis also indicated that rewards that are unexpected or weakly related to the task do not have similar negative effects as salient rewards connected to task completion or performance. CET also suggests that while rewards that are not in line with individual interests and values may lead to an experience of being controlled or coerced (indicating reduced autonomy), in many situations rewards may support the psychological needs. For instance, a reward such as positive feedback may lead to a more positive perception of personal competence, which in turn supports intrinsic motivation when delivered in a non-controlling manner. Furthermore, motivation initially stemming from extrinsic sources may also be eventually internalized, and that is the topic of the second mini-theory. (Ryan & Deci, 2017, p. 125; pp. 131–140.)

3.2 Organismic Integration Theory

Organismic Integration Theory (OIT) is the second mini-theory within the SDT framework. It is related to the process of socialization and describes how extrinsically motivated behaviour endorsed by people of significance to the individual may be internalized. The internalization of beliefs, values and behaviour is viewed as a natural tendency related to human growth similar to the tendency to autonomously explore and learn, although internalization has an even stronger interpersonal aspect. The process of internalization is supported by the fulfilment of the three basic psychological needs, which leads to the shifting of perceived

locus of causality from external towards internal and, therefore, to the shifting of regulation from controlled towards autonomous. OIT states that this process is not so much initiated by the social environment to enforce regulation on a passive individual, as it is actively pursued by the person in order to better fulfil their basic psychological needs (i.e. feeling related to their social environment and competent in the role the take). As shown in Figure 1, motivational regulation is viewed as a continuum from external to internal and is categorized into four types: external, introjected, identified and integrated. (Ryan & Deci, 2017, pp. 179–183.)

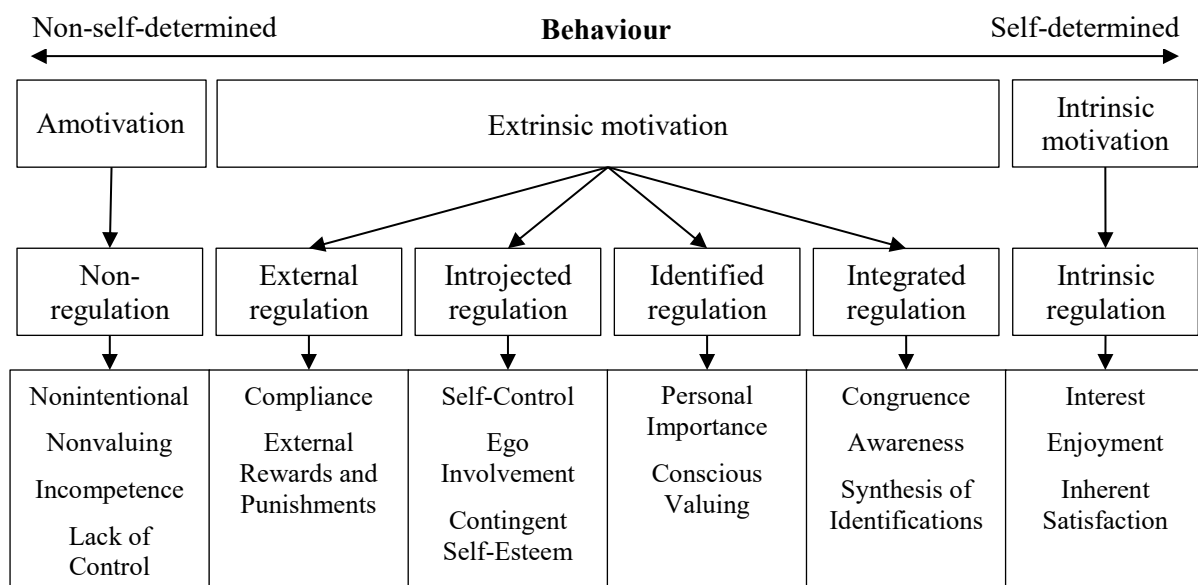


Figure 1. Types of motivation according to SDT. Adapted from Ryan & Deci (2017).

External regulation is involved in behaviour that depends directly on rewards or punishments. The perceived locus of causality is external, and the regulation of behaviour is controlled. External regulation often leads to activity only when the promise of reward or threat of punishment is thought to be present, the behaviour is purely instrumental, and the desired outcome is often pursued through lowest effort possible. The experience of autonomy is low even when the rewards are enjoyable. (Ryan & Deci, 2017, pp. 184–185.)

Introjected regulation is another type of controlled regulation, although now the perceived locus of control has shifted slightly inward. Instead of depending on external contingencies, the control is mostly internal. Introjected regulation is often based on projection, i.e. evaluation of whether the action would be approved or disapproved by others. The person might thus feel internal pressure to do what is expected because of a need for approval or an attempt to avoid shame. Therefore, the values related to the behaviour are not completely

assimilated, and the activity requires effortful and draining self-control. Still, in introjected regulation the extrinsic motivation is partially internalized, and therefore often more enduring than in the case of external regulation. As introjected regulation is associated with the evaluation of self-worth, related activities may cause considerable fluctuations in pride, shame and self-esteem. Introjected regulation is thus associated with ego involvement and may lead to strong reactions in competitive environments that involve interpersonal comparisons. (Ryan & Deci, 2017, pp. 185–186.)

Identification leads to more autonomous and effortless regulation of behaviour with a more internal locus of causality than introjected regulation. It is associated with behaviour that the individual believes to truly be in line with their personal values. Although the actions are not fully integrated with the individual's identity, they are carried out willingly with minimal external or internal control and believed to be important. (Ryan & Deci, 2017, pp. 187–188.)

Integrated regulation requires the individual to fit the regulation or value in with their other values and aspects of self. Usually this includes an active process of self-reflection and modifications to the integrated value or pre-existing values. As a result of this process, the value is in line with other identifications and basic psychological needs. An activity of extrinsic origin has thus become autonomous and feels authentic with no experience of conflict. Higher satisfaction of basic psychological needs is associated with a higher level of integrated motivation which, in turn, is associated with more effective self-regulation. Even with high levels of perceived autonomy, actions involving integrated regulation are usually still instrumental to some degree, with goals aligned with outcomes. This means that even full integration does not equal to intrinsic motivation, which is borne out of interest and enjoyment and is instantaneously rewarding in itself. (Ryan & Deci, 2017, pp. 188–189; 197–198.)

All types of motivation can lead to successful behaviour, social acceptance and a sense of efficacy, but OIT proposes that a higher level of internalization leads to a perception of higher autonomy and relatedness. Also common to all types of motivation is that, whether driven by external or internalized factors, motivated activity is always intentional.

Amotivation, on the other hand, describes a state where the individual has no intention to act. This is typically caused by a perceived lack of competence, which leads to an experience of not being in control. Here, potential performance is thought to be inadequate or to not lead to a desired outcome. Another explanation for amotivation according to SDT is a lack of

perceived value in the activity or its outcome, which leads to a lack of autonomous interest. (Ryan & Deci, 2017, pp. 189–191.)

According to OIT, internalization is closely related to the basic psychological needs. Internalization is an active process where the individual is seeking fulfilment of their needs. This is achieved as internalized behaviour is not only experienced as more autonomous but is also more in line with the values of others, thus supporting the need for relatedness. A certain level of need satisfaction is also needed for successful internalization. Even for external regulation, the individual must experience adequate competence to carry out an action. Introjection must involve a sense of relatedness in order to care about the approval of others. Identification and integration depend on autonomy. An environment that supports need satisfaction therefore also promotes internalization. From this perspective, the satisfaction of basic psychological needs seems to be both the chicken and the egg, so to speak. Greater level of internalization, according to OIT research, leads to persistence and effectiveness as well as positive experiences and well-being. The link between the basic psychological needs and well-being is more intricately explained by other mini-theories. (Ryan & Deci, 2017, pp. 202–203; 208.)

3.3 Other Mini-Theories within SDT

The remaining four mini-theories are less central for the study at hand but will be briefly discussed to convey a more comprehensive view of SDT. Causality Orientations Theory (COT) focuses on individual differences related to motivation. Basic Psychological Needs Theory (BPNT) states that the three basic psychological needs not only affect motivation but also well-being in general. Goal Contents Theory (GCT) divides individual life goals into intrinsic and extrinsic aspirations. Relationships Motivation Theory (RMT) focuses on need satisfaction in close relationships.

COT differentiates between motivational styles that it calls causality orientations. The three causality orientations are autonomous, controlled, and impersonal orientation. Autonomous orientation is associated with self-determination and interest as well as finding informative functional significance. Control orientation leads to a tendency to focus on external control, rewards, and demands. Impersonal orientation is related to experiencing a lack of control and motivation. COT considers causality orientations to be differences between people that develop over time based on both biological and environmental factors, where the satisfaction

of the needs for autonomy, competence and relatedness plays an important part. Still, all people exhibit all orientations to some extent, and situational factors may determine which orientation dominates. Autonomous orientation is associated with increased well-being and integration, controlled orientation with introjection and diminished self-regulation, and impersonal orientation with lower levels of well-being, motivation and performance. (Ryan & Deci, 2017, pp. 216–234.)

BPNT proposes that satisfaction of autonomy, competence and relatedness leads to a higher level of well-being. Need frustration, on the other hand, leads to ill-being. BPNT states that the satisfaction of the needs for autonomy, competence and relatedness is central to the processes of development, personal integration and effective functioning, and that the thwarting of the needs leads to negative outcomes in the processes mentioned. BPNT also argues that the three needs are common to all humans in all cultures and social contexts, even when they do not have personal value for an individual. Need satisfaction and frustration is said to vary between situations and over time, but all of these changes are reflected in well-being. Even though all three needs are essential, according to BPNT autonomy support lays the groundwork for fulfilment of all needs, while controlling environments jeopardizes the satisfaction of all three. On a larger scale the satisfactions of the three needs are usually correlated with each other, even though variation in specific situations may exist. BPNT also distinguishes between the growth-related basic needs and so-called deficit needs (e.g. need for security) that emerge in dire situations and are related to coping with negative effects in these situations, but not with growth and flourishing across all situations. Vitality, defined as psychological energy for action and full functioning, is said to be increased through need satisfaction and depleted through both internal and external control. The positive effect of living nature on vitality is also considered to be mediated by need satisfaction. According to BPNT, open awareness of internal and external situational context (i.e. mindfulness) can increase perceived levels of autonomy, internalization, need satisfaction, and thus, well-being. (Ryan & Deci, 2017, pp. 239–268.)

GCT suggests that extrinsic goals like money and popularity have instrumental value, while intrinsic goals such as personal development or meaningful human connections have inherent value. GCT assumes well-being to be higher when aspiring for intrinsic goals and lower when prioritizing extrinsic goals. According to GCT, this difference in wellness outcomes is true, not only for the aspiration, but also when progressing or attaining a goal. GCT is tied to other mini theories through the basic psychological needs, proposing that striving for intrinsic

goals satisfies the needs better than acting towards extrinsic goals. In relation to OIT it is assumed that the pursuit of intrinsic goals involves more autonomous regulation than extrinsic goals. GCT also posits that need frustration during development may lead to compensating for the needs with extrinsic goals, which diminishes their well-being. When attempting to motivate an individual, framing the activity as an intrinsic goal generally leads to higher persistence and well-being than presenting it as an extrinsic goal. The goals leading to the highest well-being related outcomes are, according to GCT, those that are most directly related to the basic psychological needs. Mindfulness is thought to shift the balance from extrinsic towards intrinsic goals, and thus better well-being, through enhanced integration. (Ryan & Deci, 2017, pp. 272–291.)

RMT proposes that relatedness-nurturing relationships are more satisfying and lead to higher well-being when autonomous motivation is involved. The satisfaction of all three basic psychological needs lead to higher security and well-being, while need frustration has opposite outcomes. Autonomy support is a key component in secure relationships and authentic functioning within them, according to RMT. Autonomy support is more often mutual than one-sided and thus leads to benefits for both participants. While satisfactions of the basic needs usually correlate, relationships where needs are pitted against each other (e.g. relatedness at the expense of autonomy) are usually weaker and lead to diminished well-being. The experienced quality of a relationship, need satisfaction, and resulting well-being, is also lower if the partner is objectifying and not expressing the intrinsic value of an individual. (Ryan & Deci, 2017, pp. 293–314.)

While not all of these mini-theories are focused on motivation and, therefore, central to the study at hand, they are all part of the SDT framework and revolve around the concept of basic psychological needs. Understanding motivation often requires a deeper level of analysis than fixating on the activity itself. While some aspects of SDT, like close relationships and RMT, are mostly outside the scope of this study, understanding these underlying aspects may still benefit the analysis. SDT regards the needs for autonomy, competence and relatedness as central to all aspects of human growth and functioning, which should be kept in mind when turning the attention towards SDT research related to video games in particular.

3.4 SDT in Gaming Motivation

A search for “‘self-determination theory’ AND ‘games’” yielded 580 documents on Scopus (June 11th, 2025) showing a stable increase in the number of publications per year since 2011. Tyack & Mekler (2024) reviewed SDT-based research in the field of HCI and concluded that SDT had reached the status of a paradigm in both gaming research and among industry professionals. They even argue that research is lacking a critical perspective on the widely endorsed SDT, which inhibits theory development. In their view, application of SDT is often shallow and most of the included mini-theories are not utilized to their full potential.

Tyack & Mekler (2024) argue that one reason for the popularity of SDT in the context of games is the activity of SDT theorists themselves in the field. Ryan et al. (2006) first utilized the SDT framework to examine motivation in the context of video games in four separate studies, showing that the basic psychological needs predict both enjoyment and future play. They introduced the Player Experience of Need Satisfaction (PENS) scale, which measures experiences of autonomy, competence, presence (i.e. immersion) and intuitive controls. The PENS scale has since been widely adopted, while other SDT-based scales such as the Intrinsic Motivation Inventory (IMI), Ubisoft Perceived Experience Questionnaire (UPEQ) and Basic Psychological Needs Satisfaction (BPNS) have also emerged (Tyack & Mekler, 2024). Ryan & Deci (2017, p. 511) see exceptional value in studying video games, since they involve intrinsic motivation.

According to research reviewed by Ryan & Deci (2017), the need for competence is often satisfied in games through progressive, moderately challenging activities that lead to experiences of efficacy and mastery. A structure for leveling up is a common way to increase the salience of progress and to provide feedback. Leveling up may also be associated with the acquirement of more powerful tools or abilities and unlocking of more difficult challenges. Fast leveling early in the game keeps the player engaged, while slower progress later on prompts the player to invest more time and effort. This type of guided progression attempts to match the players’ skill levels with optimal challenges. However, the progress does not need to be linear, since varying tasks with occasionally lower demands may lead to increased experiences of competence and intrinsic motivation. Clarity of goals and intuitive controls are also important for keeping the player on path and motivated, since confusing instructions or controls may diminish experiences of mastery. Another important aspect is feedback, which is categorized into granular feedback, sustained feedback and cumulative feedback. While

granular feedback is immediate, sustained feedback informs the player that they are on a correct path toward the goal, and cumulative feedback summarizes the player's achievements and may give direction for improvement. Positive feedback in games often provide a readily available source of satisfaction for the need for competence, which may be especially important for players with few sources of perceived competence in activities outside video games. (Ryan & Deci, 2017, pp. 513–515.)

Regarding the need for competence, it should be noted that many games, including most MMORPGs, offer game modes where players compete against each other. This can occur in PvP game modes or PvE modes with measures of success such as a leaderboard. The discussion by Ryan & Deci (2017) does not cover this type of competition in video games. Noticing that the extensive high-quality review by Tyack & Mekler (2024) also included zero references to SDT-based HCI research on competitive gaming, (Moller et al., 2024) confirmed in their own study that there indeed is a severe research gap in the area. Therefore, qualitative studies such as the empirical part of this thesis may provide valuable insight that future research can be based on.

Autonomy can be supported in video games by offering players choices. Choice in games can be implemented through open-world designs where players can travel anywhere, take on any mission, perform any action and even be anyone they want to be. Virtual worlds usually have few restrictions on genders, races, bodily features or even species that a player can choose for their character. Customizing a character is associated with a heightened sense of agency, which may increase perceived autonomy and intrinsic motivation. (Ryan & Deci, 2017, pp. 515–516.)

Relatedness support in video games is most prominent in multiplayer environments, where players are able to interact with each other, perform activities together and form temporary groups or long-term guilds. In a virtual context players can meet people they otherwise could not and act together in pursuit of shared goals. Many games are designed to encourage and reward teamwork since it can increase motivation through relatedness support. (Whitbourne et al., 2013) found that, while players in different age groups had different reasons for playing casual games, the social nature of gaming was most important in all groups. Ryan & Deci (2017) also reviewed studies reporting that people can feel relatedness to non-player characters (NPCs) as well. Modern games feature intricate virtual characters that allow

interaction, give positive feedback and provide assistance, which may lead to relatively deep attachment as perceived by the player. (Ryan & Deci, 2017, pp. 516–517.)

