Deepening User Engagement on an Esports Platform Using Gamification

A Multi-Conceptual Study

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ABSTRACT
In recent years, the global interest in esports has grown exponentially, opening up for new technologies and products to be developed. One example is esports platforms which serve players with a common place to carry out their esports-related activities. This study utilizes current research about motivation and user engagement to develop three conceptual design proposals aiming to showcase how appropriate gamification components could be incorporated into an esports platform in order to deepen user engagement. These conceptual designs are evaluated by conducting a focus group, in which the participants had expert knowledge in the fields of esports, user experience, technology, and game design. Based on the results, conceptual design guidelines are established, and two final conceptual designs are proposed. With these two final designs, this study aims to contribute to and inspire future design work within the field of gamification and esports.

SAMMANFATTNING
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ABSTRACT
In recent years, the global interest in esports has grown exponentially, opening up for new technologies and products to be developed. One example is esports platforms which serve players with a common place to carry out their esports-related activities. This study utilizes current research about motivation and user engagement to develop three conceptual design proposals aiming to showcase how appropriate gamification components could be incorporated into an esports platform in order to deepen user engagement. These conceptual designs are evaluated by conducting a focus group, in which the participants had expert knowledge in the fields of esports, user experience, technology, and game design. Based on the results, conceptual design guidelines are established, and two final conceptual designs are proposed. With these two final designs, this study aims to contribute to and inspire future design work within the field of gamification and esports.

CCS CONCEPTS
• Human-centered computing

KEYWORDS
Gamification; Motivation; User engagement; Psychological needs; Multi-Conceptual study;

INTRODUCTION
Today, esports has become exceedingly popular and the global interest has grown exponentially in recent years [22]. The term esports is defined as a competitive approach to video games [3], where individuals or teams play by a set of rules in a number of organized video game competitions [22]. It is now one of the most rapidly expanding forms of new media due to the growing amount of online games and broadcasting technologies [9]. As a result of esports, video games are no longer just a massive entertainment industry – the top players are considered to be superstars [5].

Esports is not only significant in societal terms, but in business as well [3]. As the esports community has become more professionalized, official teams now often have coaches, psychologists and other trainers to help them climb the international leaderboards [22], and the players receive monthly salaries and prize money from winning various tournaments and games [5]. The requirements for joining the elite teams are high and only a fraction of all players qualify for professional esports. The top players are no less dedicated than mainstream athletes [5], and they must devote vast parts of their lives to the games and continually stay motivated to play and improve their skills. In these forms of esports, recreational activities become professionalized and the concepts of “fun” and “work” are challenged, awarding participants with both social and economic rewards [15].

On the other hand, not everyone wants to engage in professional esports and will, instead, rather play for leisure. Still, they are excited to keep playing and may devote several hours a day to the games. According to García-Lanzo and Chamorro [22], video games can be experienced as a passion that satisfies basic psychological needs. This passion is useful to help understand the different motivational patterns for engaging in video games and esports.

With such a large amount of esports players around the world, this opens up for new technologies and products to be developed, both for people who play and for people who work with esports. One type of product that could be useful for players are esports platforms where they can join various tournaments and manage their own profiles. This gets players engaged in esports and could serve them with a common place for all their esports-related activities.

In order to create a successful platform as the one aforementioned, it is important to design it in a way that promotes user engagement. Esports is, however, a relatively new research area and there does not exist a lot of previous studies in the field, especially when it comes to deepening
Gamification has recently become a trending topic for both academic interests and for businesses because of its social and economic impacts [7, 11, 20]. It is, however, a young academic topic, and therefore, few well-established studies exist regarding why and how gamification affects users’ behavior and motivation [2, 7, 11, 22]. Some of the established theories that exist, center around the psychological effects of rewards on motivation, which have been used in recent studies on gamification [7, 18, 20, 23]. However, those studies seldom concentrate on a specific user group and often focus on examining the effects of gamification on any type of person. Since esports have become exceedingly popular across the globe, an interesting topic to study is the effect of gamification on people who play esports. Since those users are already interested in a competitive environment, they are presumably more likely to feel engaged by the elements of gamification.

The purpose of this study is to develop conceptual design proposals and conceptual design guidelines for an online esports platform which illustrate how gamification can be used in order to deepen user engagement by visualizing data for the user. The study aims to answer the following question:

- What combination of gamification concepts and incentives can promote deeper user engagement on an esports platform?

RELATED WORK

This section first defines gamification and presents some of its most common game elements. Furthermore, this section brings up current research related to the effects of gamification on user engagement and motivation.

Gamification

The term gamification is generally defined as the incorporation of game design elements in non-game contexts [2, 7, 20, 21], and the purpose is usually to make products and services more fun and engaging for users [2].

