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**Character on the digital football field: The influence of personal characteristics on
gaming addiction among FC24 players**

Floris van der Geest

12818216

Faculty of Social and Behavioural Sciences, University of Amsterdam

Master Communication Science (Entertainment Communication)

Dr J. Lemmens

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Abstract

More and more people are becoming addicted to playing games, but the underlying, often unconscious motivations that drive gamers to become entangled in playing games often remain unclear. The aim of this study was therefore to investigate to what extent the personal characteristics self-confidence, sexism and social anxiety can predict the degree of gaming addiction that gamers exhibit. In addition, an answer was also sought to the question to what extent the degree of these three personal characteristics changes as a gamer gets older and to what extent this age change affects the degree of gaming addiction. It is believed that younger gamers become addicted to playing games more quickly than older gamers, but what role do personal characteristics play in this? To answer these questions, a survey was conducted among FC24 players from all over the world ($N = 1315$). The results show that both social anxiety and sexism are positive mediators of the association between age and gaming addiction. This means that as an FC24 player gets older, he or she becomes less sexist and socially anxious, resulting in less gaming addiction. However, no significant results are found for self-confidence. Based on these findings, tackling sexist attitudes and social anxiety among younger gamers seems urgently needed. Regulations and social plans that respond to these personal characteristics can be a good step in protecting younger gamers from developing a gaming addiction.

Keywords: game addiction, personal characteristics, age, FC24

Introduction

In recent years, awareness of the dangers of gaming addiction has increased rapidly in the Netherlands. While in 2018 the question was asked whether gaming addiction was a real addiction, experts are now considering which prevention methods are the most effective in preventing gamers from developing an addiction (Vegeliën, 2018). The figures confirm that gaming addiction is a problem that requires a swift and direct approach. Research shows that the number of gaming addicts worldwide has only increased in recent years. In order to protect gamers from developing a gaming addiction, both government regulation and self-imposed regulations are being introduced, such as government supervision of the use of addictive elements during the production process of games (Király et al., 2017). However, the increase in the number of gaming addicts over the years suggests that the current measures are not enough to tackle the problem (Castanedo et al., 2023).

Figures show that the problem is greatest among young people aged 18 to 24, with 15% showing signs of gaming addiction (Nevenansky, 2023). After the age of 24, it is noticeable that this figure decreases rapidly. One reason that could explain why young adults become less addicted to playing games as they mature is the development of personal characteristics of this generation. As someone gets older, he or she develops new personal characteristics, while others disappear more (Roberts & Caspi, 2003). For both minors and young adult gamers, personal characteristics are an important explanation for developing a gaming addiction (Bülbül et al., 2018; Basha, 2021). The follow-up question is which personal characteristics become stronger or weaker over time and how these relate to developing a gaming addiction. This study will attempt to answer this question by investigating to what extent three personal characteristics occur in gamers of different ages and to what extent these personal characteristics are related to displaying a gaming addiction. These three personal characteristics are self-confidence, sexism and social anxiety.

One of the most popular games in the world among both younger and older target groups is the football game FIFA. With the latest version of the game, EA Sports FC 24, the game managed to secure seventh place in the top 10 best-selling video games of 2023 (Chojnacki, 2024). EA Sports has added some drastic changes to this game. For example, the name has changed from FIFA to EA Sports FC and it is now also possible to play with female players in the game. There are different voices within the gaming community; one is happy with this change and sees it as a good step towards more inclusivity, while the other is less happy with the female players in FC24 because it would create unrealistic situations (Novoa, 2023). With this new approach, FC24 offers the perfect situation in which the relationship between the development of personal characteristics and gaming addiction can be tested. On the one hand, FC24, due to the popularity of the game, offers an escape for gamers with low self-confidence and high social anxiety to come into contact with other gamers in an online environment who have a very specific common interest, namely football. On the other hand, FC24, due to the inclusion of female football players, is a game in which sexism is a major topic of conversation, especially within the male world of football and gaming.