According to Ryan & Deci (2017), SDT was founded on the observation that extrinsic rewards diminished intrinsic motivation. In a gaming context, Frommel & Mandryk (2022) studied extrinsic engagement rewards. Contrary to the foundations of SDT, they found that for many players these rewards, only requiring engagement and thus not related to competence or other needs, were associated with higher intrinsic motivation. Still, they concluded that experiences vary and some players dislike missing out on rewards and feeling obliged to play, and that playing just for the sake of rewards does indeed also involve more externally regulated motivation and amotivation. A motivational profiling of League of Legends players showed that intrinsic and autonomous profiles are associated with a more positive experience and less negative feelings, whereas amotivated and externally regulated players enjoyed the game less and had more negative experiences (Brühlmann et al., 2020).

SDT also attempts to explain immersion in video games with the satisfaction of basic psychological needs. Immersion, or the experience of being within the game world instead of performing mediated actions from the outside, is explained by a constant flow of need satisfaction. Breaking this flow by, for instance, perceiving the controls as unintuitive can lead to diminished immersion. According to SDT, need satisfaction contributes to experiencing the story, emotions and physical attributes such as the surroundings and movement in the game more authentic and compelling. Video games are often designed to deliver a consistent flow of need satisfaction, which includes providing clarity about the outcomes that certain actions can be expected to lead to. In addition to consistency, need satisfaction in video games is often dense and immediate. Density here refers to the frequency of satisfaction which is usually higher in video games than real-world activities. Especially mobile games are also designed to provide immediate satisfaction that does not depend on the time or place. (Ryan & Deci, 2017, pp. 519–521.)

Need density is also used to explain overuse of video games in what is called the need density hypothesis. Based on studies they reviewed, Ryan & Deci (2017, p. 522) estimate that 10–15% of all players exhibit a pattern of overuse of video games but conclude that a consensus regarding the pathological prevalence has not been reached. Depicting the difficulty of estimation, a more recent study reported that systematic reviews focusing on the criteria of Internet Gaming Disorder (IGD) in the fifth edition of the Diagnostic and Statistical Manual

of Mental Disorder (DSM-5) by the American Psychiatric Association (APA) include estimates for IGD varying from 0.21% to 57.50% (X. Wang et al., 2023).

The need density hypothesis described by Ryan & Deci (2017) suggests that while a high level of need satisfaction in games predicts high engagement in them, also a low level of need satisfaction outside the game predicts game engagement. Therefore, especially vulnerable for overuse would be those players whose needs are thwarted in real life, since the difference in the density of need satisfaction between the realities is greater. The authors note that overuse is not an aspect unique to games, since similar findings have been reported in relation to social media usage and other online behaviour. According to SDT, a further explanation for overuse behaviour is diminished self-regulatory capabilities resulting from need thwarting. MMORPG players may be at risk for overuse, as they are offered exceptional levels of need satisfaction through open world designs and character customization, feedback related to progress, and options for social interaction. Additionally, multiple activities can be carried out simultaneously, which gives the impression that something always remains unfinished. (Ryan & Deci, 2017, pp. 522–525.)

Ryan et al. (2006) pointed out that an overwhelming majority of research has focused on negative consequences related to gaming. More than a decade later, a large portion of the gaming-related discussion by Ryan & Deci (2017) still focused on negative phenomena such as overuse and aggression. In more recent research, Kavanagh et al. (2023) showed in their meta-analysis that low self-esteem is a risk factor for a gaming disorder, although their analysis was unable to conclude the direction of causality. Gibson et al. (2023) established a link between problematic gaming behaviour and spending money on in-game micro-transactions, while explaining the transactions with a frustration of basic psychological needs. Need frustration, in addition to need satisfaction, related to video games has been a popular topic. Kosa & Uysal (2022) drew attention to this distinction, while showing, as predicted by BPNT, that the satisfaction of basic psychological needs in games is associated with more positive outcomes whereas need frustration predicts more negative outcomes for well-being. Achterbosch et al. (2024) used SDT to determine that a certain type of toxic behaviour in MMORPGs affects the basic psychological needs as the victims usually report diminished autonomy and relatedness while the perpetrators, especially regular offenders, report increased need satisfaction. Based on the findings they called for game design choices that channel satisfaction-seeking towards non-toxic behaviour.

From a more positive perspective, using the SDT framework Razum & and Huić (2024) found out that adolescent gamers are mostly successful in integrating video games into their lives, and are benefiting from social connections, relaxation, enjoyable competition as well as improvement in English and tech skills. They did remind that a minority is vulnerable to problematic gaming, but that most seem aware of the issue and willing to accept help in changing non-adaptive behaviour. Ballou et al. (2022) showed that gaming has the potential to compensate for needs left unsatisfied in real-life due to a crisis. However, their data from the early days of COVID-19 pandemic showed that higher need satisfaction in games was not achieved by those with least satisfaction in other areas of life but, in fact, those whose needs were already satisfied in daily life. Vuorre et al. (2024) provided evidence that playing video games, especially the first 15 minutes, is correlated with an uplift in mood, although causality could not be determined.

The topics of motivation and well-being have remained popular in SDT-based research on video games (Tyack & Mekler, 2024). To balance the discussion of negative and positive effects of gaming, Ballou & Deterding (2024) proposed the Basic Needs in Games Model (BANG) of video game play and mental health based on SDT and gaming research, which aims to account for both quality and quantity of play, positive and negative impacts, and short-term effects as well as more lasting ones. While this thesis is focused on intrinsic motivation, studies related to well-being and behavioural outcomes are also relevant since SDT posits that all of these are affected by the satisfaction of the basic psychological needs for autonomy, competence, and relatedness. This theoretical assumption, in a gaming context backed by the evidence from Brühlmann et al. (2020), provides a background for the empirical part of this study.

4 Methodology

The empirical part of the thesis was conducted as qualitative research. Data were collected by interviewing players and analysed using the Gioia method (Gioia et al., 2013). Instead of focusing heavily on academic theory and deduction, the method emphasised player experiences in the way that they were understood by the players themselves. Finding connections, or a lack of connections, between the research data and the widely used SDT framework resulted in a contribution to a wider pool of prior academic research while also providing rich data to guide practical game development. With limitations imposed on the data mainly through interviewee sampling, the study was classified as an intensive case study (Eriksson & Kovalainen, 2008), while the method of data analysis has its roots in grounded theory (Gioia et al., 2013).

4.1 Study Context

The Elder Scrolls Online (ESO) is an MMORPG developed by ZeniMax Online Studios and published by Bethesda Softworks in 2014. It is based on Bethesda's The Elder Scrolls game series and is set in the fictional world of Tamriel. A screenshot of the game can be seen in Figure 2.



Figure 2. ESO characters in Vivec City, Vvardenfell.

In ESO, players can create multiple characters, choosing a class from seven possible options and several races that inhabit Tamriel. The game provides player-versus-environment (PvE) solo quests and group activities as well as separate areas for player-versus-player (PvP) combat in different forms. ESO is constantly developed, and new content is released to expand the game periodically. Buying the base game gives access to most of the content, while newer areas and some special features require a subscription service. Additionally, ESO features an in-game store for purchasing content and cosmetics for character customization and housing.

The author of this thesis played the game intensively from October 2023 to August 2024 reaching a Champion Point (CP) level of 1 246 in 2 046 hours played. The pace of progress in CP levels depends on playstyle and the content played among other factors, but the author estimated that in all cases a minimum CP level of 1 000 was required to be considered an experienced player for the purposes of this study. The maximum CP level a player could reach at the time of writing was 3 600. The author's familiarity with the game gave insight regarding the vast and intricate game world and helped interpret the experiences of more knowledgeable informants. While other MMORPGs such as WoW have been studied extensively (Nguyen et al., 2025), one reason for making ESO the focal point of this case study was the fact that, despite its popularity sustaining over a decade, very few studies have focused on the game. Additionally, ESO includes many different game modes, mini games within the main game, and a variety of ways to develop and customize a unique playstyle and approach to the game, which is reflected in one of ESO's slogans "Play your way". This provided a solid ground to approach RQ2 by evaluating the motivation of players with different playstyles and areas of focus.

4.2 Data Collection

The data were collected between November 2024 and May 2025 by interviewing ESO players with different areas of focus in the game. The multitude of game modes, mechanics, zones and other content added to the game during the past decade has made it possible to specialize in a certain aspect of the game. For instance, players may choose to play PvE or PvP content, focus on trading items, engage in role-play or simply enjoy the social aspects of the game. Many players engage with several game modes and playstyles, while others may focus more strictly on certain aspects of the game. Therefore, the goal of the sampling process was to collect data from players with diverse perspectives to the game. Players with

different areas of focus were initially identified through the author's networks in ESO-related Discord groups, and snowball sampling was used to recruit additional informants. In the snowballing phase, previously interviewed experts were asked about areas of the game that they thought should be covered in the study. The areas mentioned were PvP, PvE, trading, role-playing, social play and casual play. As several informants were highly esteemed experts in their area of focus within the ESO community, in-depth interviews with these key informants were favoured instead of shorter interviews with a higher number of players.

To limit the effects of differing cultures, in-game economies, user interfaces and other variables between the different platforms and EU/US servers, interviewees were selected from the PC EU server only. These criteria along with focusing on a single MMORPG may limit the generalizability of the findings but also allowed the study to focus more closely on the effects of the different areas of focus within the sample. This approach was in line with the intensive case study methodology described by Eriksson & Kovalainen (2008). The interviewees were contacted through Discord and presented with an invitation letter (Appendix 2). The interviews were conducted via Discord calls. Interviews were concluded when saturation was reached and new interviews no longer provided additional information.

The interviews were semi-structured, starting with open questions about players' experiences and leading to more specific questions related to the theoretical framework. The participants were thus allowed to first discuss their experiences freely before being introduced to the concepts of the SDT framework. As data were collected and preliminarily analysed in parallel, the process of sampling interviewees and the interview questions were slightly altered to reflect early findings in the data collected from previous interviews as instructed by Gioia et al. (2013). The initial interview questions are found in Appendix 1. Questions that were irrelevant due to each interviewee's perspective on the game or due to extensive information already given in previous answers were not asked. Specific questions related to the theoretical framework were also not asked if the themes related to the three basic psychological needs were brought up by the interviewees in their answers to previous questions. In these cases, further elaboration was asked regarding each theme as they were brought up. This ended up happening in every interview. The informants were not compensated for their participation in the study.

4.3 Data Description

The sample included a player mainly focused on PvP game-modes (P4), a community-focused guild leader (P3), a trader and trading community leader (P5), a player focused on furnishing houses and role-playing (P6), a player focused on score pushing (i.e. breaking world records) in the most difficult endgame PvE content (P7), and a casual all-round player (P1). Also included was one player who had quit the game five months prior to the interview, having previously played intensively and mainly focusing on PvP (P2). Five of the participants were male and two were female in the age range of 25 to 45 years. The participants had played the game for from 3.5 years (P2) to more than 10 years (P3, P4 & P5) and their CP levels ranged from 1 341 (P1) to 3 600 (P4). For reference regarding these measures of experience, the game was launched 11 years ago in 2014 and the maximum CP level that could be reached was 3 600. P3, P4 and P7 were also creating content related to ESO on online platforms outside of the game itself. The sample covered all key areas of focus that were recognized by the author together with the informants while providing some overlap as all players were engaged in several types of activities within the game. The sample size was sufficient for reaching data saturation in the qualitative analysis but limited for drawing generalizable statistical conclusions. Background information about the interviewees and their experience is presented in Table 1.

Table 1. Demographic data of the participants.

Participant	Age	Gender	Area of Focus	Experience	CP	Country
P1	31	Male	Casual/Diverse	4 years	1341	Finland
P2	45	Male	PvP	3.5 years	2488	Finland
P3	34	Female	Social Guild Lead	> 10 years	2808	Finland
P4	32	Male	PvP/Streaming	> 10 years	3600	Finland
P5	26	Male	Trading	> 10 years	2802	Germany
P6	34	Female	Housing/Role-play	6 years	1469	Netherlands
P7	25	Male	PvE/Content Creation	5 years	~2700	Poland

P3 and P5 had several game accounts and the CP level listed is for their main accounts only. The interviews were conducted in English and Finnish, and the quotes from Finnish speaking participants in later sections were translated by the author. As the study focused on in-depth interviews with key informants, interview length ranged from 1 hour and 11 minutes to 1 hour and 54 minutes.

4.4 Data Analysis

The recordings were transcribed using a secure AI transcription service provided by the University of Turku, corrected manually by the author, and analysed using the Gioia method. The participants were considered as experts on ESO and player experiences related to it. The interpretation of their experiences was the main goal of the study, while connecting them to a theoretical framework was a secondary goal. The topics brought forward by the interviewees were grouped into 1st order concepts and then combined into 2nd order themes (Gioia et al., 2013).

In an inductive grounded theory approach, Gioia et al. (2013) suggest that the 2nd order themes should be combined into aggregate dimensions that form the basis of new theory. In this study, however, the 2nd order themes were viewed from the perspective of the theoretical framework. This abductive approach tied the empirical data to prior research by evaluating player experiences in the context of the SDT framework and its components. The findings of the study thus emerged as connections between the data and the theoretical framework, but also as findings that did not fit the three concepts of SDT. An abductive approach and the Gioia method provided the means to widen the view beyond the boundaries of the theoretical framework. Eriksson & Kovalainen (2008) describe this type of strategy as sensitizing concepts in inductive analysis with concepts from prior research. As qualitative research the study aimed to obtain rich data covering various viewpoints to discover concepts and themes that may influence intrinsic motivation, although statistically significant correlations in this type of study may not be drawn. From the practical game development perspective, the Gioia method provided the means to focus on actual player experiences that provide valuable insight when not obscured by a heavily enforced theoretical perspective.

In practice, the interview transcripts were coded by highlighting interview data related to motivation and enjoyment using NVivo (v.15.0.0) software. Enjoyable experiences were also considered due to their strong link to intrinsic motivation according to the SDT framework. Analysing the first two interviews (P1 & P2) yielded 81 codes related to motivation. The analysis of further interviews yielded 16 new codes for the third interview (P3), nine new codes for the fourth interview (P4), two new codes for the fifth interview (P5), and no new codes for the sixth and seventh interview (P6 & P7). The total number of codes in the data set was 308, averaging 44 codes per interview, with 108 unique codes. The in-depth nature of the interviews may have contributed to reaching data saturation with a relatively small sample.

The codes were then grouped into 2nd order concepts and further categorized under the three basic needs defined by SDT. The data contained both positive and negative experiences related to each component, thus representing both need satisfaction and need frustration. A fourth main group was formed for codes that were better explained by extrinsic motivation, and a fifth group included codes that could not be easily placed in any of the previous categories. Within these categories, some codes that were closely linked to each other were then combined. Codes that existed both on the positive and negative sides in a category, but essentially represented the same experience or phenomenon, were also combined. The analysis resulted in the final data structure seen in Appendix 3.

Familiarization with the data and crude identification of 1st order concepts occurred in between the interviews in order to adjust the sampling and interview questions according to preliminary findings. This had a substantial effect, as the first three interviews made it clear that a preliminary research question regarding the effects of player experience on the factors of intrinsic motivation was not feasible in this type of qualitative research. Thus, the second preliminary research question about these effects was abandoned. Instead, the players' unique perspectives and differing areas of focus in the game provided interesting data. This type of qualitative difference was also better suited to the research methods in use. A new secondary research question was formulated and changes in interviewee sampling were then made, with different areas of focus prioritized instead of different experience levels.

4.5 Research Evaluation and Ethics

The main dimensions in evaluating qualitative research are credibility, transferability, dependability and conformability. These differ from the traditional triad of reliability, validity and generalizability used to evaluate quantitative research. Credibility is a measure of how well the findings make sense and can be believed and thus reflects the internal validity of the research. External validity is covered by transferability, which measures the extent to which the findings are applicable in other contexts. Dependability in qualitative research is comparable to reliability in quantitative research and consists of well-defined documentation, methods and research decisions. Conformability is a measure of objectivity and is achieved by adherence to methodology, which leads closer to the goal of consistency between findings that different researchers might yield from the same data. (Mandal, 2018.)

The credibility of the findings is supported by the in-depth nature of interviews, which led to a large pool of data collected from knowledgeable informants. The interview data are extensively compared and contrasted to prior research literature in careful analysis. While qualitative research in general does not aim for wide generalizations and this study in particular had the goal of providing rich insights from a very specific case, the findings presented here may be transferable to other MMORPGs. Transferring the conclusions beyond this narrow segment, however, is not advised. The dependability of the data and findings was supported by using methodology that is widely adopted in qualitative research, even though the level of reliability strived for in quantitative research cannot be reached. As the study involved interpretation of data by a single researcher, following a well-established methodology was important also from the perspective of conformability.