There are various components of gamification that target a diversity of objectives and are useful for different purposes. Some of the most commonly used elements are points, leaderboards, levels, achievements and badges [7, 21, 23]. Points are earned by users and can be converted into levels which may then lead to intangible status rewards or tangible rewards in the real world [23]. A leaderboard is a form of comparative scoring system where players can view their placement in relation to others [23]. Achievements and badges are elements that display a user’s accomplishments and successes within the system, both to the user and to the public [23].

Even though the systems being gamified today are traditionally not in game-related contexts, there are examples where gamification has been successfully integrated into such contexts as well. Two examples are Steam [25] and Xbox Live [12]. An esports platform could also be considered a game-related context since its users compete against each other in video games. Hence, it is interesting to examine the effects of gamification on users of an esports platform, as the impacts may differ from the effects on users in non-game-related contexts.

Motivation and User Engagement

The body of existing research on gamification shows that it is quite a complex phenomenon whose effects on user engagement can differ from one situation to the next. In a literature review on existing empirical research regarding gamification by Hamari et. al. [11], results show that studies, in general, indicate positive outcomes of gamification. However, the review also demonstrates that the effects can depend greatly on the context in which the gamification is being implemented, as well as the characteristics of the people using it. For example, something that is acceptable in the context of a sports-fan site may not be appropriate in the context of a health-discussion forum [21].

One topic that is frequently discussed in existing research on gamification is user motivation and how it relates to engagement in a system or product. An established theory that is referred to in many studies on gamification is the Self-Determination Theory by Deci and Ryan [18]. It mainly emphasizes the difference between two types of motivation: intrinsic and extrinsic. The former refers to executing an activity for the internal satisfaction of the activity itself, without any external reward, while the latter is related to executing an activity in order to attain some separable outcome, where people’s behavior is controlled by external factors. The theory also states that intrinsic motivation more effectively increases engagement and performance than extrinsic motivation. Hence, striving to increase
mainly the intrinsic motivation of users should presumably be the priority if the aim is to deepen user engagement.

Nicholson [23], basing his research on this theory, emphasizes the difference between what he calls reward-based gamification, which focuses on providing external rewards for the completion of tasks, and meaningful gamification, in which game design elements are used to help build intrinsic motivation and meaning in non-game contexts. While systems based on rewards can create an immediate spike in engagement, Nicholson also points out that they mostly relate to short-term change. In fact, Farzan et al. also concluded this in their study when implementing reward-based gamification into a system, using points, levels and leaderboards [17]. Initially, the user activity increased, but shortly after it reverted back to baseline. Furthermore, when the game elements were removed, the user activity even dropped below its original level which indicates that the users had become less intrinsically motivated to engage with the system through the extrinsic rewards. This important finding, that extrinsic rewards undermine intrinsic motivation, is also supported by Deci and Ryan [18].

Conway [20] points out the importance of designing gamification with a user-centered mindset, where the user goals and characteristics, as well as the product’s environment, tasks and workflow are given extensive consideration at each stage of the design process. He argues that gamification too frequently calls upon organization-centered design, where users are treated as “senseless mechanisms” who are only motivated by extrinsic rewards. In agreement with this, social psychologist Judd Antin [21] points out that most examples of gamification are not considering where potential motivational rewards come from. Conway also argues that existing examples of gamified systems focus too much on the benefits of the organization, and that shifting this focus towards the users will more likely generate long-term participants who do not require a continued stream of rewards to remain engaged [20].

Research indicates that a critical component in increasing long-term engagement through gamification is to understand the psychological needs of users [20, 21]. In particular, the needs for competence, autonomy, and relatedness are identified as key elements that contribute to people’s intrinsic motivation [18]. Competence can be explained as how well a person feels they are able to meet the goals of an activity [20, 23]. Autonomy is based upon the feeling of free will and the extent to which a person makes his or her own decisions about behavior [18, 23]. Relatedness refers to the notion of belongingness with others and the connections that a person feels with other people through their behaviors [18, 23]. Deci and Ryan [18] argue that fulfillment of these needs directly influences an individual’s development, performance and well-being. When users associate their own happiness with a system or product, they most likely will engage deeper with it. Unfortunately, as Conway [20] has identified, existing gamified systems generally fail to support these innate psychological needs. Hence, it is important to further investigate how gamification can affect such needs in a positive way.