Various parties, such as government institutions and healthcare institutions, are committed to developing laws, regulations and prevention methods to prevent younger generations from developing a gaming addiction. However, the existing rules mainly protect gamers from excessive gambling in games rather than from developing a gaming addiction. For example, the European Parliament has introduced rules that ensure that gamers know what their chances of winning are when gambling in a game and that gamers can more easily cancel their purchases (European Parliament, 2023). However, there are less strict rules to protect gamers from gaming addiction. However, looking at the increasing number of gaming addicts, it is more than necessary that strict rules are also drawn up for this (Castanedo et al., 2023). The European Parliament indicates that protecting vulnerable groups is a main goal for them when it comes to protecting gamers from gaming addiction (European Parliament,

2023). By demonstrating that gamers with certain personal characteristics are vulnerable to developing a gaming addiction, this study helps to map which groups can be considered ‘most vulnerable’ and therefore need the most protection. Legislative bodies, such as the European Parliament, can adjust the rules on game production where necessary or introduce new rules so that these vulnerable young people can be better protected. If regulation is not enough, it is also possible that campaigns can be developed based on this study to offer support to vulnerable gamers to change their gaming behavior.

It is important that this study is conducted, because firstly, it can not only answer the question of whether age difference leads to changes in personal characteristics and gaming addiction, but also the question of how this happens. Although some researchers have investigated the role of personal characteristics such as social anxiety and self-confidence, in most cases they look at game genres such as role-playing games and first-person shooting games (Dindar & Akbulut, 2015; Hyun et al., 2015; Marino et al., 2020). However, it is relevant to also investigate these characteristics in the sports genre, because the motivation to play a game strongly depends on the genre of the game. Gamers play multiplayer games to interact with other gamers and shooting games to compensate for shortcomings in daily life (Kim et al., 2022). What the motives, resulting from personal characteristics, are for gamers to play sports games is still unclear and requires further research.

Regarding sexism, there is evidence to support the assumption that gamers often display sexist characteristics, but to what extent this sexism strengthens or weakens as the gamer gets older remains to be seen. In addition, it has not yet been ruled out that sexism is related to gaming addiction and this study provides more clarity on this. Due to the addition of female soccer players in FC24, the topic of sexism has become a major point of discussion among FC24 players. Many players find it unacceptable that female players are on the field together with male players, because in their opinion women are qualitatively much worse than male soccer players (Donovan, 2023). Because many FC24 players have actively thought

about these gender roles or are still thinking about them when they play the game, this makes it the perfect game to investigate the role of sexism on gaming addiction.

Finally, it is relevant to investigate the role of age in the development of these personal characteristics. Young people are often considered more vulnerable when it comes to gaming addictions than young adult gamers (Festl et al., 2012). The most common argument that this younger target group is more vulnerable to developing a gaming addiction is that young people often struggle with personal problems such as lower social skills and do not dare to openly talk about personal concerns, which causes individuals to withdraw more in themselves and seek their happiness in, among other things, video games (Lemmens et al., 2009; Porter et al., 2010). This study builds on this by looking at other personal characteristics, but also by looking at the extent to which gamers experience fewer personal problems as they get older. Studies that investigate the role of personal characteristics in games that are mainly popular among younger target groups, such as Fortnite or Minecraft, do not explain to what extent the role of personal characteristics is different for older gamers (Carter et al., 2020). Because FC24 is immensely popular among both young and old gamers, this study can do that. Based on this information, the following main question was formulated:

RQ: To what extent do the personality traits of self-confidence, sexism and social anxiety explain why the age difference of FC24 players can lead to the display of different degrees of gaming addiction?