The data collected for this study was handled according to the data management plan in Appendix 4. The interviewees were informed about the purpose of the study first in the invitation letter in Appendix 2. Details regarding the collection, handling and reporting of the data were discussed once more at the beginning of the interview. The interviewees were informed that they are free to interrupt the interview at any point and withdraw their consent to participate in the research. The interviewees were also informed that neither the researcher nor the University of Turku have any affiliation with the developers or publishers of ESO.

5 Findings

The results of the abductive analysis of interview data are presented in the data structure found in Appendix 3. In the abductive analysis, the 1st order concepts emerging from the interview data were grouped into 2nd order concepts and categorized under the three basic psychological needs affecting intrinsic motivation according to the SDT framework. A fourth group was formed by findings that were not directly related to intrinsic motivation and further divided into elements of extrinsic motivation and aspects not well explained by the framework. The key elements of motivation related to the need for autonomy were the ability to naturally actualize oneself by playing the game in a personal way, the freedom to choose personal goals and the means to reach them, and freedom to adventure and explore in the virtual world. Motivation related to the need for competence was supported by sufficient and fair challenge offered by the game, opportunities of constant improvement and learning, and opportunities to utilize personal abilities in the game. Motivation through relatedness support was increased by meaningful encounters and connections with other players, opportunities to receive and provide help and collaborate with others, and finding a role in the game community. External rewards were valued by the participants more when they had informational significance instead of controlling significance. Other reasons for playing were following routines and passing time. The structure of this chapter follows the data structure presented in Appendix 3, which gives a more comprehensive view of the breadth and depth of data collected in the interviews.

5.1 Autonomy

5.1.1 Self-Actualization in a Virtual Environment Leads to Autonomy Satisfaction

All participants reported enjoying experiences that made them feel that their actions in the game world reflect their true selves and conform to their natural tendencies. This often involved a unique way of playing and adapting to the activities in a personal way (P1, P2, P4, P5, P6 & P7).

Like in PvE for example, when I'm playing a tank in a way that it's kind of like... Or I play some mechanics in a way that is a little humorous. I find it extremely fun. And I think it's like me self-actualizing there. (P2)

Continuing on self-actualization, P2 also noted that it does not depend solely on his own actions but happens in interaction with other players. P6 also experienced that unique

activities she engages in that are not directly guided by the game, such as a spontaneous game of hide and seek, often emerge from random interactions between players. P6 also felt that while furnishing player houses was an activity that emerged from her personal tendencies, the perceptions of other players also had an impact:

It's a bit similar to why some people make art. It's a way to express oneself, but if no one sees the art then what is the point of it? Obviously you're channelling your own creativity, but a part of what makes it meaningful is that you can show it to others and make them feel or think. (P6)

These observations tied autonomy together with relatedness in the multiplayer environment. P1, P3, P4, P5 and P6 felt that the way their self-perceptions guide activity selection is also related to their personal strengths, thus connecting the needs of autonomy and competence. For P4, even deeply personal attributes such as aesthetic preferences were tied to both competence and relatedness, while also involving extrinsic elements in the form of feedback:

It's always nice to get whispers that your outfit is nice. And then there's also a good feeling for yourself when you know your outfit is good. When everything has clicked, the colours are correct, you have the right Radiant Apex mount for the character that works with the outfit and such. [...] You know you've succeeded, and others know you've succeeded. (P4)

P1 and P6 also felt that personal aesthetic preferences guide their activity in character customization and housing. P6 also experienced that aesthetically pleasing aspects of the game increase immersion which in turn affects the selection of game content. According to P6 the beauty of the game world was especially inspiring when first getting acquainted with the game and again after taking a break from it. P5 was not interested in housing, because he felt that he was not a creative person but a competitive one instead. P6, who felt that her creativity was mainly related to visuals and writing as reflected in her interest in housing and role-playing, argued that creativity can also take many other forms in the game:

Creativity can also be investigation of game mechanics and coming up with character builds. YouTube is full of videos and tutorials about builds that people have created. That's creativity to me. (P6)

Creativity related to character builds and gear setups, as described by P6, was evident in the activities that P2, P4 and P7 enjoyed the most. P4 and P7 also felt that certain features of the game restrict autonomy and steer them away from such content. For P4, examples of this were certain PvP situations where a group of players with powerful buff sets could hinder his

ability to engage in the solo playstyle he usually enjoys. P7 had similar feelings related to certain PvE content:

The shorter ones like the Craglorn trials which are being done in six minutes nowadays. You just... yeah, it's... really, you're doing the exact same thing and there's like very little variance. So yeah, I actually enjoy these a bit less. (P7)

All participants felt that ESO provides a lot of options for the players. This endorsement of autonomous play is also reflected in one of the game's slogans "Play your way". However, as a high-level PvE player, P7 argued that in the most challenging content the slogan loses its accuracy:

The game has options. Some options are better, some are worse, and there comes a point where you have to start throwing away the worst options because the content gets that difficult and, you know, people will try to just throw this 'play how you want' phrase everywhere, where it just, sadly, just doesn't work everywhere. (P7)

P1, P2, P3, P5 and P6 said that they limit even enjoyable activities in the game when they have real-life responsibilities or activities. They had negative feelings towards situations where in-game activities required real-life sacrifices. P2, who had quit the game, said that one of the reasons for the decision was the feeling that playing the game stood in the way of real-life projects. P2 described both these real-life projects and in-game activities as self-actualizing but decided to quit the game to focus on the former. P4, P5 and P7 also mentioned that server lag and other technical issues sometimes limit their enjoyment and selection of activities. P1 and P5 also mentioned real-world technical requirements, i.e. access to a compatible PC, as a limiting factor in certain situations.

P3, P4, P5, P6 and P7 also experienced that in-game responsibilities affected their natural gravitation towards activities. P3 and P5 had current, and P6 prior, responsibilities related to running in-game guilds, while P3, P5 and P7 were creating content related to the game on different online platforms. P7 also had responsibilities in high-level PvE groups where his presence was sometimes required for others in the group to be able to play. P5 was in a similar situation as he was running several guilds. For all of these participants the responsibilities had been building up during their history with the game and were not affecting the beginning of their ESO careers. Apart from P6 the participants felt that, even though they impose some restrictions, the responsibilities had been shaped up based on their own personal preferences, which limited their negative consequences. P7 even stated that he probably would have quit ESO altogether if it was not for his commitment to certain PvE

teams, which kept him returning to the game. P6 on the other hand experienced a more negative impact on motivation compared to, for instance, P5:

I don't have the issue that I don't feel like logging in because it's, like, not that much enjoyable. I just know it's part of the process. It's part of the structure. I made this, I made this work and built this up. So, I'm fine with it. (P5)

I do [feel] quite often that if I'm an officer or guild leader, I'm just doing things even if I don't enjoy them. Maybe that has led to the fact that I've taken breaks from the game every now and then. (P6)

While affecting the experience of autonomy, community responsibilities were also tied to relatedness. P3 and P5 also reported that they had other players assisting them in their responsibilities, and whether this has a moderating effect could be studied in the future. P6 noted that the social aspects of events and activities were more enjoyable when she was free from responsibilities. P6 gave up her position as a guild leader even though she felt that she was good at it. This indicates that competence satisfaction was not sufficient to make up for autonomy frustration in her case. P3 said that she sometimes played on the North American server instead of EU in order to be free from the responsibility to moderate the guild chat.

5.1.2 The Freedom to Choose and Reach Goals Supports Autonomy

While all participants described enjoyable in-game activities that they were naturally drawn towards, other activities stemmed from goals that the participants had deliberately set for themselves. The goals may, again, involve the needs for competence and relatedness in addition to the need for autonomy. Still, autonomous decision-making was emphasized in several descriptions of goal-oriented behaviour. The importance of autonomy may affect players similarly but lead to drastically different behaviour. For example, P1, who focused on the more casual aspects of the game, enjoyed setting different types of goals than the highly competitive P4:

I just built a bookshelf. I collected a series of books, I don't remember the name of it, I think it has eight parts. They're all nicely readable there. And I certainly haven't read them. But I have all the parts there neatly on the bookshelf. So, you create those kinds of mini-quests for yourself. You've once again accomplished something... kind of unnecessary. But you've succeeded. (P1)

I don't give up, I just never give up. Like my [Infinite] Archive streams, when I tried to get the number one spot [on the leaderboard], I was there for about 13 to 14 hours straight, every day, and if I got bad visions, meaning that I can't go far, I just try again. And the next day the same thing, about 13 to 14 hours. (P4)

Both quotes depict goals set by the players autonomously while also indicating a strive for competence satisfaction in both cases. For P4, the leaderboard acted as extrinsic motivation and seemed to provide informational functional significance related to competence.

Belonging to the group competing for the best performance and sharing the experience with an audience on-stream may have also brought an element of relatedness to the activity. An SDT-based interpretation would then be that the more intense experience and behaviour by P4 is due to broader range of needs covered by the activity.

While selecting and achieving goals was important for all participants, especially the more competitively oriented players P4, P5 and P7 also enjoyed the multitude of ways in which a goal could be reached. P4 and P7 highlighted the existence of many relatively balanced ways in which to build a competitive character. They also enjoyed the versatility of the combat system that includes blocking, dodge rolling, and gaining resources by heavy attacking, in addition to using class specific and universal skills common to many MMORPGs. P4 and P7 felt that these features gave the player more options to reach a desired result. P5 felt that the ability to achieve similar results using different character classes had improved since release:

I just remember from 2014 on, if you wanted to really play this healer role, you kind of had to be a Templar class back then. Now every class can somewhat manage, obviously differently. [...] back then when the game released, it was still obviously a lot smaller, the game itself. And therefore, you were more limited, and [the freedom] just increased over time, I would argue. (P5)

As P3 and P6 were oriented more towards the social than competitive aspects of the game, the goals they autonomously set were also more linked to relatedness. Achieving these goals still satisfied the need for competence as described by P6 when a role-playing event she successfully organized was enjoyed by the participants and sparked a lot of social interaction. When P3 said that the guild she leads has a habit of doing things their own way, she also described the importance of making a personal impact on a community when asked about the origins of this “own way”:

A lot of it probably originates from my own ethics and personality and such. [...] I think that if I wasn't allowed to make those decisions and bring about those changes [to promote fairness and equality] back then, I wouldn't be in this guild. (P3)

P7 felt that his natural tendency to optimize gameplay could make a positive impact on the ESO community that in his view was ridden by misinformation, which created a basis for the goals he set when starting to create game-related content online. P3 found it important to be

able to stand behind her decisions as a guild leader, and P2 felt the same way about their opinions about the game and the community in relation to the game developers, as discussed in more detail in Section 5.3.3 of this thesis. P4 talked about the importance of standing behind his decisions related to in-game activities:

In PvP when you meet all kinds of people, there's all kinds of drama [...] If anything, it just makes me play more, as a protest to some people. I can't be bullied out of anything. The opposite happens, if someone tries to. (P4)

As a casual player, P1 was not willing to pay the subscription fee to access more content and premium features in the game. His experience was that choosing not to pay the monthly subscription fee not only restricted him from accessing extra content but also hindered what he considered to be normal gameplay and should have been included in the game he had bought. He was very unhappy about this restriction of autonomy:

It's a much more reasonable game if you pay for the subscription. And that's obviously a really annoying side of it. You have a constant problem with your inventory if you don't pay for it. [...] So many things have been made a little bit more difficult so that if you don't pay, it's a bit more difficult and a bit more annoying. (P1)

In the case of P1, the autonomy restricting and controlling approach chosen by the game developers had not led to a subscription. It is hard to tell if a more motivating approach based on autonomy support and less control would lead to a better result from the developers' perspective, as P1 also says that another reason for not subscribing is that he cannot justify spending the money because he does not identify as a gamer in general.

The time spent in-game related to real-life activities was discussed previously, but the different amounts of time needed for different in-game activities also affected the in-game goals and decisions for P3, P5, P6 and P7. They had incrementally developed patterns of gameplay that at some point became too time-consuming, which prompted a reorientation towards different activities. P6 expressed the importance of autonomy support offered by the game in these situations:

At some point it was role-playing that, for two or three years, I was most excited about. But then, because of a lack of time I gave it up. Now I'm excited again about playing the story. Quests and story. There are so many things you can do in ESO that if the excitement for one thing ends, you can switch to something else. (P6)

In addition to restrictions due to the lack of a premium subscription, P1 felt that a lack of information made some of his goals feel unreachable. He described situations where he experienced that the schedules and rewards of in-game events were not clearly communicated, which led to him not being able to achieve his goals despite his best efforts. In addition to autonomy-related frustration, experiences like these have the potential to undermine perceived competence and even the desire to relate to the community as discussed in Section 5.3.3 of this thesis. P1 also felt that after such experiences he felt a lack of goals in general, which suggests a link between need frustration and amotivation as predicted by OIT. P1 had taken breaks from the game in these situations. P3 also remembered experiencing a lack of in-game goals in the beginning of her journey in the game as she felt that she had already played through the content that was available at the time. However, the social aspects of the game then grew in importance for her, suggesting that gameplay remained meaningful because of relatedness satisfaction. Similarly, P5 felt that at the time of the interview he had accomplished all goals that he had set for himself, but the community he was involved with was the main reason to keep playing.

5.1.3 In-Game Adventure and Exploration as Quests for Autonomy

ESO has been expanded constantly during more than a decade, and for a new player it may contain an overwhelming amount of content. However, for the more experienced players new content was important to keep them interested, as mentioned by P3, P4, P5 and P6. In addition, P7 brought up the importance of balance changes for existing in-game features in new patches, which affected character building and optimization. All participants felt that a sense of adventure was more present when they first started playing the game.

At first it was just an adventure, but as the characters were developing, I quite soon realized that the adventuring was actually quite boring. But it's always fun to play Battleground PvP-matches against people. So at least for me, I mostly just wanted to do that. With other people, in a party. (P1)

The previous quote suggests a path where the weight shifts from autonomy satisfaction towards competence and later relatedness satisfaction. A similar pattern was described by P5. P3 and P6 felt that the excitement for autonomous exploration can be brought back by new content added to the game. P3 discussed the effects of new game content both for her own gameplay and for the guild she was running:

When something new is added I just want to do the new thing. That may be what at the moment determines completely what I do in the game. [...] The only thing

that determines the activity level in our guild is new content. If there's nothing new for a while, the activity decreases. (P3)

P1, P5 and P7 discussed the positive feelings caused by the openness and vastness of the game world. P7 experienced that new additions to the game that extend the game world were enjoyable even if he never engaged with the new features. This suggests that the experience of autonomy supported by additional choices have positive effects even when they do not affect behaviour. On the other hand, P1 felt that once he got acquainted with the game world that initially felt vast, he started to realize that it was not that big after all, which affected the enjoyability of adventuring negatively. P1, P5 and P6 added that adventuring and exploring was more enjoyable in a group especially when first starting the game, which suggests that a simultaneous satisfaction of the need for relatedness in activities involving autonomous exploration may add to the positive experience. P3, on the other hand, also appreciated the possibility of playing the game alone when she was so inclined:

It was important for me for some reason that when I played there were other players around, even if I don't need to do anything with them. I got a feeling that I can play this as a single player game, in the very beginning. But still, if you want to, you can be in contact with other people. (P3)

Regarding aspects of the game that undermine autonomy, P1 reported that many in-game activities felt obligatory. For him, these included inventory management and other chores caused in part by the fact that he was not subscribed to the premium features, but also activities that he participated in because of social pressure. P1 also experienced that the freedom of adventure was undermined by too strict guidance in many quests. He felt that some quests were obligatory to gain necessary skills or items, but they were often uninteresting and felt like chores. P4 and P7 also mentioned playing other games as a reason for lacking motivation for ESO. While the game may have satisfied the need for autonomy, the players also had the option to autonomously choose another game that may provide even stronger need support.

5.2 Competence

5.2.1 Sufficient and Fair Challenge as a Key Source of Competence Support

Overcoming challenges was enjoyable for all participants and also the most frequently appearing code in the data. As discussed before, many challenges undertaken by the participants were chosen autonomously based on their personal preferences and self-

perceptions. They often also involved an aspect of relatedness as reviewed more thoroughly in Section 5.3.2 of this thesis. While overcoming challenges was reported as one of the most enjoyable feelings in the game by all participants, it was also one of the most diverse experiences in terms of sources for these feelings. For P1 the challenges were mainly casual goals set by himself or dictated by extrinsic rewards that he wanted to collect. P2 talked about performance-related challenges in both PvP and PvE. P3 was more focused on social aspects and said that the most enjoyable challenges were those where she was able to help others achieve their goals. P6 saw building projects and house furnishing as challenges that she enjoyed completing. P4, P5 and P7 as highly competitive players all enjoyed winning, but they sought victories on somewhat different areas as P4 was mainly focused on PvP, P5 on massing in-game currency through trading and P7 took on challenges mostly in PvE content. The most enjoyable challenges for each player thus reflected the content and playstyle that they had autonomously chosen.