Because gamification has shown to be a complex phenomenon, it can also be quite difficult to determine its effectiveness. Studies have measured it based on different variables, from motivation and engagement-related outcomes to user behavior-related outcomes, where the latter is more frequently used [11]. In their study [2], Amir and Ralph propose a theory of gamification effectiveness, based on existing research on motivational psychology and digital game design. They suggest that “gamification is effective to the extent that the gamified system is used, contributes to any explicit goals of the system and contributes to the goals of its users” [2].

PRESTUDY

This section first presents a description of the esports platform for which the conceptual design proposals were developed. This is followed by a presentation of three target user groups of the esports platform which were established through this study.

The Esports Platform

The esports platform for which the conceptual design proposals were developed is called Challenger mode [4] and is developed by the company with the same name. It is a digital gaming arena where players can compete against other gamers and teams in matches, tournaments and leagues. It is a way for users to become more engaged in esports and to have a common place for all their esports activities. The idea is that both amateur gamers and aspiring esports athletes can come together to practice, compete and build their teams on the platform. This means users can both play with their established teams and find players to create new teams with.

The platform currently supports competitions in three games: PLAYERUNKNOWN’S BATTLEGROUNDS (PUBG) [16], League of Legends (LoL) [19], and Counter-Strike: Global Offensive (CS:GO) [24], where it is possible to play single matches, tournaments and leagues. In the first mentioned, users compete in matches and have a chance to win smaller amounts of prize money. Tournaments are
arranged daily and weekly and support single players and teams of two to five players. These are often arranged by external organizers such as Omen by HP [8] and Dreamhack [6] which results in a larger prize pool. In all types of competitions, the players may also be rewarded a varying extent of credibility and respect among other people in the esports community.

The platform currently has a few components that are classified as gamification elements in the scope of this study. These are global leaderboards for LoL and CS:GO. Furthermore, the platform contains two separate tier-systems for these two games, where players are given a tier-level based on their rate of winning and losing competitions. This level is mostly used by players to find other users to play with or against.

Target User Groups

The current users of the esports platform can be divided into three target groups - casual, core and power users - based on their behavior of engaging with the platform. The groups represent three levels of engagement, based on the users’ frequency and intensity of using the platform. Casual users have the lowest degree of engagement and power users have the highest degree of engagement, and the aim is to have more users in the groups with higher levels of engagement. This study aims to develop conceptual design proposals and conceptual design guidelines which can help move people from casual to core, and from core to power, as a result of deepening the user engagement.

Casual Users

This is the target group with less active users who do not play esports on a regular basis, from once a month to once a year. They are often casual gamers who sometimes like to engage in competitive gaming as well. Some members of this group use the platform only when invited by other players, for example when a company sets up a team of coworkers.

Core Users

The core users are the general, average users who set the reference point for the other two target groups. On average, these people use the platform for a few hours on a weekly basis.

Power Users

These are the people who are highly engaged in the platform. They use it the most frequently and with the most intensity. These users play esports daily, and for several hours a day. For some power users, winning prize money through esports is their job and main source of income. They strive to be the best and win as many games and tournaments as possible.

CONCEPTUAL DESIGN PROPOSALS

First, this section presents the prerequisites and methodology for the creation of the conceptual design proposals. Next, the three concepts are described, followed by an explanation of how they were evaluated and the results from the evaluation.

Prerequisites and Method of Creation

Based on the research about motivation and user engagement, three conceptual design proposals were created, showcasing how appropriate gamification components could be incorporated into the esports platform in order to deepen user engagement. These were created using Photoshop [1], and icons used for the sketches were gathered from an external website [13]. The objective was that each conceptual design proposal should promote at least one of the psychological needs - competence, autonomy, and relatedness - since the related research suggests these are key elements which contribute to deepening user engagement. Another prerequisite was that the conceptual design proposals should be exclusive and distinctive from one another, and hence, they all included different gamification components. This also implied a greater coverage of the possible gamification components.
Description of Conceptual Design Proposals

Endorsements and Badges

In this concept, users can give endorsements on other players’ traits and attributes, and on their skills in playing certain roles in individual games. This provides an overview of a user’s game-related skills and characteristics, as the number of received endorsements for each trait and player role are displayed on the user’s profile (see Figure 1). Based on these endorsements, users can receive different badges that are displayed on their profile page for other players to view (see Figure 2). The idea is to strengthen social relations between users of the platform, and hence, fulfill their psychological needs for relatedness by providing them with opportunities to engage in social activities.

Daily Challenges with Points and Ranking

In this system, users are provided with a list of daily challenges from which they may choose one challenge to complete that same day, where the list is regenerated every day. The challenges consist of a wide variety of activities that enable users to try out different functionalities on the esports platform, both by the user alone and by requiring collaboration with other users (see Figure 3). When players complete a challenge, they are awarded a certain number of points which are shown for each challenge in the daily list. Players may then view the number of points on their profile page and the points are used for a ranking-system with different levels that a player can achieve, for example, bronze, silver, and gold (see Figure 4). Players can also see how many points they have left to achieve the next level. The idea is that this system will promote the psychological needs for autonomy and competence, by allowing users to make decisions based on their own ability to meet the goals of an activity.