Theoretical Framework

Age and Gaming Addiction

The relationship between age and gaming addiction has been studied several times. The findings of these studies are very consistent and show that as a gamer gets older, he or she will show a lesser degree of gaming addiction (Mentzoni et al., 2011; Kuo et al., 2012; Ahmadi & Saghafi, 2013; Hyun et al., 2015; Wittek et al., 2015). It appears that adolescents aged 14 to 18 show more problematic gaming behavior than young adults aged 19 to 39 and people aged 40 and over (Festl et al., 2012). The most common reason why this relationship occurs is that older gamers have less time to spend on playing games and more often spend their time on other priorities than younger gamers. A theory that supports this explanation and describes which priorities are preferred is the Socio-emotional selectivity theory (Birk et al., 2017). This theory distinguishes between two motives that determine how people act in daily life; motives related to the regulation of emotions and motives related to the acquisition of knowledge. The theory states that the motive for knowledge decreases and the motive for emotional stability increases as people grow older. Emotional stability is achieved by many young adults when a number of core values are met, such as building a social network, being successful at work, and forming intimate relationships (Havighurst, 1973; Brose et al., 2013). As young adults begin to pursue these goals more intensively, they have less time to spend on playing games (Mentzoni et al., 2011; Kuo et al., 2012; Wittek et al., 2015). This results in a reduced chance of exhibiting game-addicted behavior.

On the other hand, younger gamers up to the age of 18 have more time to spend on playing games because they have more free time in addition to school activities and a possible part-time job (Winn & Heeter, 2009). In addition, these young people spend more time indoors than young adults over the age of 18 and prefer the option of having social interaction with peers in a digital environment over direct contact outside the home (Karsten, 2005; Šmahel et al., 2013). This level of free time and preference for online interaction may result in an increased chance of developing a gaming addiction among gamers up to and including the

age of 18 (Festl et al., 2012). Based on this information, the following hypothesis has been formulated:

H1: The age of FC24 players is related to gaming addiction, in such a way that the older someone gets, the fewer characteristics of gaming addiction someone shows.

Level of Self-Confidence among Gamers

Self-confidence can be defined as “The way in which a person values and respects himself or herself” (Juwono & Winarta, 2017). Research shows that as a person ages, his or her level of self-confidence often increases (Erol & Orth, 2011; Orth et al., 2018). From the age of 15 to 60, people’s self-confidence continues to increase. A theory that builds on the Socio-emotional selectivity theory and explains why people build more self-confidence as they age is the theory of personal development (Orth et al., 2018).

While the Socio-emotional selectivity theory states that the search for emotional stability is part of growing older, the theory of personal development describes that this emotional stability is achieved by developing personal characteristics that fit with growing up. For many young adults, building self-confidence is a personal characteristic that improves functioning in social roles, such as employee and partner (Orth et al., 2012). This involves the Social Investment Principle, which means that many young adults are more actively committed to fulfilling these social roles (Roberts et al., 2008). Building self-confidence plays a crucial role in realizing a more mature lifestyle, on the one hand because a high level of self-confidence is seen as one of the adult personality characteristics, and on the other hand because meeting social norms, such as having a job and a stable relationship, provides more self-assurance (Watson et al., 2002). Young people therefore seem to develop more self-confidence as they grow older.

Self-confidence has been closely linked to gaming addiction in many studies. Many of these studies state that as a person develops more self-confidence, he or she exhibits a lower

degree of gaming addiction (Lemmens et al., 2011; Bozoglan et al., 2013; You et al., 2016). Characteristics such as distrust and loss of control may explain why this correlation occurs. Elements of self-confidence such as self-respect and personal pride lead to a person exhibiting more discipline and self-control, which reduces the chance of developing a gaming addiction (Afriwilda & Mulawarman, 2021). In addition, for many people with low self-confidence, playing games serves as an escape from normal life, in which it is difficult for these gamers to adapt to the environment and come into contact with peers (Craig, 1995). In real life, these gamers may experience a lack of identity and control that they can achieve in the digital environment, which in many cases can lead to gamers with low self-esteem playing excessively a game in which this identity is built, which can result in gaming addiction (Green et al., 2021). This explanation is also called the compensation hypothesis. Building on this, games can offer people with low self-esteem the opportunity to get in touch with a virtual community, while avoiding social contact in reality, so that the lack of self-esteem does not hinder making friends (Kavanagh et al., 2024). However, this positive association can lead to more gaming addiction. Based on this information, the following hypothesis has been formulated:

H2: The relationship between age and gaming addiction is mediated by self-confidence, such that as a person gets older, more self-confidence is developed which ultimately results in a lower degree of gaming addiction.