I have an idea in my head about a house, and I start building it. And usually, the idea changes along the way because maybe the furnishings in ESO don't work the way I was thinking for that idea. Then I have to figure out and adapt in some way. Then it's about succeeding, and especially when I can show it to other players as their reactions are also something that bring me joy. (P6)

Then there's also, like, big bursts of positive emotion when you get like the... a world record. Yeah, and even probably 10 times bigger burst of emotion than that is when you get like a world first, which is a... which only happened twice to me. (P7)

In the prior quotes, both P6 and P7 describe situations where they overcome challenges in their own areas of focus. Notably, both also express the presence of an extrinsic reward in the form of feedback from others for P6 and a world record or being the first in the world to achieve a certain accomplishment for P7. All participants brought up challenges that included some form of extrinsic reward. Still, all participants valued the internal experience related to the challenge more than extrinsic rewards such as other players' reactions, while recognizing the value of both. P5, who took a very competitive approach towards trading, was aiming to accumulate in-game gold which in itself was an extrinsic reward. However, he was also running several trade guilds, which added an element of relatedness to his gameplay. P5 discussed the relationship between competing and winning in his own field:

...if I would not have any competition at all and would always win every week the best trading spots. I mean, that would be nice, but it would get boring over time, too. And I might then, like, trade less or play less possibly even. (P5)

Some of the most satisfying feelings were reported in situations where the challenge was difficult but still within reach. Reminiscing a Dragonstar Arena run on Veteran difficulty still evoked feelings for P2:

Memories grow sweeter over time. It was definitely not cool. When we were attempting it on Veteran. But it was so fucking cool! And like... I guess it feels like... That it's so overwhelming that... It just grows into such huge proportions. It feels like... Like this is so fucking impossible! (P2)

In the quote, P2 describes an experience where he did not overcome the challenge set by the game content as the group was unable to complete the arena that time. He explained that, although the challenge was difficult, it was still within reach requiring a high level of performance. He added that the emotional impact of the experience was also affected by the group that he shared the experience with. P2 mentioned that, prior to the experience he described, he had already collected the most valuable rewards from the arena with another group consisting of more skilled members. Interestingly, the collection of these extrinsic rewards in a less challenging environment had not evoked such strong emotions. P1, P3, P4, P5 and P7 also felt that game content was less enjoyable when the challenge was insufficient. P7 had thoughts about his observation that the game developers are lowering the difficulty in new content:

I would enjoy it more if it was more difficult. But I understand why they're doing it, and I understand that this is better for, like, the majority of people. [...] More people are going to enjoy it this way. Even if they're going to hurt the minority of super tryhard gamers like me. (P7)

Here P7 was talking about the most difficult content in the game where he strived for world records, but even P1 as a casual player was bothered by the lack of challenge in normal game content:

It doesn't feel adventurous anymore as it turns into running through [content] in all aspects. Both quests and dungeons are just running through them, so it's pretty boring. [...] I'm just brainstorming here that maybe there could be an additional hardcore server [...] where everything wasn't made so easy, like holding the hand [of the player]. It could be more interesting, and I might care to adventure. (P1)

P3 and P4 described similar experiences of losing interest due to insufficient challenge. P4 and P7 sometimes used self-imposed restrictions such as choosing a weaker character class or suboptimal gear, which led to a bigger challenge. P2, P4 and P5 had also experienced situations where the competition did not feel fair. For P2 and P4 these were related to PvP and, according to them, caused by both game design choices and the behaviour of players

who exploit the design. According to P5, unfair competition was also present in the in-game trading scene. Despite some frustration regarding their exploitation, the game design choices affecting the power balance between players was also enjoyed by P2:

If you see a one versus three situation you can participate in it in some way and turn it around so that you two won those three. And that kind of asymmetry is really interesting to me. (P2)

P3 and P4 also enjoyed moments of success when playing solo or in a small group against a larger group. In general, all players except P6 felt that PvP gameplay and success in the competition involved was enjoyable. For example, P5 and P7 were highly competitive in trading and PvE gameplay respectively, but both had experienced phases where they satisfied their desire for competition in PvP play. Likewise, the PvP focused P4 had also played PvE content competitively in various stages. Both P4 and P7 said that they were always drawn towards the most difficult content, biggest challenges and toughest competition. P4 highlighted the importance of leaderboards as a measure of success. The extrinsic nature and informational significance of leaderboards are discussed in more detail in Section 5.4.1 of this thesis.

I just have always been competitive, so score pushing is just, you know, like... I don't know, I kind of automatically go for this. Like always go for... always was going for the most difficult thing. (P7)

In contrast, P1 and P6 were happy with completing smaller challenges set by themselves, and P6 even felt that competitive players may make role-playing less enjoyable if they aim to control the situation and other players, seemingly leading to autonomy frustration. P1, P3 and P6 described having feelings of anxiety related to competing against others in PvP at some point.

Compared to other people I see, who have played lots of games, they just go straight into those kinds of competitive modes. And if they have a bad performance they just go into the next one. And I get anxious [...] if I don't quite know what I'm doing when I go into a competitive mode. (P1)

However, P1, P3 and P6 all reported that the PvP-related anxiety was alleviated by experiences of success in these activities. Later, P1 and P3 had spent a considerable amount of time engaged in PvP game modes and enjoyed the increased success rate it led to. P6 mainly played PvP when extrinsic rewards such as time-limited event rewards were available. P4 had negative feelings and had even lost sleep after a bad performance in PvP. P2 also reported frustration after unsuccessful PvP sessions. P4 often found himself chasing a feeling

of success at the end of a bad session in order to alleviate the negative feelings. After a bad performance P4 often spent time trying to find ways to improve, turning the negative experience into a challenge. Similarly, P5 described a market crash in the in-game economy that caused his investments to lose value as an initially negative experience that he later reinterpreted as a challenge to adapt to a change in the environment.

5.2.2 Perceived Competence Amplified by Constant Improvement

Learning and improving was motivating all participants in the study, as already indicated by some of the experiences discussed. All participants described enjoyable experiences of learning from the time when they first started to play the game, but especially P4, P5 and P7, who performed at the highest level of the game in their respective areas, still enjoyed improving and optimizing their gameplay.

In the beginning it was mostly about leveling up and playing the story in different quests. And that way I guess I learned more about the ESO lore. And that's where the role-playing started. And through role-playing I began furnishing houses because that way I could create really good locations where I could then role-play. (P6)

There's a new addon for PvP that tells your win rates and K/D-r's and such in BGs, so I downloaded that. I try to improve my numbers, and I like creating builds a lot. [...] I try to create the best possible builds and usually it's a lot of... a lot of hours go into that. (P4)

All participants mentioned enjoyable experiences related to developing a character, although P1 additionally noted that acquiring certain character skills such as the Psijic skill line also required completing tedious and repetitive quests that he did not enjoy. P1, P3, P5 and P6 were mostly interested in early development of characters and making them good enough for certain activities, although P3 and P5 also talked about collecting virtual resources such as crafting motifs and in-game gold for their characters. P2, P4 and P7 were more interested in constantly optimizing their characters and gaining competitive advantage by testing different skill and gear setups and finding the best solutions for certain activities.

A new trial comes out, and you know your old setups aren't really working, you have to figure out something new. And I started like optimizing all kinds of little things, trying to get as much damage mitigation as possible. (P7)

For P2, P4 and P7, mastering the game mechanics related to the combat system was another possible source of competitive advantage. They all enjoyed learning and utilizing combat related skills and regarded the combat system as the most interesting part of ESO as a game.

The trading-focused P5 had also gone through a phase where he enjoyed developing skills related to PvP combat but mostly talked about the mechanics related to the in-game market in a similar way as the combat-focused participants about their interests. In his view, the trading system was what made ESO more interesting than other games with different game design in this area.

Over time, I found out that I'm just really interested in how the market in this game works. And therefore, I decided to, like, put more effort into that and learned a lot. And there were several patches back then where I thought, OK, they will change this, maybe this item will be very interesting to buy then or, like, to buy beforehand because it will increase in price maybe in a few months or after the patch. And then I got more and more into the market and into the trading. And I just developed a whole understanding of the whole market in ESO. (P5)

For P1, the card game Tale of Tributes that could be played inside the main game was more interesting to master, since he felt that it was simpler and more transparent compared to learning all the intricacies of combat, where many variables affecting the end result were not explicit.

I can see the cards the other player picks, and I can learn from them all the time. Unlike in the main game, I'm not able to perceive what actions the other player continuously takes that make them play so much better. Feels like the learning does not happen while playing but should somehow be done outside of it. (P1)

P1 was also reluctant to spend time figuring out the best combinations of the hundreds of item sets in the game, while for P2, P4 and P7 this was one of the most enjoyable aspects of the game. While P2 and P6 felt that the gear had mainly extrinsic value and that they completed the content only to collect the rewards, P4 also enjoyed the process of collecting the gear.

In a way I partly played the game for PvP. That means playing PvE to get better armor or better gear. Or to collect some currency or material for something. (P2)

I played WoW back in 2004–2005, and gear grind was the reason I played it, because it feels good to make the character stronger. It's a basic RPG element actually. That's what I like [in ESO] too. (P4)

As quoted earlier, P6 stated that gaining knowledge about the lore related to the game world motivated her to start role-playing. P1, on the other hand, commented that becoming more familiar with the game world decreased the sense of immersion and motivation for adventuring as the game world did not feel as vast anymore. P2, P5 and P6 found feelings of comfort and enjoyment in being very familiar with the game.

I feel very safe in the game because I basically know more or less everything about it. And at least the most aspects which I take part. (P5)

In addition to improving their own gameplay, P3, P4 and P5 were also driven by goals related to developing a community. These efforts also involved an element of relatedness which is discussed further in Section 5.3.2 of this thesis. Similarly, progression and improvement of skills and characters were often experienced together with other players as expressed by P1, P3, P5, P6 and P7. For P4, the community he wanted to nurture existed outside of the game world since he was streaming his gameplay on a separate platform. P7 also created game-related content online and mentioned it as the main driver for their in-game activity, but he was more motivated by spreading information than growing his channel. Guild leaders P3 and P5 listed developing their in-game guilds as key a motivator. P5 ran several trading focused guilds and sought to improve both trading related and social aspects of the guilds. He stated that he was happy with the community he had built and wanted to maintain it even if it took a lot of effort and set some restrictions for his in-game activity. P3 also felt that in certain situations running a guild involved negative emotions and difficult decisions but that making a positive impact for other players made it worthwhile.

Especially in the beginning when I wasn't used to it, even though I did everything right in my own view and still got all that criticism and talking behind my back and stalking in social media, it was very weird. And it felt bad, and a lot of times I thought about why do I play this and why do I do this. But when I think about the positive side and that I create this kind of safe community for everyone it helps me endure. (P3)

Related to these experiences, P3 felt that in-game experiences taught her something that could be transferred to real life:

It strengthened my self and my leadership qualities. The self-confidence that this gives... everyone should lead a guild and be subject to criticism... or a community of some kind. [...] You need to consciously strengthen [your persona] and decide what you allow and what you are able do. (P3)

Related to his area of interest, P5 observed that the in-game market works in a similar way as the real-world market and compared running a trading guild to running a company and facing competition. P2 felt that observing the community and culture in ESO was inspiring his artistic projects in real-life.

5.2.3 Competence Supported by Skill Utilization and a Sense of Pride

In addition to expanding their competence, all participants also enjoyed situations where they felt they could utilize their existing abilities. All participants described experiences of success related to cognitive tasks or problem-solving related to their own areas of interest in the game.

I felt that I played [Tales of Tribute] quite well. [...] For some reason that game was a good fit for me, a bit like a game of intelligence, also strongly involving luck but a lot of tactics too. (P1)

I really, really enjoy predicting how the market in the game will develop, and as well, like, check on different changes in the game like patches coming with different changes, and then thinking of which items might increase the price or lose price and basically investing in future items or disinvesting. (P5)

For P2, P4 and P7, enjoyable problem-solving was mainly related to gear setup optimization and combat system utilization. P6 talked about figuring out how to furnish houses while dealing with restrictions set by game design and the properties of certain in-game items. The social inclination of P3 was reflected in her efforts to make decisions based on logical reasoning for the benefit of the community and the excitement for solving problems in game content together with a group. Again, the participants valued the internal experience of success more than showing off their abilities. As reviewed in Section 5.1 of this thesis, the participants autonomously chose the game content they engaged in, but competence also played a role as they were looking to leverage their personal strengths. P6 discussed the relationship between learning new things and doing something she already felt skilled in:

Doing what I'm good at. That's what excites me more. Yeah, it's always nice to, like, create a new character and level it up, because in the beginning you get things so fast, and you get a lot of skill points and new skills, and it feels nice for a while. But then you go back to the roles that you feel you're good at. (P6)

P3 felt that she ended up leading a guild because she naturally had skills that it required, and P1 evaluated his interest in Tales of Tribute in a similar way. P5 described how his gameplay developed based on his perception of his skills as they were applied in the game:

It's not like I had the plan back in 2016 that I want to be the leader of a huge trading community, or I want to be the, I don't know, like, richest person in the whole game [...] It just developed over time simply because I felt that I got a [hang of] how to do this, how to build up a community, how to build up the finances within the game. (P5)

P7 also described the development of his gameplay from competing in PvE content on the highest level to educating people both in the game and on online platforms outside the game. His experience suggests that he not only steered towards content that required skills that he consciously knew he possessed, but his engagement in the game also revealed skills that he was previously unaware of or gave him self-confidence related to them:

Trying to be the best has always been there from the start. Educating people... uh, I don't know, has been there since I... since I realized I was, like, good enough for it. (P7)

P7 also noted that new content and changes to the game affect how well skills can be utilized. For him, changes that aim to level the playing field for players with different skill levels decreased motivation. Even though he observed that this was the general direction that the developers had taken, he felt that certain changes still enabled skill expression whether or not the developers wanted it, which still made it possible to autonomously choose skill-based activities in the changing environment.

In the multiplayer context, experiences related to competence were often also tied to relatedness. While already discussed in relation to competition between players, this was also evident in group play content as indicated by the experiences of P1, P2, P5 and P6. They enjoyed situations where they felt that they were skilled enough to contribute to the performance of a group.

It does affect you when you feel needed in the group. I don't know if I'd be too motivated to play for long in a group where I felt that the others are just carrying me. (P6)

P1 felt that being a part of the reason for success in sufficiently challenging group content was one of the best feelings that the game could provide. In addition to gravitating towards activities where their skills could be utilized, P1, P3 and P6 also avoided other activities because of a lack of self-efficacy. P3 remembered that in the very beginning, when the game was released, she gave up questing because it felt too difficult to continue alone. She also remembered being less excited about PvP in the past when she didn't feel skilled but got more into it after she developed her skills and found friends to play with. Recently P3 had been educating players about many different aspects of the game but still avoided subjects that were not her strong suit such as theory crafting and figuring out the best gear setups. P1 also avoided focusing on gear setups because he found the mechanics related to them difficult and uninteresting.

It's complicated in the way that you'd need to dig into it on forums and websites and do some research on it. Maybe if it was clearer [I'd be interested], but I also understand that for many people [the complexity] is what makes it so great for them. (P1)

P2, P4 and P7 were some of those “many people” referred to by P1 who enjoyed delving into the intricacies of the game mechanics. Their experience differed drastically from that of P1 even when they took part in similar content such as PvP combat. Despite the differences in interest and perceived skill, all of these participants seemed to be able to find experiences satisfying their need for competence in the game.