Achievements for On-Boarding

This system is designed to primarily encourage new users to explore the various functionalities of the esports platform. By performing different activities on the platform, users receive proof that they have succeeded with different achievements, which are displayed on their profile page (see Figure 5). To view the activities that a user can engage in on the platform, there is a list of all the obtainable achievements (see Figure 6). The aim of this concept is to promote the psychological need for competence, by encouraging new users when they complete simpler tasks or test functionalities on the platform.
Method of Evaluation

In order to evaluate the conceptual design proposals and their possible effects on users of an esports platform, a focus group was conducted. The aim of the focus group was to investigate the affordances and limitations of the three conceptual design proposals, with a focus on their effect on users’ competence, autonomy, and relatedness.

A focus group was chosen as the method of evaluation because it is a flexible research tool that can help to gain an understanding of a specific topic from the perspective of the participants [14]. Furthermore, focus groups can uncover diverse knowledge which is often difficult to access by more formal methods of data collection [14]. In this study, a less structured approach was chosen, in which the moderator primarily should facilitate the discussion between the participants, rather than direct it [14]. Using a focus group in this context was beneficial because it allowed the participants to discuss the topic in detail.

The participants were recruited on the basis that they played esports or considered themselves to have expert knowledge in one or more of the following fields: user experience (UX) design, technology, and game design. To find participants with such expert knowledge, the recruitment process included reaching out to employees at Challengermode and at a company which specializes in game development. Unfortunately, it was not possible to recruit participants from the three target user groups, as it was difficult to get in contact with users of the platform who live near the location where the focus group was held. However, the characteristics and knowledge of the chosen participants were believed to provide valuable contributions to the research question. Hence, there was an emphasis on discussing the target users for each conceptual design proposal during the focus group, as they were a significant aspect of this study.

The participants with an understanding of user experience design would presumably contribute with useful information about how each conceptual design proposal could enhance the user satisfaction and engagement with the platform. The technical experts could help evaluate the technical difficulties of implementing each conceptual design proposal into an esports platform. The game designers had significant knowledge of designing and developing games, and could help evaluate how the individual game elements contribute to, and affect, the overall conceptual designs. Finally, the participants who played esports would be able to relate to the users of the platform and understand how each conceptual design proposal could affect the target users, as they have similar interests. The combination of participants from these categories would presumably provide nuanced reflections regarding the conceptual design proposals. There were a total of six participants, who were all male adults, and the distribution of the participants’ expert knowledge can be seen in Figure 7.

The focus group was conducted in a conference room at the office of Challengermode, in which the moderator and all participants were present during the entire session. In order to document everything which was discussed by the participants, a device was used to record the audio. During the focus group, the participants were first provided with information about internal and external motivation, as well as definitions of competence, autonomy, and relatedness. This was to guide the conversation towards the aim of the focus group. The three conceptual design proposals were presented, followed by an open discussion about each one of them. This was to receive a general view of the participants’ impressions of the conceptual design proposals. After this, the participants were given the task to label the design proposals with the three psychological needs presented earlier during the session, based on whether the needs were promoted in each design proposal. This was followed by an open discussion about the results from the task, where the participants could explain their decisions. The aim of the task was to receive a nuanced evaluation of how each design proposal could promote competence, autonomy, and relatedness. Lastly, the participants were given five votes each to distribute on the conceptual design proposals they believed were the best. This was to provide indicative results of which design proposal the participants believed was the best. The recorded data was transcribed and grouped according to different topics that were discussed during the focus group session. This data was then analyzed regarding each design proposal’s ability to promote the psychological needs for competence, autonomy, and relatedness, as well as their respective target user groups.

![Figure 7. Distribution of the participants’ (P1-P6) expert knowledge.](image-url)
Results of Evaluation

This section presents the results from the focus group and the general topics discussed by the participants, one conceptual design proposal at the time. For each design proposal, its ability to promote competence, autonomy, and relatedness is explained, followed by a demonstration of the respective target users and the established conceptual design guidelines.

Endorsements and Badges

In general, this conceptual design proposal seemed to be the most popular among the participants, and in the voting, it received 17 points out of a possible 30 (see Figure 8). The reason is that the participants believed it promotes a positive social environment and supports other functionalities on the esports platform, such as finding suitable members for a team. Participants agreed that it promotes trust between users and can reinforce a user’s credibility of having certain skills.