The mediating role of sexism

Sexism is defined in many studies as “Behaviors, circumstances, or attitudes that promote stereotypes of social roles based on sex” (Dahl, 2015). Sexist beliefs that men often hold toward women include that women are inferior to men at work and that women are less good at male activities, such as sports (Vial et al., 2024). On the other hand, sexism from women toward men, also called reverse sexism, manifests itself in, among other things,

assuming that men can only perform physical tasks or that men cannot behave maturely (Morando et al., 2023). For many young people, hegemony plays an important role when it comes to sexism (Budgeon, 2013). Young people look up to role models and strive to develop the same prestige as these examples (Gelūnas, 2022). For men, this results in a worldview in which men are expected to be physically superior to women, while women strive to fill high positions in business or politics instead of men (Meyers, 1991). However, as young people get older, their level of sexism seems to decrease, studies show (Fox & Tang, 2014; Hammond et al., 2017).

As they grow older, many young people are more likely to develop personal characteristics that are appropriate for becoming adults (Casey et al., 2011). This includes entering into a permanent relationship, which replaces sexist views of the opposite sex with greater appreciation for what men and women have to offer. However, it is striking that when people reach the age of 60, they often revert to more conservative and traditional values and, as a result, develop a higher degree of sexism (Gouveia et al., 2015). Age therefore appears to have a U-shaped effect on sexism, with the degree of sexism decreasing at a relatively young age, but as someone reaches a higher age, sexist thought patterns return. Since this study does not consider gamers aged 60 and over, the backlash effect described here seems less relevant.

The question is, however, to what extent sexism serves as a predictor for gaming addiction. To date, science does not provide much evidence for the existence of this relationship. However, based on a survey study, researchers were able to conclude that there is a correlation between game consumption and hostile sexism (Fox & Potocki, 2015). It is stated that when a gamer spends more time playing the game, a higher level of sexism and aversion towards the opposite sex is developed. The main reason for a positive relationship between sexism and gaming addiction is that people who show a high level of sexism are more likely to suffer from mental problems such as stress (Borgogna & Aita, 2020; Scheer et al., 2022). When people with many sexist views come into contact with situations in which

these sexist views are refuted, this causes a lot of stress and uncertainty. Research shows that these mental problems can lead to problematic gaming behavior in many people (Andreassen et al., 2016; Moge & Romano, 2020).

Strikingly, similar character traits such as discrimination and masculinity are also related to gaming addiction (Khazaaal et al., 2018; Gelūnas, 2022). A second explanation for the finding that these types of antisocial behavioral characteristics are related to the development of a gaming addiction lies in the drive for social dominance among gamers (Kowert et al., 2022). A related explanation is the Social Dominance Theory. This theory states that social inequalities are maintained and that this process results from values such as prejudice, oppression, and discrimination (Sidanius & Pratto, 2012). This phenomenon mainly occurs among men. Male gamers who are driven by these social dominance characteristics, such as sexism and discrimination, see it as a great humiliation when they are defeated by women in a game (Bertozi, 2008). The urge for male gamers to prove that they are better than women therefore ensure that beating a female gamer, but also female characters in the game itself, has a strong motivating effect on this male gamer to invest more time and effort in the game to prove their point (Gabbiadini et al., 2016; De Beauvoir, 2023). As a result, this type of gamer can develop a gaming addiction more quickly, because the need to prove themselves can take over. Although this explanation only applies to men, it is still relevant to mention in view of the gender distribution in the sample of this study.

Based on this, the following hypothesis was formulated:

H3: The relationship between age and gaming addiction is mediated by sexism, such that as a person gets older, he or she becomes less sexist, leading to lower levels of gaming addiction.