5.3 Relatedness

5.3.1 Maintaining and Establishing Connections in the Game Supports Relatedness

In the multiplayer environment of ESO many of the participants' experiences related to autonomy and competence (see Sections 5.1 and 5.2) were in some way related to other players. This was reflected in P1's thoughts about self-actualization:

I actualize myself and I actualize with others. Like when I have my own impression about my character and my playstyle, and I build my character and try to communicate my playstyle to others, both verbally and by playing. But how well it succeeds... when we play together, that's when it [is revealed]. (P2)

P4, P6 and P7 also described experiences that increased in value due to encounters in the game world. For P6 these included random interactions with players met via dungeon queues and guild chats, and satisfying social needs was an important reason for her to play. P4 and P7 both created game-related content online and consequently interacted with players also outside the game. Still, P7 felt that in-game interactions were more satisfying. P4 felt that he was not a socially inclined person and had a strong competitive drive, but even he valued social experiences highly:

A big part of my best ESO memories are from playing with other people. (P4)

For P4, these memories included some random encounters in PvP content but, more importantly, experiences shared with people he was in contact with also outside of ESO. P1, P2, P3, P6 and P7 all stated that real-world friends were involved in their decision to start playing the game in the first place, and for P1 real-world connections were still one of the main reasons for playing. P1 recognized that his commitment to the game had remained on a casual level partly because he had not made new social connections in the game. P2, P4, P5

and P6, on the other hand, talked about meeting new people as something they enjoyed in the game. P5 started playing alone but enjoyed making new friends in the game and eventually built a community consisting of thousands of players in several guilds.

[I] started with a new game and just kept learning and just exploring the game, going through all the zones to all the different kind of activities which the game offers. [I] found a lot of people to be friends in the game and play content together. And now in the last years, it just changed by simply, like, growing the community as, not like normal part of the community, but as a leader of a community, which obviously is just a different kind of perspective. (P5)

P1, P4, P6 and P7 felt that their experience was impacted negatively by losing in-game friends when their friends decided to quit ESO. P1 felt that the impact was big enough to cause a reduction in play time and to take breaks from the game, while the other three were less affected and found ways to compensate. This may be explained by the previously stated importance of playing with friends for P1, while the others may have had other important sources of need satisfaction. P4 and P6 felt that meeting new people in the game was helpful in these situations. Like P1, also P3 had experienced situations in the past where completing certain content required making connections.

In the beginning, when I wasn't a guild leader you just couldn't get into trials. There was a group of friends that you first had to get in to. And I don't like that, especially when I've entered many games as a new player, it's not nice to first have to get into [an inner circle] to be able to join these activities. (P3)

For P3, these experiences sparked motivation to build a community where all members had equal opportunities to participate in all content. P3 also wanted to create a safe environment for her community as she had experienced name calling and other toxic behaviour herself. While P1 was happy about his observation that there was less toxic behaviour in ESO than other games he had played, P4 and P6 talked about situations where other players deliberately tried to interrupt their activities and ruin their experience. According to Achterbosch et al. (2024), this type of behaviour, known as griefing, has a negative impact on the satisfaction of both autonomy and relatedness for the victims. For P3 and P4, however, standing up to bullies was a source of motivation that may have in part made up for the negative effects of getting bullied.

I don't want to give up because of these negative things. I want to continue because of the good things. (P3)

Adventuring as autonomous activity was already discussed in Section 5.1.3 of this thesis, but P1, P5 and P6 described experiences of shared adventuring that are a better fit in the category of relatedness satisfaction. In these situations, spending time with other people was valued by the players, while the game content mainly provided a context for a shared experience.

We had this group in which we were kind of coping with COVID by adventuring in The Elder Scrolls Online. [...] We didn't need to go to a bar which was at times a bit difficult anyway. We were able to pass time and at the same time kind of hang out with people. (P1)

Ballou et al. (2022) also recognized the potential of video games to substitute real-life need satisfaction during COVID. For P1, adventuring in the game was a way to share experiences with real-world friends, but P5 and P6 also valued similar experiences with people they met in the game.

5.3.2 From Getting to Giving: Support and Collaboration as Keys to Relatedness

P1, P2, P3, P5 and P6 all described enjoyable situations where they received help from other players. Most of these experiences were about getting support for tasks like quests and boss fights (P3, P6) or choosing gear for a character (P1). P3 and P5 also appreciated the help they got related to their duties as guild leaders. P3 felt that in one instance getting help from a more knowledgeable player changed the way she played the game in some ways since it made her enjoy PvP more:

We had one very skilled PvP player who basically at the time theory crafted everything related to the game, and they taught me all the tips and tricks. And it got me excited, that someone like that had taught me, and it motivated me. And then when you see that, wow, the two of us could handle those fifteen, oh wow, that was fun! (P3)

Interestingly, the competitive PvP and PvE players P4 and P7 did not talk about receiving help, as they enjoyed optimizing their gameplay and setups themselves. P1, who found the optimization uninteresting, felt that he may never have participated in PvP if it was not for others helping him get started with gear setups. P2, P3, P4, P5 and P7 all enjoyed giving advice and helping other players to a varying degree. P2 and P4 gave advice to players when engaged in their usual activities if someone asked for it. P5 enjoyed his status as an expert helping members in his community, which formed a big part of his daily gameplay:

I'm talking with members of the community and, like, different aspects, helping them to, I don't know, price items right. And generally, how content might be

done, et cetera. So, I'm happy to help there, but less by taking part in the content, more by giving tips how to do the content. (P5)

Also for P3 and P7, helping others was their main focus in the game. For P3 this meant guiding new players and making it easier for them to get started with game content while also writing guides online. P7 had shifted from score pushing in endgame PvE content into educating players as a content creator. The participants' experiences of helping others were mainly from the later stages of their history with the game, which is, of course, when they had accumulated more knowledge to be shared. This may have also involved an element of perceived competence as illustrated by the quote from P7 presented earlier, where he stated that he started educating people when he realized that he was good enough for it. Here is a description by P7 of how he felt about giving advice:

You have like a hobby that you're super focused on. You want to, like, talk about it a lot with other people. So, when there's someone interested in, like... someone who wants to talk about it, you just dump info on them, you know. (P7)

P3, P4, P5, P7, and in the past also P6, spent a fair share of their time in the game working for the communities they were involved with. P4 and P7 were creating content, and the others were running in-game guilds. As discussed in Section 5.1.1 of this thesis, the participants enjoyed these activities even though they were limiting their possibilities to engage in other game content as they had autonomously assumed these roles in the community. An exception was P6 who had consequently given up her role as a guild leader. Most of the goals set by P3, P4, P5 and P7 were also related to helping others and, as discussed in Section 5.2.2 developing their communities, satisfying their need for competence when reaching these goals. This suggests that these players may be able to satisfy all three of their basic needs while helping others. P3, when asked what excites her the most in the game:

Things in the game itself don't really excite me, and I'd say if I was playing without a community, without being a guild leader, it may be that I wouldn't play the game at the moment because it doesn't excite me in itself that much. So, it's the community and organizing things and such. (P3)

P3, P5, P6 and P7 also felt that they were happy to celebrate other players' success or share their joy in the game. For P3, the happiness she felt when guiding new players through group content was comparable to when she completed the achievement for the first time herself, even when the content was very low in difficulty. P7 had similar experiences when guiding beginners through trials:

It was so, so fun, looking at them experience these things for the first time [...] Hel Ra and Aetherian Archive [are so] boring, at least to me by now. They're like trials that are being done literally in six minutes by score pushing teams. And it was so funny to see like, you know, completely new players just in awe at simple things like the... the gargoyle pull in Hel Ra or like, yeah, those kind of like small things that I've grown desensitized to. (P7)

While personal in-game goals have already been discussed, all participants also mentioned goals that they shared with other players or a group. P1, P3, P5, P6 and P7 described experiences of progressing or learning together with others. The experiences were related to various game content and goals. P5, for example, first got into trading after setting up a trading guild with a group of friends. P6 was more motivated to complete dungeons on veteran difficulty after finding a nice group to do it in. P7 had shared most of his progression with the same players:

When I was like 160 CP I joined the first trial group. I was doing normal trials and then moving on to vets, yeah, slowly progressing [...] and two people from that very beginning group I found at 160 CP were still with me when I was doing my first Blackrose Prison world record, and one of them is still playing in score pusher groups with me. (P7)

Since many of the goals set by the participants and many experiences of progression in the game involved other players, it would be interesting to further study if the satisfaction of relatedness has a moderating effect on game progression. Fitting this suggestion was the lack of goals experienced by P1 when he was also lacking in-game friends. However, P4 had a considerable number of achievements in the game even though he emphasized his personal competitiveness a lot more than the social aspect of progression.

While personal success as a team member was discussed in Section 5.2.3 of this thesis, situations where success of the team as whole mattered more were described by P1, P3, P5 and P6. These experiences were, again, somewhat related to competence but may have contributed more to the satisfaction of the need for relatedness.

A single battle where we, for example, strike with a smaller group by a bit of a surprise, and everyone's actions are synchronized, and we succeed. I heal just the right amount and do damage and someone else uses their ult. And we manage to kill those who were just about to kill us. Those [situations], of course, always give the best [feelings], when we're able to turn the tables. (P1)

P1 compared this kind of successful group play to shared experiences of success in team sports. P5 had experienced similar feelings in successful groups and observed that mutual success was important also for many other players. P6 described role-playing as a group

effort where all players needed to follow certain rules to succeed, which then led to the most pleasurable role-playing experiences. She also recognized negative feelings of missing out when her guild mates succeeded as a group. P3 talked about a group effort to complete a new trial:

We spent a month at the Mantikora, and then we cleared that first boss. It was such a good feeling, and not many groups had cleared the whole trial at the time. It was such a huge motivation as we improved as a group, and you could see the progress, and then when you clear it, it just motivates you more and gets you addicted. (P3)

In group activities, the participants often got feedback from others. P1 and P4 had experiences where feedback had an extrinsic quality with informational functional significance, where compliments on their skills or actions supported their perceived competence. However, P6 and P7 described situations where feedback had an effect on the need for relatedness. P7 felt that the feelings evoked by positive feedback when educating players by creating social media content did not compare to the experience of guiding players in the game and interacting in real-time. For P6, the nature of the feedback received affected how she felt about playing with the person in the future:

Positive feedback is, of course, always nice. And when someone is really negative, sometimes you wonder if they're having a bad day or why are they being so negative, so you don't always take it to heart. But it can have an effect, like maybe I won't invite that person to look at my house next time. (P6)

Competition in the game is also related to other players by definition. P4 and P7 were striving for top positions on leaderboards and P5 in in-game wealth and trading success. This made them part of a very limited group of high-performance players, to which they related even if the activity itself was solo PvE content such as score pushing in the Infinite Archives by P4. P5 felt that, similarly to real-life companies, his trading guilds are positioned in the market having allies and being in good terms with some competitors while in worse terms with others. P3, on the other hand, did not want to compete with other guilds and preferred focusing on doing things her own way in her guild. P1 and P2 felt that competing against players in PvP was more exciting than PvE content and, at times, even too exciting for comfort.

In Tales of Tribute, it took quite a long time before I started [playing against players], but when I did, then I only played against people because it was a lot more fun. But there's always some anxiety in the beginning, maybe because it's not fun to lose. (P1)

In the same way as adventuring, competitive play may also provide a context for social interaction where relatedness satisfaction seemed to be the primary goal (P1, P4, P5). P1 had initially enjoyed adventuring together as the background activity when connecting with friends but as he became more familiar with the game world, he felt that group PvP still provided the excitement that adventuring had lost. P4 was often engaged in solo activities but still felt that some of his best memories were from collaborative content. P4 and P7 also felt that they were sometimes unable to engage in some endgame content that they would otherwise be interested in because they didn't have a suitable group for it.

5.3.3 Finding a Role in the Community as a Source of Satisfaction and Frustration

Activities in ESO may feel immersive as discussed by P1 and P6 regarding adventuring in the game world. Still, all participants were in some ways also conscious about their role and position in the community of the game as a whole. As mentioned, for P4, P5 and P7 this meant belonging to a group of top performers in their respective activities. P6 had been a part of the role-playing community that had its own set of rules within the game. P3 discussed how she wanted to shape the community that she led and how that community related to others in the game. P3, P4 and P7 were also creating content on online platforms outside of the game. P2 summarized his perception of the structure of the ESO community:

The community, when you play ESO, in some sense equals all players of ESO. Then again, inside of that can be [guilds]. And then we have our group of friends, and then small encounters, small groups and constant human encounters that make it meaningful. (P2)

Many of the participants' experiences reviewed here have in part determined the positions that the players had ended up in within this structure, with each player also making their own impact on the organic development of the structure. As the community is interacting both in a multiplayer environment in the game and on several online platforms outside of it, players are also inspired by each other as illustrated by the experiences of P2, P3 and P4. P2 admired certain playstyles and certain types of conduct in the game, which also affected his own gameplay. This indicates a process of internalization as defined by OIT. P3 and P4 described situations where they had been challenged by other players, which affected their choice of activities. P3 talked about an interaction that had an impact on her decision to start organizing casual events:

At the time I wasn't doing any overland content or any easy stuff at all. We had someone in our guild lead who always wanted to find all the loopholes and

challenge me, like “we’re a casual guild, shouldn’t we do something a bit more casual too?” And that’s how I started thinking about these things and do them myself. (P3)

Dindar (2008) argued that MMORPGs provide a context for extrinsically motivated status-seeking behaviour, but some experiences of the participants in this study indicate that this type of behaviour may also have other more intrinsic purposes. P3 felt that customizing a character using rewards from certain achievements connected her to other players who shared a similar experience in the game. P6 saw positive feedback and compliments less as a direct measure of status and more as invitations to polite and positive interaction that sometimes sparked long-lasting relationships. P5 felt that the expert status he had established enabled him to help other players, which he found enjoyable in itself. However, all three participants also recognized the extrinsic value of such experiences.

In addition to connecting with other players, P2, P4, P5, P6 and P7 also enjoyed feelings of relatedness to the game world. For P4, P5 and P6, their history with other games in The Elder Scrolls series affected their decision to start playing ESO and the enjoyability of their experience especially in the beginning. On the contrary, P7 felt that he couldn’t relate to the players of earlier games in the series as he had not played them. For P6, intriguing stories and visual beauty enhanced immersion and drew her into the game world. P1, on the other hand, was not interested in story related content as he felt the story was not relatable mainly because it was lacking coherence. As SDT explains immersion in video games as a constant flow of need satisfaction, for P1 the perceived lack of coherence in the story may have interrupted this flow. P7 felt that some later additions to the game had made the game world more enjoyable:

Tales of Tribute is a good addition because it kind of makes the world feel more alive. Because you don't have to, like, engage with all of that. Like I don't have to touch the card game or fishing for it to make the world feel more alive. (P7)

While relatedness usually involves other people, Ryan & Deci (2017) stated that players may also find NPCs relatable. Such experiences were not expressed by the participants in this study, but P1, P2 and P6 talked about their relation to their own characters in the game. As a role-player P6 put a lot of thought into the background of her characters and customized them accordingly. P1 enjoyed customizing a house to fit the style of his avatar, or what he referred to as a game character version of himself. Similarly, P2 felt a deep connection to his characters that in a sense seemed to mediate the virtual experience for him:

You customize the appearance and all the skills and the playstyle [...] They are absolute creations. When you have played more and you have a high-level character with good gear, it's very much your creation. There are aspects that you have customized yourself [...] and it's getting pounded on and you're just looking at it when the character you customized is getting beat up. (P2)

While P2 found the game world and his characters in ESO relatable, from a wider perspective he felt that one reason for playing the game was that being a gamer was a part of his identity. P1 felt the opposite way.

It's one of those cultural reference points, relating to that kind of a peer group. [...] People in it talk about things that resonate with me and in a way that I can understand and that I find interesting. Maybe I relate to it based on values too. (P2)

My perception of myself is that I'm not some kind of a gamer. Even if [the subscription fee] was just ten Euros a month, I'm not going to pay for something that doesn't fit my self-perception, if that makes sense. And I also feel like I wouldn't spend that much time on it anyway, so it feels like a waste of money. (P1)

Situations where relating to in-game communities was difficult were recognized by P3, P6 and P7. All three talked about leaving a group or a community or refusing to join one under certain circumstances. P6 felt that she always had the possibility to choose another group or guild when she felt uncomfortable in one. For P7, on the other hand, this was not always possible as he wanted to share footage of his gameplay online and of the limited number of endgame groups not all allowed it. P3, who had shaped a community based on her personal values, found that it affected not only the way she played ESO but also other communities she was a part of:

If it feels horrible, I can't stay. And when there's a new game release, I rarely find a community where I know that things are handled in a neutral and fair way and that they have the courage to make decisions, so usually I set up my own server or create my own small community in the game for a while. (P3)

For P3, it was important that a community has clear rules that all members follow. P6 felt that role-playing also required certain rules and that the experience was usually enjoyable when everyone followed the rules. P6 did rather not play with people who didn't stick to the rules or behaved badly. From a different perspective, P1 experienced that some content had implicit rules that he may not know or be able to follow. The fear of playing in a socially unaccepted way made him avoid certain content:

I've always had a certain feeling of inferiority, because the mechanics interest me so little that I may have played the healer role wrong in some way. So, I haven't joined any trials or anything because I feel like I should be more interested in it, know more specifically what I'm doing, keep buffing all the time and such. And I just play one style that I've kind of tried to master. (P1)

P1 also felt that updates and changes made to the game added to the complexity as he would need to stay updated about, for example, gear effects that were not explicitly revealed to the player in the first place. While P4 and P7 enjoyed optimizing their builds, they also disagreed with some decisions made by the game developers that affected the way they wanted to play the game. P2 had even stronger grievances towards the developers:

It would be cooler to be an ESO player if all the developers weren't such fucking slipper heroes! (P2)

P2 experienced that the community-facing representatives of the game developers had very different views about the game and the community than he did. While having difficulties to relate to the developers, P2 felt that his opinions were shared by many others in the ESO community. While such tension between the players and developers seems negative, in the case of P2 there may have also been positive effects as it strengthened his perceived relatedness to the part of the community that held similar opinions. Still, P2 felt that the ESO representatives' style of communication had a negative impact on his motivation to play. P1 also experienced frustration because of a lack of communication from the developers.