One topic discussed was whether the endorsements should be anonymous or not, and there were several arguments for the importance of presenting the name of the user who has provided an endorsement. One reason was that it is required in order to repay someone for giving you an endorsement. This desire to show gratitude was also one of the strongest reasons why the participants believed the system would be beneficial. Another reason was that it imposes that users stand by their opinions and do not give random endorsements in order to receive endorsements themselves. As identified by one participant, this also poses a risk of being considered a bad assessor. Additionally, the participants argued that providing all users with the information about who gave an endorsement also means it is possible to contact that user and ask for more details regarding their decision to give a certain endorsement.

There were also arguments which pointed out a few negative aspects of this conceptual design proposal. The main reason was that it could be demotivational and make users feel sad if they have not received any endorsements. A suggestion was to combine the endorsements with a simple point system, or leveling system, which correlates with a user’s level of activity and competence on the platform. Hence, the system would provide a better representation of a user’s game-related skills and characteristics. The participants also implied that they found the badges unnecessary because those elements do not provide any further significant information than the endorsements themselves.

One popular suggestion for improvement was to let users enter customized traits and player roles on their profile, which they wish to receive endorsements on. Common traits or roles should also be suggested while the user is typing. There was agreement among the participants that these changes would allow players to tailor their profiles according to their own preferences and communicate that information to other players. However, it was important that the system should not allow users to type in customized traits or player roles on other users’ profiles since this could cause mean endorsements and negative social interactions. Another suggestion was to let users customize the visibility of certain traits and player roles to other users, allowing players to show the categories of endorsements they are proud of.

Promotion of Psychological Needs

When discussing this conceptual design proposal in relation to competence, autonomy, and relatedness, the participants appeared to have varying opinions. Some argued that it mainly promotes relatedness since there is no automatic system behind the endorsements - it is the users themselves who interact with each other and this leads to relatedness. It was also said that relatedness can come from users feeling that they have the same motivations and skill sets as other players. This agrees with the predictions formed before the focus group. Unlike these expectations, other participants claimed that the endorsements mainly promote autonomy since all users have their own free will to provide the endorsements they want. They also argued that autonomy is encouraged by the fact that users themselves may choose to specialize in particular roles in certain games, and thus, try to receive endorsements on those roles. The participants agreed that there was some promotion of competence since users can receive confirmation that they have certain traits and play particular roles well.

Target Users

The results from the focus group indicate that this conceptual design proposal would mainly target the core and power users, and not so much the casual users. Participants
agreed that people who play esports on a regular basis would most certainly strive to develop their skills in the games in order to receive more endorsements. Hence, this design proposal could encourage the weekly and daily users to play esports and engage with the platform more frequently, as a result of wanting to develop their skills. However, the probable demotivational effects on users who are less experienced with the platform indicate that this design proposal is less suited for casual users.

**Conceptual Design Guidelines**

Based on the results from the focus group, the following conceptual design guidelines can be concluded:

- Users who provide endorsements should be able to choose from a list of predefined endorsements, either defined by the system or by the recipient users themselves.
- Endorsements should not be anonymous.
- Users should be able to choose which of their received endorsements should be visible to other users on the esports platform.
- Endorsements should be combined with some form of point system, or level system, that correlates with the user’s level of activity and general competence on the esports platform.

**Daily Challenges with Points and Ranking**

This conceptual design proposal was the least popular among the participants, and in the voting, it received only two points out of a possible 30 (see Figure 8). The participants expressed that users may feel constrained by the limited amount of available challenges and that their behavior on the platform may shift towards something they do not intend. Others expressed that the challenges would be seen as suggestions for how the users could behave on the platform, which was considered positive by some users. There was also discussion about users who are considered completionists and that this system could induce an unwanted need to complete a challenge every day, even though none of the daily challenges seems enjoyable by the users. All participants agreed that the points and ranking would not add much value to the system nor to the users. The participants concluded that this design proposal would either be considered positive because it promotes fun challenges, or it would be seen as a way to control the users’ behavior on the platform.

The participants questioned this system as they claimed its consequences would depend much on the actual challenges presented to the users, meaning it could be a riskful system to implement. Some expressed an aversion to challenges that involve interaction with other players because they do not appreciate when their social behavior is controlled by a system. There were suggestions that challenges based on in-game interactions would impose fewer feelings of control since people mainly use the platform with the intention to play esports anyhow. The participants agreed that this system could be appreciated by some users, and likewise, highly unappreciated by other users. Furthermore, they claimed that the system would need to be very intelligent and the daily list of challenges should be tailored to the users’ preferences, instead of just showing random challenges to them.