Gamers and their social anxiety

Social anxiety is seen as a constant fear of being in a social environment that involves exposure to strangers or the possibility of being judged in a social or imaginary context (Peleg, 2012). Social anxiety often develops at a young age. Research shows that by the age of 11, almost 50% of children suffer from social anxiety symptoms, with this percentage rising to 80% among 20-year-olds (Stein & Stein, 2008). Building on this, however, studies do show that as someone moves into a later phase of life, the level of social anxiety decreases (Gretarsdottir et al., 2004; Beesdo et al., 2007). One explainable reason for the high prevalence of social anxiety among younger target groups is the high level of online media presence in the lives of young people (O'Day & Heimberg, 2021). By using social media a lot, many young people develop a negative social comparison, in which they develop an image in which they see themselves as inferior in many personal characteristics to the people they see on social media, which increases their social anxiety (Antony et al., 2005). In addition, people with social anxiety prefer online communication over face-to-face communication, which causes social skills to be less developed and the anxiety to persist (Weidman et al., 2012). Since social media use decreases as someone gets older, it is understandable why social media has a great influence on the development of social anxiety (Feng et al., 2019).

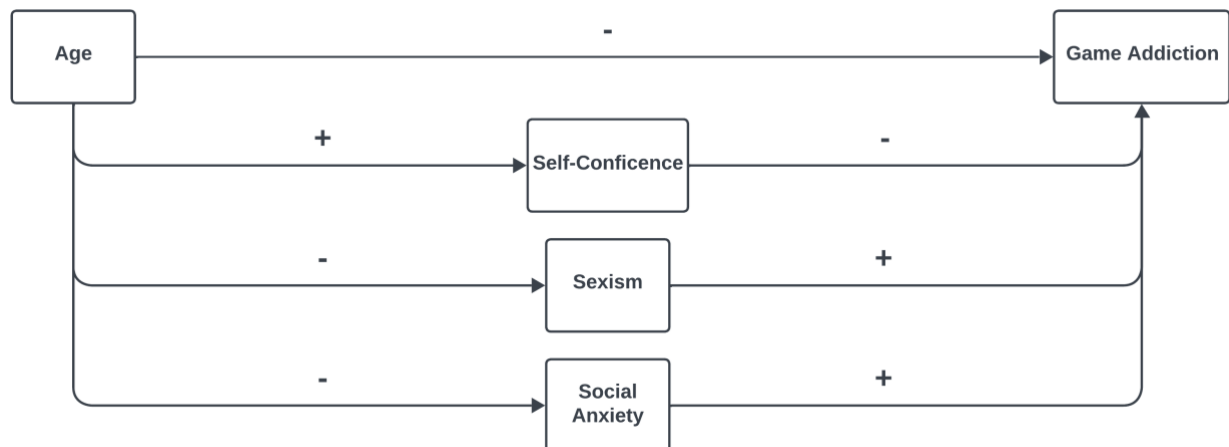
In terms of gaming addiction, social anxiety is a major problem. Studies show that the level of social anxiety is a very good predictor of gaming addiction (Cole & Hooley, 2013; Fayazi & Hasani, 2017; Li et al., 2022). Research shows that for many young people with high social anxiety, video games offer the opportunity to connect with peers who share a passion for games, but also to forget negative experiences from everyday life or to relieve negative emotions (Dechant et al., 2020; Giardina et al., 2021). Online games offer young people with high social anxiety the opportunity to talk about sensitive topics and to receive emotional support from other gamers that would not be achieved in a face-to-face conversation (Cole & Griffiths, 2007). However, research also shows that the reduction of

social anxiety during gaming can lead to an even greater level of anxiety that is aroused during face-to-face contact (Lo & Wei, 2005). This results in a constant preference for having interactions during gaming and avoiding contact with others in daily life, which can lead to problematic gaming use and addiction. Based on this information, the following and final hypothesis was chosen:

H4: The relationship between age and gaming addiction is mediated by social anxiety, such that as a person ages, levels of social anxiety decrease, leading to fewer features of gaming addiction.

Figure 1

Conceptual model of the relationships between age, gaming addiction and the three personality traits self-confidence, sexism and social anxiety.