5.4 Non-Intrinsic Motivation

5.4.1 Extrinsic Motivation: The Importance of Informational Significance

All participants had engaged in activities where extrinsic rewards made a significant contribution to their motivation. Again, the described experiences were complex and often also involved the satisfaction of one or several of the three psychological needs. P2, P4 and P6 enjoyed the process of grinding for rewards that supported their other goals. Getting rewarded with gear that made their characters more powerful for P2 and P4 seemed to involve competence support in addition to the reward itself. P6 completed PvE content to collect reward furniture. Additional furniture choices perhaps supported her autonomy in housing activities but engaging in the content also made her feel related to others in a similar situation:

I had to complete the Sunspire trial to collect the first door in the game that can actually be opened. [...] There are also other helpless housing players who have never completed trials and who make the attempt just to collect a door. I think it's really fun. (P6)

P3 felt that, for example, outfit colours that were rewarded for achievements made her part of the group that had completed the challenge. This also seemed to have informational functional significance about her competence, and wearing the colours was simultaneously an expression of status. P1 was interested in activities that rewarded more powerful decks of cards for the card game he played. He also enjoyed autonomously selecting goals that involved extrinsic rewards with very little effects on his gameplay, like collecting a mount that he did not even end up using:

A new patch is released, and things change. What [kind of a build] do you need to have for it to be maxed out... I haven't been interested in that, so I've spent my time on other things, and I've... I feel like... I don't know if anyone else I've played with has gotten the Ebon Dwarven Wolf, but... At least not many people... If anyone... So, I guess that has been my thing then... "I'm trying to farm this. I'm not interested in that stuff, I'm doing this thing." (P1)

P5 focused on trading to collect in-game gold, which is an extrinsic reward, but he mainly used it to support his trading guilds by buying better trading spots in auctions. He felt that the underlying motivation was competition and performing better than other traders and running a better performing trading community than others. The amount of gold gained thus provided informational functional significance as a measure of success. From an SDT perspective, competitive behaviour is often related to introjected regulation and ego involvement. While the more competitive participants also felt that the internal feeling of success is more important than the perceptions of others, P4 discussed the relation between the two:

When you know you're number one in something, that's more important than other people knowing it. But they go hand in hand, I think, when the leaderboard is like it's supposed to be. Because then other people know, and it's also the only way for you to know it yourself. You can tell yourself that you're really good at something, but if there's no statistics, it's hard to believe it. Although, if you're competing, a certain part of it is of course ego, that you need to tell yourself that you're the best at what you do even if there's no statistics. (P4)

P4 also said that he usually steers away from content where the leaderboard does not reflect actual skill, and as an example said that the Cyrodiil leaderboards are based more on the amount of time spent playing than competitive success. For P4, some leaderboards thus seemed to represent controlling significance which led to him choosing activities where the

leaderboards offered informational significance instead. Collecting reward items also seemed to have informational significance related to competence for P4:

I like to build collections and try to get all the outfit styles and such. [...] And same thing with gear, when there is the sticker book it's nice to collect the sets there and it in a way adds to the value of your account. And that's also competitive, when you think about who has the most valuable ESO account. That's also something I think about every now and then, how do I make my account the best it can be. (P4)

P3 and P4 reported that they had abandoned some activities they used to be engaged in because the rewards no longer felt sufficient. P1 and P6 also reported negative feelings related to collecting rewards. P1 was discouraged to develop the Psijic skill line for his characters as he felt that it was locked behind a tedious questline. He also had mixed feelings about time-limited events as he did not want to change his real-life schedule but disliked missing out on rewards. P4, P5, P6 and P7 had more positive feelings about these events and the related rewards as they gave them a reason to engage in content that they otherwise neglected and, from their perspective, required relatively low effort. In addition to scheduled events, ESO also includes time-limited daily quests. P6 seemed to exhibit external regulation when completing daily crafting quests routinely even though she did not enjoy them:

[Crafting dailies] have remained as a routine. I still do them automatically when I log in. But then again, it's just needless use of time. It feels like work and that's why I don't like them. But I do them anyway because I get some rewards out of it. (P6)

P7 felt that social pressure from the groups he was committed to was a big reason for playing, and that he might have quit without it. As one of very few players able to fulfil his role in top performing teams he felt that his position caused both positive and negative effects, highlighting both social pressure and informational significance related to competence:

You know, it strokes the ego, when you're so important. [...] It's both problematic, because I feel more pressure to show up every time, like I don't... I can't really, like, take that day off. At the same time, it's... it feels good to be like... it feels good to be this important. (P7)

Social pressure and solidarity towards his friends caused P1, according to him, to sometimes play even when he didn't enjoy it but others were more enthusiastic. Interpreted in terms of OIT, it seems that his regulation was introjected when he joined dungeon raids that felt unimportant for him but exciting for his friends. The opinions of others also affected P1, P4, P6 and P7 in the form of feedback as reviewed in Section 5.3.2 of this thesis. As predicted by

CET, the positive experiences these players described related to feedback involved a competence supporting informational significance. P1, who still mainly played as a healer, described an experience from when he first started the game:

It really stuck in my mind, in the very beginning, when we played some dungeon in a group and I was doing the duties of a healer, and [a friend] complimented that I'm really good at the job. "A really good healer", he said. (P1)

Enjoyable feelings related to positive feedback may also be connected to the expression of status that all participants had some experience of. All participants recognized that behaviour such as showing off rewards has an extrinsic quality, even though they felt that their own feeling about the achievement related to the reward mattered more. CET could explain this with functional significance, while from an OIT perspective the behaviour could indicate efforts to internalize the values of a group that the players belonged or wished to belong to. The data in this study are insufficient for conclusions related to the causes of the described behaviour but offer suggestions for further research.

Outside of in-game activities, P1 mentioned that the decision to start playing ESO in the first place was affected by real-money savings. He was unsure whether the base game was completely free at the time but remembered that saving money had an impact. Also not directly related to in-game activities, P1, P2, P3, P5 and P7 felt that the service and decisions by the game developers affected their motivation. P3 and P7 both mentioned update 35 affecting their experience negatively. For P3 the update made certain group activities that she and her community enjoyed no longer possible, and P7 lost many friends with whom he played as they, according to P7, quit because of the changes. P5 was frustrated because he felt that his goal of running trading guilds sustainably only using their profits could not be reached because the design of micro-transactions enabled unfair competition:

Not sure if it is possible because the market got more and more difficult and the gold stream sources for competitors got easier and easier to... be able to, like, buy crowns and sell them for gold and finance the trading guilds by basically unfair methods. (P5)

P7 enjoyed the fact that there were recurring opportunities to obtain most items in the game, as he felt that other games he had played exploited players' fear of missing out more. While P7 was happy about a less controlling and more autonomy supporting approach compared to other games, P1 had more negative feelings. P1 felt that the system for acquiring rewards in special events was complicated and not clearly communicated, and he had taken breaks from

the game because of the frustration related to this. P2, who had quit the game, based their final decision to leave on a bad experience related to customer service as his request to unlock a feature for his account was denied:

It didn't feel worth it. I had played for three and a half years and paid them quite a bit every month. And I tried to thoroughly explain my issue and hoped that it wouldn't lead to a mechanical reply. [...] I felt that the game was in a way gaslighting me, by mistake, like "you haven't played enough" when I already had thoughts that I had played a bit too much. (P2)

P2, who was worried about the game taking time and focus away from his real-life projects, thus experienced the automatic reply from customer service as controlling, seemingly causing autonomy frustration. He was also unhappy with how the game developers' representatives treated the part of the community he felt related to.

[They have] soft PR-people who know nothing about developing the game or its mechanics. And the game is continuously catering to new players, patronizing and infantilizing the new players. It gives the impression that someone has calculated the costs that if we get enough new players every year, we don't have to care about the long-term gripes bothering the old players and it's acceptable to lose some if new players come in. (P2)

P2 also felt that the developers tried to coerce players like him to an overly positive conduct even though he felt that the slight toxicity, as he described it, in the PvP community should be accepted as a part of the culture.

5.4.2 Other Aspects of Motivation: Routines and Passing Time Unexplained by SDT

SDT depicts humans as autonomous organisms constantly striving to utilize and expand their competence and relate to others in their environment (Ryan & Deci, 2017). Most of the experiences described by the participants could be attributed to this kind of behaviour and the satisfaction of the three basic needs. However, P3, P4, P5 and P6 described routines in their gameplay that did not cause feelings or grant desirable rewards. The players could not find explanations for these activities except for the routines they had developed.

I don't think about it much when I'm doing something like writs or endeavors. It's just routine. (P4)

Every day I end up doing the card game, Tales of Tribute. But it's not like I want some leads for a character. I've already collected everything. (P3)

An argument could be made that P4 was extrinsically motivated by the rewards of the daily quests even though he does not mention them. P3, on the other hand, explicitly states that the

rewards did not interest her. Perhaps the card game routine was motivated by the satisfaction of the need for autonomy but, in that case, what could not be attributed to autonomy satisfaction? Accounting the history of SDT, Ryan & Deci (2017) explain that the theory took an organismic view in response to the behaviorist paradigm that explained all human actions as learned responses to corresponding stimuli. Again, most player activity can be explained by SDT, but perhaps these routines are better explained by learned responses than autonomous organismic activity. Expanding from specific activities to the game as a whole, P1 felt that he had been routinely logging in to the game for four years without being particularly motivated:

I somehow feel like I've never been too excited about that game. And I've still spent a lot of time on it that I could have spent on something else, but it has been more about just killing time. Maybe a new way of passing time, as I don't always feel like watching some series. (P1)

P2 and P6 also felt that one reason for playing was just passing time. Again, SDT based explanations would be far-fetched. OIT does define the concept of amotivation, which would mean that the person has no intention of engaging in an activity. Clearly P1 had intentionally logged in repeatedly for a long time even when not experiencing significant amounts of excitement or need satisfaction. It could be speculated whether attributing an activity to passing time indicates avoidance of need frustration caused by alternative activities, but the data in this study do not suggest such an explanation. Again, routines formed by learned responses could offer a more fitting explanation.

It should also be mentioned that of the seven participants P2 had been worried about spending too much time on the game and P3 felt that she had at some point been addicted. SDT offers the need density hypothesis as an explanation of video game overuse. However, neither participant analysed these experiences more specifically as they were not central to this study and are already covered extensively in prior research.

6 Discussion

This thesis focused on how experienced players are intrinsically motivated to continue playing an MMORPG and how focusing on different activities in the game is reflected in their motivation. The qualitative empirical research aimed to find concepts that explain intrinsic motivation in a narrowly defined case. The data were collected by interviewing experienced players of *The Elder Scrolls Online* focused on different in-game activities. The data were analysed by grouping the emerging concepts into themes using the Gioia method (Gioia et al., 2013). The themes were then evaluated from the perspective of SDT to connect the player experiences to a theoretical framework explaining intrinsic motivation and consequently to a wider pool of academic research. The data structure resulting from the analysis is presented in Appendix 3.

6.1 Key Findings

The majority of experiences related to motivation discovered in the interview data could ultimately be placed under the three basic psychological needs defined by SDT: autonomy, competence and relatedness. All participants described several experiences related to all three needs even before they were introduced to the concepts of the theoretical framework in the semi-structured interview. In fact, many experiences involved two or all three needs contributing to intrinsic motivation and in some cases even additional elements of extrinsic motivation. The categorization of the results was thus subject to interpretation, but the framework provided solid grounds for analysing the complex subjective phenomena. SDT as a widely used framework connects the results to prior research, but the categorization would most likely remain quite similar if competence, relatedness and autonomy were replaced with the motivational categories of achievement, social and immersion, respectively, as defined by Yee (2006).

Differences between the participants emerged especially in how they emphasized experiences related to the need for competence compared to experiences related to the need for relatedness. The need for autonomy, on the other hand, was more consistently present for all participants. Then again, the freedom to choose activities did not always lead to motivation by itself, since loss of motivation due to a lack of goals was also reported. The findings thus suggest that autonomy satisfaction might act as a necessary but not sufficient factor in motivating these experienced players, and that its importance stays relatively constant

between players. While the needs for competence and relatedness were both present for all, the participants could be placed on a continuum between the two in terms of the emphasis they put on each need. The suggested interaction between the three needs is presented in Figure 3. The participants were placed on the continuum based on the authors interpretation of their experiences. For example, P4 consistently brought up competitive activities even when asked about social play. P7 did talk about social activities, but they were mostly centred around skill-based game content. P6 mainly played for social reasons and seemed reluctant to join any competitive activities, and for P3 experiences of competence satisfaction were mainly related to helping other players while relatedness seemed to be the primary need.

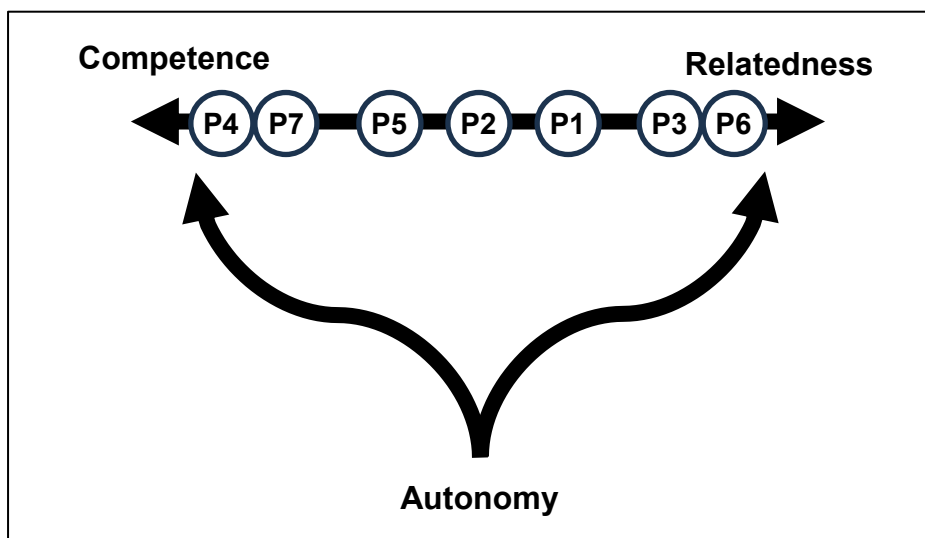


Figure 3. The autonomous selection of activities to satisfy different needs.

P1: Casual all-around player, P2: PvP focused player (quit), P3: Social guild leader, P4: Competitive PvP player, P5: Trader / Trade community leader, P6: Housing player / Role-player, P7: PvE endgame score pusher.

While the placement of each participant on the continuum in Figure 3 is not based on quantitative data, the in-depth interviews provided rich data for interpretation of differences between the needs for competence and relatedness. There were differences between the ways that the need for autonomy was satisfied between participants, but the importance of this need was more difficult to distinguish between participants than that of the other two. Again, it should be stressed that all participants still expressed all three needs even though the emphasis clearly differed. The sample size is small but, coincidentally, both participants furthest in the relatedness end of the continuum were female. This is in line with the meta-analysis of Martucci et al. (2023) stating that male players are more drawn towards competitive aspects of games while females value social aspects more.

The participants represented players with different areas of focus within the game in order to analyse how this is reflected in intrinsic motivation. In this regard the basic psychological needs, while helpful in the categorization of experiences, did not differ significantly between the participants. It seemed that players were able to satisfy their need for competence, for instance, by optimizing their performance in game content (P7), engaging in combat with other players (P4), succeeding in trading of virtual assets (P5), and in several other activities offered by the game. The need for relatedness could also be satisfied in a multitude of ways both in the game world and on game-related online platforms outside of it. In an optimal scenario, the game enabled players to autonomously select the most satisfying activities without imposing excessive control or too strict guidance. The data suggest that this autonomy then led to participants developing their expertise in the game modes or specific activities of their choosing. In some cases, this was supported by game design choices but was a sum of coincidences following participants' own actions in others. Autonomy thwarting, for example by undesirable changes made to the game or a controlling approach in game design or service, affected motivation negatively, as predicted by SDT (Ryan & Deci, 2017).