One of the positive aspects of this system, expressed by the participants, is its ability to encourage users to try out functionalities in hopes that users discover new and enjoyable ways to interact with the esports platform. Participants also argued that there are esports players who appreciate being challenged and would be motivated by this system. However, one participant expressed that this would mostly involve extrinsic motivation.

There were a few suggestions for improvements to this concept, including the addition of a risk of losing points if one fails an accepted challenge. Participants argued that there are many users who enjoy the implied risk and that it shows they trust their assessment to complete the challenge, which displays a sense of competence. Another popular suggestion was to omit the part where users must accept the challenges. Instead, there should be a list of all challenges with respective progress bars that indicate how close the user is to complete a challenge, and when a challenge has been completed, users should receive information about this. Participants agreed that with this change, the system would be very similar to the design proposal with achievements.

**Promotion of Psychological Needs**

When discussing this conceptual design proposal in relation to competence, autonomy, and relatedness, participants agreed that it mainly promotes autonomy since users are free to choose which challenge they want to accept. This conforms with the predictions established before the focus group. They also concluded that this system, in general, does not promote much relatedness, as expected when the design proposal was created. However, some individual challenges were expressed to encourage relatedness as they involve other users, such as adding another user to one’s friend list or creating a team for a tournament. In agreement with the predictions before the focus group, a few
participants argued that this system promotes competence to some extent since users can assess their ability to accomplish goals. Others claimed that it does not lead to an increased sense of competence because the challenges presented in the sketches were too simple in complexity.

**Target Users**

The results from the focus group indicate that this conceptual design proposal would presumably not target any of the user groups in particular. This is based on participants’ conclusion that the consequences of this system would depend much on the actual challenges presented to the users. As expressed by the participants, there exist esports players who appreciate being challenged and would be motivated by this system. However, no conclusion can be drawn from the results regarding this design proposal’s capability to target a specific user group.

**Conceptual Design Guidelines**

Based on the results from the focus group, the following conceptual design guidelines can be established:

- Challenges should be related to the games that are playable through the esports platform.
- The system should be intelligent and tailored for each user. It should not suggest completely random challenges to the users.
- The system should include some form of risk of accepting a certain challenge, indicating positive consequences if the user completes the challenge and negative consequences if the user fails the challenge.

**Achievements for On-Boarding**

This conceptual design proposal was quite popular among the participants, and in the voting, it received 11 points out of a possible 30 (see Figure 8). There were divided opinions on whether users are motivated to perform certain actions by the opportunity to receive achievements. Some participants argued that there are many gamers and esports players who enjoy the strive to receive achievements and that their behavior on an esports platform would be shaped by the receivable achievements. Others argued that simpler achievements, as presented in the sketches, do not provide enough motivation to alter someone’s behavior or deepen their engagement on an esports platform.

However, there were strong beliefs that users who are already invested in the platform would be motivated to receive an achievement if it was very difficult to obtain. The reasoning was that users would feel prouder that they received such an achievement since it provides a bigger challenge and requires more competence and skill. One participant also argued that with more difficult achievements, it is the challenge itself that can provide a boost in motivation rather than the received achievement. Some participants also argued that the motivation to collect achievements decreases quickly if they can be earned through quite a little effort from the user, meaning an achievement feels less unique to the user who has obtained it.

There was a unanimous opinion that new users most likely do not focus their attention on receiving achievements, but instead on exploring the various functionalities of the platform. Hence, the most popular suggestion for improvement was to form this idea towards a tutorial system where new users can learn about functionalities on the platform through a guided tour and receive achievements for completing the individual steps in the tutorial. The participants agreed that such a system could deepen the engagement of users who are new to an esports platform.

There was also a discussion of whether users should be able to see all possible achievements or if an achievement should only be shown once the user has received it. Some argued that users may feel overwhelmed and unmotivated from seeing a full list of receivable achievements when they have only obtained a few. If the achievements appear the moment they are received, the participants claimed that it would provide users with a better feeling of motivation and competence. One participant explained that seeing one’s obtained achievements would be enjoyable because it provides a history of one’s previous behavior and actions on an esports platform. The participant also explained that an advantage of such a history is that it naturally develops over time, without requiring any explicit action from the user.