Method

Sample

In order to determine to what extent younger FC24 players show more signs of gaming addiction than older FC24 players and to what extent the level of self-confidence, sexism and social anxiety can explain this relationship, a survey was developed and sent to collect the necessary data. Surveys are generally very suitable for use in behavioral studies and are the

most suitable method to yield a large amount of data, which are important conditions for this study (Boateng et al., 2018). To participate in the study, respondents had to be 16 years or older and play FC24 with some regularity. FC24 is the most recent football game from EA Sports, launched in September 2023 and until recently known as FIFA. To recruit people from this target group, a combination of a convenience sample and a purposive sample was used. By placing a call on various FC24 related groups on Discord, Reddit and Facebook, people were asked to participate in the study and to send the invitation to family and friends. In order to motivate people to participate in the research, compensation in the form of a voucher worth €5 was given to each respondent who completed the survey in its entirety. Because the respondents were only recruited from groups in which people participate who play FC24 with some regularity, this is a targeted sample.

After several weeks of recruitment, a total of 1406 FC24 players participated in the study and 1373 fully completed the survey. For various reasons, the data of some respondents was subsequently deleted. For example, 30 respondents were deleted due to unrealistic answers to the gameplay control questions and another 19 due to providing the same email address twice and thus participating in the study multiple times. In addition, 3 respondents had completed less than 10% of the survey and 6 respondents were younger than 16 years old, which was reason to delete this data as well. This ultimately resulted in a dataset of 1315 respondents with which the analyses could be performed.

The average age of the respondents who participated in the study was found to be fairly well distributed with a mean age of 27 years ($M = 26.99$, $SD = 6.57$). In terms of gender of the respondents, it was found to be not evenly distributed with 84.2% found to be male ($n = 1106$), 14.7% found to be female ($n = 193$) and 0.5% identifying as non-binary ($n = 6$). In terms of employment status, 53.5% of the respondents were found to have a full-time job ($n = 704$), 21.8% had a part-time job ($n = 287$) and only 13.8% were unemployed ($n = 181$). Most respondents described their relationship status as single, namely 45.2% ($n = 595$), while 36.3% were living with

a partner ($n = 478$). Regarding behavior around FC24, approximately the same number of respondents appeared to have purchased the standard edition of the game, namely 52.3% ($n = 688$), as the Ultimate Edition, which 47.7% had purchased ($n = 627$). Finally, participants appeared to spend a great deal of time playing FC24. On average, respondents spent just over 25 hours per week playing the game ($M = 25.37$, $SD = 12.97$). Looking at the total number of days that respondents play, it appears that 6.9% of respondents play FC24 7 days per week, while most respondents, namely 38.2%, play FC24 4 days per week.

Procedure

In November 2023, a recruitment text was sent to various Discord, Reddit and Facebook pages that focus on FC24 to recruit respondents. This recruitment period lasted several weeks. If the player was interested in participating in the study, he or she was forwarded to the survey via the link in the recruitment text. They were the first to be informed about the subject of the study. In addition, the informed consent stated that the anonymity of the respondent would be guaranteed, that the respondent could stop participating in the study at any time and that participation in the study could not lead to any risk or damage, in any form whatsoever. After agreeing to this condition, the questionnaire started.

Respondents were first asked about various demographics such as age, gender and employment status. In order to motivate respondents to continue with the survey, some questions were then asked about their personal experience with FC24 that were not relevant to the research, such as what the respondent's favorite team in FC24 was. This was followed by some general questions related to gaming, such as how many hours the respondent spends gaming on average per week. Subsequently, the respondent was asked about his or her motivations for playing FC24. The next part of the survey focused on the financial aspect of FC24, where the respondent could indicate how much money he or she spent on FC24 in total and how he or she experienced the loot boxes in the game? The viewing behavior of FC24 content was the next part that was covered,

where the respondent indicated how often and why he or she watched FC24 content. The following questions aimed to measure the variables gaming addiction, gambling addiction and perception of gender roles. Finally, the respondent's level of self-control, self-confidence and social anxiety were measured using various items. The survey concluded with the option for respondents to choose a charity to which €250, divided over the chosen organisations, would be donated at a later time. After choosing this, the respondents were thanked for their participation and the study was over.