The sample in this study only included experienced players, but the interviews also touched upon their earlier experiences reaching up to more than ten years prior. While others were unable to discern a pattern in their history with ESO, several players (P1, P3, P5 and P7) stated that their main interest had roughly shifted first from adventuring into improving and later into the social aspects of the game. Autonomy-related experiences of adventuring and exploration surfaced more in their memories of the beginning of their journey, leading to a desire for competence satisfaction through, for example, learning and character development. Deeper commitment to communities both in the game and outside of it happened in the later stages of their involvement with the game. While inconclusive and subject to interpretation due to the design of this study, the data provide interesting clues towards a pattern in the order in which the basic psychological needs are sought to be satisfied. For a new player, the game should provide the freedom to explore while gradually introducing experiences of increasing competence. While some players may value the social aspects of the game from the beginning, the experiences of the participants in this study suggest that the need for relatedness gains importance at a later stage of the player's journey. P3, P5 and P7 had ended up spending most of their time helping other players within their community, and they seemed to be able to fulfil all three of their basic psychological needs this way.

6.2 Theoretical Contribution

The aim of this study was to explore individual players' experiences using methods that enable the detection of details that remain indistinguishable for quantitative research. The detailed experiences were then viewed in the context of SDT, which aims to be a universal theory at a very general level of human activity. One of the reasons for using SDT as a framework was its wide adoption in both research and industry (Tyack & Mekler, 2024). This allowed interpreting the findings of this study from a similar viewpoint as many others. While the needs for autonomy, competence and relatedness are often presented as equal and interrelated, the experiences of the participants in this study suggest alternative views.

First, the need for autonomy was more consistently present for all participants, while the needs for competence and relatedness varied more across participants. This is not clearly explained by Ryan & Deci (2017). A possible interpretation of the findings in this study could be that the needs for competence and relatedness are acting as a secondary layer on top of autonomy satisfaction. Autonomy as a necessary but not sufficient experience would thus lead to a search for satisfaction in the other two needs as illustrated in Figure 3. From the perspective of the motivational categories defined by Yee (2006), the suggestion made here could also be helpful in interpreting the differences in, for example, game progression between groups with social and achievement motives found by Billieux et al. (2013). The data collected in this study are insufficient to verify this interpretation, but the proposition can be tested in future research.

Second, several participants described a similar pattern of need satisfaction in their game progression. The pattern suggests that the need of autonomy weighs more heavily in the beginning, followed by the growing need for competence, while the need for relatedness is the last of the three to gain importance. This is also not explained by Ryan & Deci (2017). Again, the pattern suggested here is highly interpretative and based on a small sample, but also effortlessly testable in other studies with different designs. While many studies provide a snapshot of gaming motivation, changes in motivation throughout the engagement in a game are less studied (Kahraman & Kazançoğlu, 2023). The pattern suggested by the data in this study could serve as a starting point for such research.

The explorative nature of this study required not only interpretation of participants' experiences but also interpretation of the theory. While reviewing the paradigmatic status of SDT in gaming, Tyack & Mekler (2024) also pointed out that the literature is lacking a

critical viewpoint towards the framework. As SDT aims to stretch itself to cover all forms of human activity, it seems evident that most experiences can be interpreted as attempts to satisfy the three psychological needs. Events that are not easily explained by this search for satisfaction (i.e. extrinsic motivation) are recycled into the satisfaction of basic needs through the concept of functional significance, which adds yet another layer of interpretation. To defend itself from attempts to introduce additional needs outside of autonomy, competence and relatedness, the theory sets six strict criteria for the candidate needs to fulfil (Ryan & Deci, 2017, pp. 250–252). SDT has been developed for decades with additional mini-theories adding to its universal reach, and yet it allows for operationalisation and verification of its propositions as shown in numerous studies summarized by Ryan & Deci (2017). However, it should be questioned whether all additions to the theory serve the purpose of falsifiability to make SDT more rigid, or if they may be viewed as ad hoc adjustments to a theory becoming immune to falsification as warned by Karl Popper (Caldwell, 1991). In this study specifically, questions were raised about whether SDT provides valid explanations for following unexciting routines or just passing time.

6.3 Practical Implications

The research design consisting of a small sample and in-depth interviews should be considered when evaluating the practical implications of this study. The broader patterns described in Section 7.1 of this thesis serve more as suggestions for future research and are not yet backed by sufficient evidence for practical application. However, the rich descriptions of player experiences (see also Appendix 3) may be of value to MMORPG developers. Game design guidelines based on the data are discussed here and summarized in Table 2.

Table 2. Game design guidelines based on the interview data.

Source of Motivation	How to Support	What to Avoid
Autonomy	Allow personal goal setting Provide several paths to goals Provide new content for exploration	Controlling communication Promoting social pressure Repetitive obligatory content
Competence	Provide sufficient challenge Provide learning opportunities Allow use of personal strengths	Too easy/difficult content Unfair competition Poor measures of success
Relatedness	Provide opportunities for encounters Allow giving and getting help Help settling into the game community	Barriers for social connections Need for networking Bad service experience
Extrinsic Rewards	Provide informational significance	Controlling significance

All participants enjoyed autonomy supporting game features regardless of their preference of competitive or social game content. P1 and P6 also experienced autonomy thwarting experiences that caused them to take breaks from the game and P2 quit the game altogether because of these experiences. P1 and P2 had negative experiences related to the service and communication by game developers. The motivation of P6 decreased because of social pressure and responsibilities. While pressure and responsibilities may depend on other players, game design choices may also affect the organization of the social structure that is formed in in-game guilds by supporting or thwarting the needs of community leaders. Need frustration related to autonomy was also experienced by P1 and P6 in situations where game content was repetitive or boring but had to be completed to reach a goal. Participants were also frustrated when playing the game clashed with their real-life activities (P1, P2, P3, P5, P6). On the other hand, autonomy support was provided by game features that allowed the participants to complete their personal goals in a way that felt natural for them, preferably with several optional paths leading to goal completion. For experienced players, new content was important as it had the potential to bring back the enjoyment related to exploration and adventuring that otherwise was more present in their memories of early experiences with the game (P3, P6).

Competence support was enjoyed by all participants in situations where they had opportunities to overcome sufficiently demanding challenges, to learn and improve in their activities, and to develop their characters in different ways. All participants also enjoyed content that allowed the utilization of their personal strengths. Experiences of success in cognitive tasks was pleasurable to all, while the nature of these tasks differed according to the participants' interests. Overcoming challenges was the most frequently mentioned motivator in the data. It was, however, important for the participants that the challenges felt fair and difficult enough while still being within their reach. Challenges that were perceived as too difficult (P1, P3, P5, P6), too easy (P1, P4, P7), unfair (P2, P4, P5) or uninteresting (P1, P3, P4, P5) caused frustration. While some participants were more engaged in competitive content, competence support was important for the others in different ways. P4, P5 and P7, who described themselves as competitively inclined players, were looking for difficult challenges and fair competition where success could be measured. P1, P3 and P6 sought competence support by engaging in activities that they felt skilled at and were more interested in personal goals set by themselves than challenges directly provided by the game. Game

design choices should thus cater for both fair competition between the players and autonomous goal setting in non-competitive environments.

The need for relatedness was supported by meaningful encounters in the game world, help and support both received and given, collaborative gameplay and opportunities for players to find their place in the game community. The encounters involved both real-life friends and new ones made in the game. Frustration related to this was caused by a lack of people to play with (P1, P4, P6, P7) and the need for networking in order to access game content (P1, P3). While the game has options for finding groups for certain content, it could be questioned whether this sufficiently supports the need for relatedness as the groups are usually temporary. Game features providing additional low-barrier ways to connect with others could address these issues. All participants also enjoyed some type of collaboration with others. Getting help from others was important (P1, P3, P5, P6) but experienced players also enjoyed helping others (P2, P3, P4, P5, P7) and working for the communities they were involved with (P3, P4, P5, P6, P7). When comparing the participants' recent activity to their memories of the beginning of their journeys the shift towards helping, educating and guiding others (P3, P4, P5, P7) was the most prominent change. In addition to in-game guilds the participants used several different online platforms to accomplish this, which leads to the question of whether this need could be better supported by features in the game itself. Another observation was that the participants had strong opinions about the actions of the developers (P1, P2, P3, P4, P5, P7). While some choices by the developers impacted the motivation of the participants negatively, even negative attitudes may have supported relatedness when other players in the community shared the attitude (P2).

All participants enjoyed collecting rewards and virtual assets in the game. Time-limited events also evoked mainly positive experiences (P1, P4, P5, P6, P7), although P1 did not like changing his real-life schedules and had taken a break from the game due to his frustration caused by the complicated structure of event rewards that he felt was not well communicated. According to CET, the impact of extrinsic motivation differs based on its functional significance. This was best illustrated by the experience of P4 who chose activities where the leaderboards provided an accurate measure of his skills and thus provided informational significance. He avoided activities where the leaderboards were based on the amount of time spent playing, exhibiting controlling significance. Similarly, the participants enjoyed rewards that reflected their competence more than those that did not provide this type of informational significance. It should also be noted that even experienced players may play the game just to

pass time (P1, P2, P6), and the game should provide a comfortable, need supporting and frustration-free environment also for this type of gameplay.

6.4 Limitations and Future Work

As the study aimed to evaluate the experiences of long-time players focused on distinct areas of the game, in-depth interviews with seven players were conducted. The sample covered a wide range of activities but, although there was some overlap, each approach to the game was mainly represented by one player. This retained symmetry in the data as each area had roughly equal weight but also led to a relatively small overall sample size. Due to the length of the interviews the data pool was still extensive and data saturation was reached. The sample included players of one game only and, while ESO shares many similarities with other MMORPGs, the results of this study should not be directly transferred to all video games. The sample also consisted of seasoned veterans in the game, which supported the credibility of focus-area specific findings but also meant that the reported experiences may differ from those of less experienced players.

The methodology and the theoretical framework of the study are widely used, and adherence to the methodology in this study supported the conformability of the findings. Following the methodology documented in Chapter 4 of this thesis should lead to similar results by other researchers. However, the qualitative nature of this study required a fair amount of interpretation of the experiences communicated by the players. The study was conducted by a single researcher, and another scientist may interpret parts of the data differently. Although the study focused on players' experiences, the theoretical framework had an impact on the results, and different perspectives may have led to different conclusions. This was especially evident in regard to the uninteresting routines and playing to pass time as described by the players, since SDT didn't seem to provide clear explanations for these experiences. It should also be noted that experiences described as enjoyable by the players were interpreted as supportive to intrinsic motivation, as there is a fundamental connection drawn between intrinsic motivation and enjoyable activity in SDT. Again, a different perspective may have led to different conclusions by distinguishing more clearly between the experiences of motivation and enjoyment. For instance, Boyle et al. (2012) note that enjoyment does not accurately predict time spent playing according to research based on the flow-theory.

Despite the limitations, this study unearthed a plethora of rich experiences of experienced MMORPG players that may have been neglected in quantitative research. The findings may thus aid future research in formulating hypotheses and theoretical models. Three of the most important directions for future research are highlighted here.

First, the changes in players' motivation throughout their journey in the game should be studied more thoroughly. Kahraman & Kazançoğlu (2023) have already expressed the need for additional research in this area. The data collected in this study suggest that a pattern in the seeking of need satisfaction might be discerned, as several participants reported experiences suggesting that the emphasis had shifted from autonomy satisfaction to competence and later relatedness satisfaction. Quantitative studies using numerical measures of player experience and validated gaming-related SDT-based surveys, especially with longitudinal research designs, may provide interesting insights.

Second, based on the data collected in this study, future research could develop and test a model consisting of autonomy support as a necessary but not sufficient first layer and a continuum between competence and relatedness support as a second layer of need satisfaction. This differs from the view of Ryan & Deci (2017) who present all three needs as equally important. A crude concept of such a model was presented in Section 7.1 of this thesis. While conclusions about such a model cannot be drawn in this study, the data show enough asymmetry between the needs to warrant future research into whether the basic needs truly are as equal as posited by SDT. The findings of this study could act as a starting point for such research.

Third, (Moller et al., 2024) reported that there is a severe research gap in SDT-based research on competitive gaming. Although this thesis was not specifically focused on competitive play, several participants had a strong inclination towards competitive game modes including diverse ways of competing in different areas of the game. For example, the findings related to the importance of the functional significance of leaderboards and extrinsic rewards may be of interest to researchers attempting to fill the research gap in future studies.

References

- Achterbosch, L., Vamplew, P., & March, E. (2024). Assessing the impact of grieving in MMORPGs using self-determination theory. *Computers in Human Behavior*, 161, 108388. <https://doi.org/10.1016/j.chb.2024.108388>
- Ballou, N., & Deterding, S. (2024). The Basic Needs in Games Model of Video Game Play and Mental Health. *Interacting with Computers*, iwae042. <https://doi.org/10.1093/iwc/iwae042>
- Ballou, N., Deterding, S., Iacovides, I., & Helsby, L. (2022). Do People Use Games to Compensate for Psychological Needs During Crises? A Mixed-Methods Study of Gaming During COVID-19 Lockdowns. *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*, 1–15. <https://doi.org/10.1145/3491102.3501858>
- Bao, X., & Lam, S. (2008). Who Makes the Choice? Rethinking the Role of Autonomy and Relatedness in Chinese Children's Motivation. *Child Development*, 79(2), 269–283. <https://doi.org/10.1111/j.1467-8624.2007.01125.x>
- Berger, B., & Hess, T. (2018). Hedonic Information Systems: What We Know and What We Don't Know. *ECIS 2018 Proceedings*.
- Billieux, J., Van der Linden, M., Achab, S., Khazaal, Y., Paraskevopoulos, L., Zullino, D., & Thorens, G. (2013). Why do you play World of Warcraft? An in-depth exploration of self-reported motivations to play online and in-game behaviours in the virtual world of Azeroth. *Computers in Human Behavior*, 29(1), 103–109. <https://doi.org/10.1016/j.chb.2012.07.021>
- Boyle, E. A., Connolly, T. M., Hainey, T., & Boyle, J. M. (2012). Engagement in digital entertainment games: A systematic review. *Computers in Human Behavior*, 28(3), 771–780. <https://doi.org/10.1016/j.chb.2011.11.020>
- Brühlmann, F., Baumgartner, P., Wallner, G., Kriglstein, S., & Mekler, E. D. (2020). Motivational Profiling of League of Legends Players. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.01307>
- Caldwell, B. J. (1991). Clarifying Popper. *Journal of Economic Literature*, 29(1), 1–33.
- Chueca, J., Verón, J., Font, J., Pérez, F., & Cetina, C. (2024). The consolidation of game software engineering: A systematic literature review of software engineering for industry-scale computer games. *Information and Software Technology*, 165, 107330. <https://doi.org/10.1016/j.infsof.2023.107330>
- Danner, F. W., & Lonky, E. (1981). A Cognitive-developmental Approach to the Effects of Rewards on Intrinsic Motivation. *Child Development*, 52(3), 1043. <https://doi.org/10.2307/1129110>

- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Debeauvais, T., Nardi, B., Schiano, D. J., Ducheneaut, N., & Yee, N. (2011). If you build it they might stay: Retention mechanisms in World of Warcraft. *Proceedings of the 6th International Conference on Foundations of Digital Games*, 180–187. <https://doi.org/10.1145/2159365.2159390>
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18(1), 105–115. <https://doi.org/10.1037/h0030644>
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125(6), 627–668. <https://doi.org/10.1037/0033-2909.125.6.627>
- Deterding, S. (2016). Contextual Autonomy Support in Video Game Play: A Grounded Theory. *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*, 3931–3943. <https://doi.org/10.1145/2858036.2858395>
- Dindar, M. (2018). Do people play MMORPGs for extrinsic or intrinsic rewards? *Telematics and Informatics*, 35(7), 1877–1886. <https://doi.org/10.1016/j.tele.2018.06.001>
- Eriksson, I., & Kovalainen, A. (2008). *Qualitative Methods in Business Research*. SAGE Publications Ltd. <https://doi.org/10.4135/9780857028044>
- Frommel, J., & Mandryk, R. L. (2022). Daily Quests or Daily Pests? The Benefits and Pitfalls of Engagement Rewards in Games. *Proc. ACM Hum.-Comput. Interact.*, 6(CHI PLAY), 226:1–226:23. <https://doi.org/10.1145/3549489>
- gamesindustry.biz (2022). *Games market revenue worldwide in 2022, by device*. Statista. <https://www.statista.com/statistics/278181/global-gaming-market-revenue-device/>, retrieved 10.10.2024.
- Gibson, E., Griffiths, M. D., Calado, F., & Harris, A. (2023). Videogame player experiences with micro-transactions: An interpretative phenomenological analysis. *Computers in Human Behavior*, 145, 107766. <https://doi.org/10.1016/j.chb.2023.107766>
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. *Organizational Research Methods*, 16(1), 15–31. <https://doi.org/10.1177/1094428112452151>
- Hamari, J., & Keronen, L. (2017). Why do people play games? A meta-analysis. *International Journal of Information Management*, 37(3), 125–141. <https://doi.org/10.1016/j.ijinfomgt.2017.01.006>