**Promotion of Psychological Needs**

When discussing this conceptual design proposal in relation to competence, autonomy, and relatedness, the participants appeared to have varying opinions because the psychological needs that are promoted depend much on the list of possible achievements. On the one hand, and not expected beforehand, some argued that it mainly stimulates relatedness since users feel a sense of connection with others who have received the same achievements. This relatedness was claimed to become stronger if the achievements pose bigger challenges and are therefore more difficult to obtain. Hence, there would be a relatedness to others who have completed the same difficult challenges. Achievements were also claimed to promote relatedness because
they may open up for discussion among users on how to complete the tasks required to obtain them. On the other hand, some participants argued that this design proposal mainly promotes competence since users can view their completed achievements, which gives a sense of accomplishing goals and valuing one’s capabilities to achieve those goals. This is in agreement with the expectations before the focus group. Unlike these predictions, however, there also seems to be a tendency for this concept to promote autonomy, as the participants claimed that users can choose which achievements they want to try and obtain.

**Target Users**

The results from the focus group indicate that this conceptual design proposal would be able to target a majority of the target user groups. Participants agreed that adding a tutorial system would target the inexperienced casual users and motivate them to engage more frequently with the platform. By including more difficult achievements, this design proposal would also target the core users and power users, as the results demonstrate that these users are motivated by more challenging tasks.

**Conceptual Design Guidelines**

Based on the results from the focus group, the following conceptual design guidelines can be concluded:

- Achievements should be used as part of a tutorial system for the esports platform if the intention is to gain additional new users or to deepen the engagement of the less experienced users.
- Avoid having excessive amounts of achievements. Focus on having fewer, more difficult achievements that interest the experienced users of the platform.

**DISCUSSION**

This section first presents the final conceptual design proposals, based on the conclusions from the focus group. This is followed by an analysis of these design proposal’s abilities to deepen user engagement on an esports platform and to move members between the target user groups. Finally, this section discusses the choice of method of this study, as well as some suggestions regarding possible future work that would be related to this study.

**Final Conceptual Design Proposals**

Considering the conclusions from the focus group and the established conceptual design guidelines, two final conceptual design proposals for deepening user engagement on an esports platform are suggested. The first is based on the design proposal with endorsements and the second is based on the design proposal with achievements. The design proposal with daily challenges is not in the set of final conceptual design proposals, due to the lack of positive feedback from the focus group.

Since the endorsements received great response from the focus group, the suggestion is to maintain this idea in the first conceptual design proposal, but to discard the badges. This final design proposal also includes the changes implied by following the design guidelines created for the original version of this concept. According to the conclusions from the focus group, this improved design proposal should mainly fulfill the psychological needs for relatedness and autonomy, though some competence may also be promoted.

The other suggestion is to keep the conceptual design proposal with achievements since it received positive feedback from the focus group. The results from the focus group demonstrate that this system could be valuable for both new users and more experienced users if certain improvements are considered. Hence, this design proposal includes the changes implied by following the design guidelines created for the original version of this concept. Based on the conclusions from the focus group, this improved design proposal should mainly fulfill the psychological needs for competence and relatedness, though autonomy may also be promoted to a limited extent.

**Motivation and User Engagement**

From the results of the focus group, it can be concluded that the combination of gamification components in the final conceptual design proposals could be quite successful when it comes to deepening user engagement. As identified in the Self-Determination Theory [18], fulfillment of the psychological needs for competence, autonomy, and relatedness contribute to people’s intrinsic motivation, and this in turn increases user engagement. Since both final design proposals are believed to encourage all the psychological needs mentioned, they could promote the users’ intrinsic motivation, and hence, deepen user engagement on an esports platform. This is also supported by Nicholson [23], who states that gamification elements which are used to help build intrinsic motivation and meaning in contexts are more likely to generate long-term engagement. The Self-Determination Theory [18] also explains that enhancing competence, autonomy, and relatedness directly influences an individual’s development, performance and well-being, and when users associate their own happiness with a system or product they most likely will engage deeper with it. This
means the two design proposals have good potential to deepen user engagement on an esports platform.

As Nicholson [23] emphasizes, it is important that the gamified system is not primarily based on providing users with extrinsic rewards, as this often relates to short-term engagement. Naturally, the aim of this study is to examine how gamification can be used to deepen the long-lasting user engagement on an esports platform. However, since gamification is traditionally built upon providing users with some form of explicit and almost tangible reward, developing a gamified system which does not promote any extrinsic motivation can be difficult. As a way of trying to provide users with mainly intrinsic motivation, the aim with the conceptual design proposals is to promote mental and intangible rewards that can serve as intrinsic motivations for users. In this way, users may not require a continued stream of rewards to remain engaged. Hence, the final design proposals consist of more complex systems where traditional gamification components support the underlying concept. For example, an endorsement is not game-related in itself – it is merely a way to provide approval – but by adding points and displaying them to other users, the endorsements are transformed into a gamified system. Furthermore, the focus during this design process has been on understanding user goals and characteristics, and interweaving those with the context and tasks of the esports platform. If the gamification concepts are not in line with these, there is a greater risk that the gamified system fails to deepen user engagement, as pointed out by Conway [20].