Operationalization

Gaming addiction. Gaming addiction was measured using 6 items from the Internet Gaming Disorder Scale (Lemmens et al., 2015). Within this scale, gaming addiction is divided into 9 different dimensions, which are divided into three main dimensions using the ICD-11 scale: excessive, obsessive and problematic behaviour (World Health Organization, 2019). For this study, two items were included in the survey for each of the three dimensions. The items could be answered using a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The items for excessive behaviour are 'I start playing even when I should be doing other things' and 'I cannot stop playing even when I should be doing other things'. The items for obsessive behaviour are: 'Since I play this game, I lost interest in other hobbies or activities' and 'I would consider myself obsessed with this game'. 'I experienced serious conflicts with my family, friends or partner because of this game' and 'I experienced serious problems in my performance at work, school, or daily activities because of this game' are the items for problematic behaviour. The items can be found again in Appendix 1. A factor analysis shows that one factor is formed with an Eigenvalue higher than 1. This factor has an Eigenvalue of 2.79 and an explained variance of 46.53%. The reliability analysis shows that the scale for gaming addiction is reasonably reliable with a Cronbach's Alpha of .77. The Cronbach's Alpha could not be improved by removing an item, which means that all 6 items are included in the gaming addiction scale ($M = 2.91$, $SD = 0.76$).

Self-confidence. The respondents' level of self-confidence was measured using 4 items from the Self-Esteem Scale (Rosenberg, 1965). These items could also be answered using a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The 4 items are: (1) "On the whole, I am satisfied with myself", (2) "I feel that I have a number of good qualities", (3) "I feel I have much to be proud of", (4) "I take a positive attitude toward myself". A factor analysis showed that one factor was formed with an Eigenvalue higher than 1. This factor has an Eigenvalue of 2.14 and an explained variance of 53.48%. The reliability analysis showed that the scale for self-confidence is reasonably reliable with a Cronbach's Alpha of .71. The Cronbach's Alpha could not be improved by removing any item, leaving all 4 items included in the self-esteem scale ($M = 3.55$, $SD = 0.73$).

Sexism. This variable was measured using the Ambivalent Sexism Inventory (Glick & Fiske, 1996). This scale consists of 22 items that measure the degree of sexism towards women. However, for this study, it was decided to include only 5 of the 22 items in the survey. On the one hand, this was chosen because not all items are considered equally relevant for a game-related study, and on the other hand, because too many items could bore the respondent and thus increase the chance that the respondent would prematurely terminate their participation in the study. The items could be answered using a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Examples of the statements are: 'Women fail to appreciate all men do for them' and 'Women are too easily offended'. The remaining items can be found in Appendix 1. A factor analysis shows that one factor is formed with an Eigenvalue higher than 1. This factor has an Eigenvalue of 2.68 and an explained variance of 53.65%. The reliability analysis shows that the sexism scale is reasonably reliable with a Cronbach's Alpha of .78. The Cronbach's Alpha could not be improved by removing an item, which means that all 5 items are included in the sexism scale ($M = 2.89$, $SD = 0.79$).

Social anxiety. The level of social anxiety of the respondents was measured using selected items from the Social Interaction Anxiety Scale (Mattick & Clarke, 1998). This scale consists of 19 items that focus on various elements that are appropriate for people with a lot of social anxiety, such as seeking contact with others. As with the operationalization of sexism, it was decided to include only a few items in the survey for the same reasons, in this case 4. Here too, the items could be answered using a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The 4 items are as follows: (1) “I have difficulty making eye-contact with others”, (2) “I am at ease talking to people at parties or other social meetings”, (3) “When in a group, I worry that I will be ignored”, (4) “I have difficulty talking to people I feel attracted to”. A factor analysis shows that two factors are formed with an Eigenvalue higher than 1, namely the factor ‘face to face contact’, with an Eigenvalue of 1.83 and an explained variance of 45.82%. The second factor is called ‘party and meeting interactions’ and has an Eigenvalue of 1.00 and an explained variance of 25.08. Looking at the factor loadings of the 4 items, only one item appears to have a higher loading on the party and meeting interactions factor than on the face-to-face contact factor. Despite this, this loading is very weak. For this reason, it was decided to form only one scale for social anxiety with all 4 items. The reliability analysis shows that this scale for social anxiety is not very reliable with a Cronbach’s Alpha of 0.48. However, Cronbach's Alpha can be improved to 0.68 by removing item 2. It was therefore decided to compose the social anxiety scale with only 3 items ($M = 2.96$, $SD = 0.90$).