- Harviainen, J. T., & Rapp, A. (2018). Multiplayer online role-playing as information retrieval and system use: An ethnographic study. *Journal of Documentation*, 74(3), 624–640.
<https://doi.org/10.1108/JD-07-2017-0100>
- Hew, J.-J., Lee, V.-H., T'ng, S.-T., Tan, G. W.-H., Ooi, K.-B., & Dwivedi, Y. K. (2024). Are Online Mobile Gamers Really Happy? On the Suppressor Role of Online Game Addiction. *Information Systems Frontiers*, 26(1), 217–249. <https://doi.org/10.1007/s10796-023-10377-7>
- Hewett, R., & Conway, N. (2016). The undermining effect revisited: The salience of everyday verbal rewards and self-determined motivation. *Journal of Organizational Behavior (John Wiley & Sons, Inc.)*, 37(3), 436–455. <https://doi.org/10.1002/job.2051>
- Inkwood Research (2024). *Global video game market value from 2022 to 2032*. Statista.
 <<https://www.statista.com/statistics/292056/video-game-market-value-worldwide/>>,
 retrieved 11.10.2024.
- Jiming Wu & Xinjian Lu. (2013). Effects of Extrinsic and Intrinsic Motivators on Using Utilitarian, Hedonic, and Dual-Purposed Information Systems: A Meta-Analysis. *Journal of the Association for Information Systems*, 14(3), 153–191.
- Kahraman, A., & Kazançoğlu, İ. (2023). A Qualitative Research of Young People's Motivation to Start, Continue, Reduce and Quit Playing Online Multiplayer Games on Computer. *International Journal of Human-Computer Interaction*, 39(17), 3289–3311.
<https://doi.org/10.1080/10447318.2022.2096041>
- Kavanagh, M., Brett, C., & Brignell, C. (2023). What is the reported relationship between self-esteem and gaming disorder? A systematic review and meta-analysis. *Computers in Human Behavior*, 145, 107776. <https://doi.org/10.1016/j.chb.2023.107776>
- Kosa, M., & Uysal, A. (2022). Need frustration in online video games. *Behaviour & Information Technology*, 41(11), 2415–2426. <https://doi.org/10.1080/0144929X.2021.1928753>
- Krath, J., Schürmann, L., & von Korflesch, H. F. O. (2021). Revealing the theoretical basis of gamification: A systematic review and analysis of theory in research on gamification, serious games and game-based learning. *Computers in Human Behavior*, 125, 106963.
<https://doi.org/10.1016/j.chb.2021.106963>
- Mandal, P. C. (2018). Qualitative research: Criteria of evaluation. *International Journal of Academic Research and Development*, 3(2), 591–596.
- Martucci, A., Gursesli, M. C., Duradoni, M., & Guazzini, A. (2023). Overviewing Gaming Motivation and Its Associated Psychological and Sociodemographic Variables: A PRISMA

- Systematic Review. *Human Behavior and Emerging Technologies*, 2023(1), 5640258.
<https://doi.org/10.1155/2023/5640258>
- MMO Populations (2025). *World of Warcraft player count*. MMO Populations. <<https://mmo-population.com/game/world-of-warcraft>>, retrieved 22.6.2025.
- Moller, A. C., Kornfield, R., & Lu, A. S. (2024). Competition and Digital Game Design: A Self-Determination Theory Perspective. *Interacting with Computers*, iwae023.
<https://doi.org/10.1093/iwc/iwae023>
- Morning Consult (2021). *Share of gaming audiences in the United States who subscribe to at least one gaming service as of October 2021*. Statista.
 <<https://www.statista.com/statistics/1188442/gaming-subscription-users/>>, retrieved 10.10.2024.
- Newzoo (2022). *Virtual reality (VR) gaming revenue worldwide from 2019 to 2024*. Statista.
 <<https://www.statista.com/statistics/1360511/global-virtual-reality-gaming-revenue/>>, retrieved 10.10.2024.
- Nguyen, L. T., Pham, H.-H., May, A. Y. C., & Chin, T. L. (2025). Exploring the Landscape of Role-Playing Game Research Through Bibliometric Analysis From 1986 to 2023 Using Scopus Database. *International Journal of Computer Games Technology*, 2025(1), 2315333.
<https://doi.org/10.1155/ijcg/2315333>
- Patall, E. A., Cooper, H., & Robinson, J. C. (2008). The effects of choice on intrinsic motivation and related outcomes: A meta-analysis of research findings. *Psychological Bulletin*, 134(2), 270–300. <https://doi.org/10.1037/0033-2909.134.2.270>
- Rapp, A. (2022). Time, engagement and video games: How game design elements shape the temporalities of play in massively multiplayer online role-playing games: Information Systems Journal. *Information Systems Journal*, 32(1), 5–32.
<https://doi.org/10.1111/isj.12328>
- Razum, J., & Huić, A. (2024). Understanding highly engaged adolescent gamers: Integration of gaming into daily life and motivation to play video games. *Behaviour & Information Technology*, 43(11), 2566–2588. <https://doi.org/10.1080/0144929X.2023.2254856>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78.
<https://doi.org/10.1037/0003-066X.55.1.68>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Publications.

- Ryan, R. M., Rigby, C. S., & Przybylski, A. (2006). The Motivational Pull of Video Games: A Self-Determination Theory Approach. *Motivation and Emotion*, 30(4), 344–360.
<https://doi.org/10.1007/s11031-006-9051-8>
- Sourmelis, T., Ioannou, A., & Zaphiris, P. (2017). Massively Multiplayer Online Role Playing Games (MMORPGs) and the 21st century skills: A comprehensive research review from 2010 to 2016. *Computers in Human Behavior*, 67, 41–48.
<https://doi.org/10.1016/j.chb.2016.10.020>
- Tyack, A., & Mekler, E. D. (2024). Self-Determination Theory and HCI Games Research: Unfulfilled Promises and Unquestioned Paradigms. *ACM Trans. Comput.-Hum. Interact.*, 31(3), 40:1-40:74. <https://doi.org/10.1145/3673230>
- Venkatesh, V., L. Thong, J. Y., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology: MIS Quarterly. *MIS Quarterly*, 36(1), 157–178. <https://doi.org/10.2307/41410412>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View: MIS Quarterly. *MIS Quarterly*, 27(3), 425–478.
<https://doi.org/10.2307/30036540>
- Vuorre, M., Ballou, N., Hakman, T., Magnusson, K., & Przybylski, A. K. (2024). Affective Uplift During Video Game Play: A Naturalistic Case Study. *ACM Games*, 2(3), 23:1-23:14.
<https://doi.org/10.1145/3659464>
- Wang, X., Zhang, Y., Lin, J., Wong, A. C. W., Chan, K. K., Wong, S. Y., & Yang, X. (2023). Treatments of internet gaming disorder and comorbid mental disorders: A systematic review and meta-analysis. *Computers in Human Behavior*, 149, 107947.
<https://doi.org/10.1016/j.chb.2023.107947>
- Wang, Z., & Scheepers, H. (2012). Understanding the Intrinsic Motivations of User Acceptance of Hedonic Information Systems: Towards a Unified Research Model. *Communications of the Association for Information Systems*, 30, 17. <https://doi.org/10.17705/1CAIS.03017>
- Whitbourne, S. K., Ellenberg, S., & Akimoto, K. (2013). Reasons for Playing Casual Video Games and Perceived Benefits Among Adults 18 to 80 Years Old. *Cyberpsychology, Behavior, and Social Networking*, 16(12), 892–897. <https://doi.org/10.1089/cyber.2012.0705>
- Yee, N. (2006). Motivations for Play in Online Games. *CyberPsychology & Behavior*, 9(6), 772–775. <https://doi.org/10.1089/cpb.2006.9.772>

Appendices

Appendix 1. Interview Form

Background Information

1. For background information, I'd like to ask your age, gender, country of residence, occupation, and educational background. You may choose not to answer if you prefer.
2. How long have you been playing ESO?
3. What is your current CP level?
4. How many hours per week do you play on average?
5. How has your playtime varied (recently / over a longer period)?
6. How is your playtime divided between different game modes (PvP, PvE, quests, raids, etc.)?
7. How would you describe yourself as a player (e.g., experience level, casual/tryhard, etc.)?

General Motivation

8. What made you start playing ESO? How did it feel in the beginning?
9. What motivates you to play daily/weekly?
10. Tell me about your daily/weekly routines in ESO. What influenced their development?
11. What are your current goals in the game?
12. How do you feel when anticipating playing? Positive/negative emotions?
13. What kind of emotions do you usually have after playing?
14. In what situations do you feel most motivated to play?
15. Have you taken breaks from the game? Why? What made you return?

Intrinsic Motivation

16. What makes the game interesting? Can you give examples of situations or events?
17. What excites you in the game?
18. What aspects of the game feel particularly good? What do you enjoy the most? Can you describe a specific experience that illustrates this?
19. Do you feel that ESO has positive effects on your life in general?

Extrinsic Motivation & Negative Feelings

20. Do you feel that ESO has negative effects on your life?
21. Are there things that you do in the game that you don't particularly enjoy? Why do you do them?
22. Do you ever feel pressured to play even when you don't want to or don't feel up to it? Can you describe such situations?
23. Have you ever felt like you're missing out on something if you don't play?
24. In what situations do you feel the least motivated to play?
25. What would make you quit ESO?
26. What aspects of the game feel unpleasant? What is the worst part of ESO? Can you give examples?

SDT – Autonomy

27. One of ESO's slogans is "Play your way." To what extent do you feel you can truly play the game your own way? (Why / why not?)
28. Can you recall a situation where the freedom to play your way was particularly present? What did you experience, and how did it feel?
29. Can you recall a situation where you did not have the freedom to play your way and felt overly restricted or guided? What did you experience, and how did it feel?
30. What impact does freedom of choice in the game have? What are the positives? Negatives?

SDT – Competence

31. Can you recall a situation where you felt particularly skilled or competent in the game? What did you experience, and how did it feel?
32. Can you recall a situation where your skills weren't sufficient? What did you experience, and how did it feel?
33. Can you recall a situation where skill didn't matter at all? How did that feel?
34. How do factors related to skill and competence affect your gaming experience? What are the positives? Any negatives?

SDT – Relatedness

35. ESO is fundamentally a multiplayer game. How do you experience the influence of other players and collaboration in the game? What emotions does it evoke?
36. Can you recall a situation where you felt a strong sense of connection with other players? What did you experience, and how did it feel?
37. Can you recall a situation where you felt left out (not identifying with or connecting to others)? What did you experience, and how did it feel?
38. How does interacting with other players affect your gaming experience? What are the positives of social interaction? How about negatives?
(* Are there relatable elements in the game world, stories, or characters? Do you find that important? What emotions does it evoke?)

Impact of Gaming Experience

39. Do you still get excited about the same things as when you first started playing, or have your sources of excitement changed?
40. How have your goals changed throughout your history with ESO?
41. How have your emotional experiences related to the game changed over time?
42. Has freedom of choice and self-expression in the game become more or less important since you started playing?
43. Have skill and success become more or less important since you started playing?
44. Have social factors and connections become more or less important than when you started?
45. Do you feel that different phases in your gaming history have had different motivation factors (e.g., skill development phase, social phase...)?

46. Do you think the factors that motivate you to play will change in the future?

Summary

47. What aspects, activities, mechanics, game modes, social factors, etc., do you think make ESO interesting and engaging for players in general?

48. How do you think the factors influencing excitement and enjoyment change after starting the game, as a player gains months or years of experience?

49. Has this interview made you think of something you hadn't considered before?

50. Is there anything else you would like to add?

51. Thank you for the interview! May I contact you later if additional questions arise?

Appendix 2. Interview Invitation

INVITATION FOR A RESEARCH INTERVIEW

You are invited to join an interview conducted as a part of my Master's Thesis study in Information Systems Science at Turku University School of Economics.

The interview will focus on your experiences in The Elder Scrolls Online video game. The purpose of the study is to map out reasons for playing the game within players of different experience levels.

The interview will last about 90 minutes, and it will be arranged as a voice call in Discord. The call will be recorded for the purposes of later transcription and analysis. There is no need to disclose personal information. The data is handled with confidentiality and any information reported in the study is completely anonymous.

Neither the researcher nor the university has any affiliation with Zenimax Online Studios, Bethesda Softworks or any other entity developing or managing The Elder Scrolls Online.

Best regards,

Jussi Taipalharju

University of Turku

Appendix 3. Data Structure

1st order concepts	2nd order concepts	Aggregate themes
Self-actualization Conforming to own natural tendencies Playing in a unique way / Separating from the mass Personal aesthetic preferences Negative\Forced to a certain playstyle Negative\Real-life sacrifices required Negative\Technical issues or lag Negative\Real-world technical requirements Negative\Community responsibilities Freedom from responsibilities	Self-actualization in a virtual environment	Autonomy
Setting personal goals Multiple paths to a goal Personal impact on community Standing one's own ground Negative\Features are behind a paywall Negative\Too time-consuming Negative\Unreachable goals Negative\Lack of goals	Freedom to choose and reach goals	
New content Desire for adventure Open world adventure Mutual adventuring with others Single-player experience Negative\Obligatory activities Negative\Too structured guidance Negative\Preferring other games	Adventure and exploration	
Overcoming challenges Negative\Insufficient challenge Negative\Unfair game mechanics Negative\Unfair competitive situations Competitive success (in PvP) Negative\Lacking measures in competition Negative\PvP anxiety Redemption after bad performance	Sufficient and fair challenge	Competence
Learning and improving Developing a character Mastering game mechanics Negative\Obstacles for learning Negative\Lack of information Acquiring more powerful items Getting to know the game world Developing a community Mutual progression with others Acquiring skills transferable to real life	Constant improvement	
Success in cognitive tasks Leveraging personal strengths		

Succeeding as a team member Negative\Lack of self efficacy Negative\Difficult game mechanics Negative\Uninteresting game mechanics	Utilizing personal abilities	
Meaningful encounters Connecting with real-world friends Making new friends Negative\Lack of friends in game Negative\Need for networking Standing up to bullies Negative\Getting bullied Shared experience of adventure	Connecting with others	Relatedness
Getting help from others Helping other players Working for a community Celebrating others' success Shared in-game goals Shared experience of progression Succeeding in team work Positive feedback from others Competing against players Collaborative competition Negative\Lack of equal group	Collaboration and support	
Relating to the ESO community Inspired by others Expressing status Relating to the game world Relating to own avatars Negative\Inability to relate to the story Identifying/not identifying as a gamer Negative\Inability to relate to a community Negative\Socially wrong way of playing Negative\Inability to relate to the devs Negative\Lack of communication from devs	Finding a role in the community	
Rewards for accomplishments Collecting virtual assets Negative\Insufficient rewards for activity Time limited events Social pressure Discounts/real-money savings Negative\Unfair service mechanisms	Extrinsic motivation	Non-Intrinsic
Following routines Passing time Covid-pastime Addiction	Other aspects	

Appendix 4. Data Management Plan

This document contains a plan to manage the research data.

1. Research data

The research data consists of recorded interviews and their transcriptions. The interviews are recorded by the researcher and transcribed using the University of Turku transcription service. The data does not include personal information.

2. Permissions and rights related to the use of data

Permission to record the interviews and transcribe their contents will be asked once in the invitation process and confirmed a second time at the start of the interview.

3. Storing the data during the research process

The data will be stored on the researcher's personal computer that is used to record the interviews and conduct the data analysis. Original data will be backed up using the university's network drive.

4. Documenting the data and metadata

The interview recordings will be stored in audio files named "Interview-A", "Interview-B" etc.

Corresponding transcriptions will be stored in text documents using the same filenames.

If the transcriptions are edited during analysis, the edited documents will be saved in separate files using the same filenames with an additional version number "-v01", "-v02" etc. added to the filename. In case of more complex changes or batch edits, a separate log file is created to describe the changes made in different versions. Backups of the original files are stored using the university's network drive. The data will not be uploaded to a public archive/repository.

5. Data after completing the research

All data will be stored on the researcher's personal computer for five (5) years after the research and then destroyed.