Moving Users Between Target User Groups

With the aforementioned improvements, the final design proposal with endorsements mainly has the chance to move members from core users to power users, since the results indicate that it primarily targets these two user groups. The core users who want to specialize in particular roles in certain games are likely required to invest more time playing those roles in order to develop their skills and show them to other players. Hence, their frequency and intensity of engaging with the platform may shift from a few hours on a weekly basis to multiple hours on daily basis, resulting in a transfer from core users to power users. Furthermore, the players who already are power users will less likely shift to a lower level of engagement, as supported by the results indicating that these users would also strive to develop their skills in order to receive endorsements. With the addition of a point system, or leveling system, that correlates with a user’s level of activity and competence on the platform, this conceptual design proposal may also have the chance to move members from casual users to core users. These less active users may start using the system on a more regular basis as a result of positive experiences through social interaction with other users.

The final design proposal with achievements could move members from both casual users to core users, and from core users to power users. By adding a tutorial system to the achievements, this conceptual design proposal can move users from casual to core users. This is because it is predicted to help new and inexperienced users learn about the functionalities on the platform in hopes that they will find one or more activities that will engage them on a more regular basis. The more challenging achievements could help shift users from core to power if they require users to devote more time to engage with the platform. However, this shift depends much on the users’ experiences of the activities they engage in when trying to acquire these challenging achievements. If the experience feels forced or negative, the shift to the more engaged user group may only be temporary.

Since it is difficult to reach a conclusion regarding the target user groups for the daily challenges, it is not possible to determine if this conceptual design proposal would be able to move members from one target user group to another.

Method Criticism

There are several factors which could have affected the results of this study, and improvements to the method should be considered in possible future remakes of this study. Firstly, the focus group included rather few participants and increasing that number may imply additional expert knowledge and more nuanced results. Furthermore, including participants from the three target user groups would presumably provide a more accurate answer to the research question. Another suggestion would be to conduct multiple focus groups, with different goals and themes of discussion. Additionally, the participants seemed to have slightly different perceptions of the meaning of competence, autonomy, and relatedness. This could imply inconclusive results from when they were given the task to label the conceptual design proposals with the three psychological needs, based on whether the needs were promoted in each design proposal. Furthermore, when collecting data through a focus group, there is a risk that participants influence each other too much and that individuals are unable to express their own opinions. However, a positive part of having an open discussion in this way is that participants can build on each other’s opinions, leading to intricate and rewarding discussions. Important to remark is that the three conceptual design proposals created in this study are only a fraction of
the many conceptual designs which could be implemented for a certain esports platform. With other gamification components and design proposals, the results would presumably be different. This also applies if another esports platform was chosen for this study.

Future Work
In order to adequately measure the effect on user engagement of the conceptual design proposals, quite complex forms of testing are required over a longer period. Thus, such an analysis is not part of the scope of this study. However, if one were to assess this effect, the design proposals should preferably be implemented into the actual esports platform, and thenceforth, one could measure various effects and results on users. As demonstrated by Hamari et al. [11], variables which have been tested in previous studies are motivation and engagement-related outcomes, as well as behavior-related outcomes. The preferred set of variables depends much on which game elements are included in the gamified system, what resources are available for the user study, and the goal of the testing. For the conceptual design proposals presented in this study, one example could be to measure the extent to which users move from a less engaged target user group to a more engaged target user group. This would require a large base of participants who are classified into target user groups before, during, and after the decided time of the user study. Since the term user engagement is quite complex, it is important to establish a clear definition beforehand in order to conduct a proper study which can provide rewarding results. Furthermore, it is important to understand the extent to which the gamified system is used and how it contributes to the explicit goals of the gamified system and its users, as identified by Amir and Ralph [2].

CONCLUSION
To conclude this study, it seems that gamification can indeed deepen user engagement on an esports platform. However, the effect on user engagement depends on multiple factors. Research shows that engagement in a system is strongly related to the users’ motivation and, in particular, their intrinsic motivation. Fulfillment of the psychological needs for competence, autonomy, and relatedness is identified as a key element that contributes to people’s intrinsic motivation. Furthermore, the goals and characteristics of the different target users can influence how well the gamified system affects user engagement. Additionally, the effect of gamification on user engagement depends on the way the individual game elements contribute to the entire gamified system. Hence, it is difficult to establish a predetermined set of combined gamification components which will certainly deepen user engagement on an esports platform. The conclusion is that it can differ depending on the context of the esports platform in which the gamification is implemented, as well as on the factors that contribute to the target users’ goals and motivations.

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