Results

Main Effect Age and Gaming Addiction

To test to what extent an increase in age leads to a change in the degree of gaming addiction, a simple regression analysis was performed with age as the independent variable and the degree of gaming addiction as the dependent variable. In addition, the gender of the respondent was included as a control variable. To first test the relationships between the different variables, a correlation test with Pearson correlation was performed. These correlation values can be found in Table 1. This

correlation test shows that age is significantly related to gaming addiction, sexism and social anxiety. Gaming addiction is significantly related to sexism and social anxiety. This means that when someone shows more characteristics of gaming addiction, this person also shows a higher degree of sexism and social anxiety. Sexism also appears to be significantly related to social anxiety, which means that gamers with more sexism also have more social anxiety. Finally, a significant correlation is found between social anxiety and self-confidence, which means that when gamers show a higher degree of social anxiety, they have less self-confidence.

Table 1

Descriptive Statistics and Correlations for Research Variables

#	Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1	Age		6.57	-					
2	Game Addiction	2.91	0.76	-.16*	-				
3	Sexism	2.89	0.79	-.24*	.42*	-			
4	Social Anxiety	2.96	0.90	-.31*	.35*	.29*	-		
5	Self- Confidence	3.55	0.73	-.04	-.03	-.05	-.19*	-	
6	Gender	1.16	0.38	.03	.10*	-.07*	.02	.00	-

Note: * $p < .05$

To test the first hypothesis, a simple regression analysis was performed. This regression analysis showed that age is a significant predictor of gaming addiction, $F(2,1277) = 24.73, p < .001$. Only 1.9% of the variance in gaming addiction could be explained by age. The control variable gender explained 1.1% of the variance in gaming addiction. The standardized regression coefficient for age was -0.16 and significant, $B = -0.02, b = -0.16, t(1277) = 5.84, p < .001, 95\% \text{ CI } [-0.02, -0.01]$. This means that when the age of an FC24 player increases by one year, the level of gaming addiction decreases by 0.16 value on a 5-point scale. For gender, a significant relationship with gaming addiction was also found, with

a regression coefficient of 0.11, $B = 0.24$, $b = 0.11$, $t(1277) = 4.05$, $p < .001$, 95% CI [0.12, 0.35]. This means that women ($M = 3.11$, $SD = 0.67$) show a significantly higher degree of gaming addiction than men ($M = 2.87$, $SD = 0.76$).

Although it is clear that as someone gets older, he or she shows fewer characteristics of gaming addiction, it is not yet entirely clear to what extent the younger generation of FC24 players differs from the older generation of gamers when it comes to showing characteristics of gaming addiction. In order to get an indication of the extent to which these generation groups differ from each other, the respondents were divided into two groups. The first group consists of FC24 players aged 28 or younger, who can be classified under the title 'adolescents'. The second group consists of respondents aged 28 and over and are described as 'middle-aged adults'. In total, the group of adolescents, consisting of gamers between the ages of 16 and 28, consists of 834 respondents, with an average age of just under 23 years ($M = 22.87$, $SD = 3.27$) and the group of middle-aged adults, consisting of FC24 players between the ages of 29 and 49, consists of 478 respondents ($M = 34.18$, $SD = 4.30$). An independent sample t-test showed that FC24 players aged 28 years or younger showed on average a higher level of gaming addiction ($M = 2.99$; $SD = 0.76$) than players aged 28 years or older ($M = 2.77$; $SD = .74$), with the difference being significant, $t(1292) = 5.16$, $p < .001$, 95% CI [0.14, 0.31]. Based on this information, H1 is confirmed.

Mediating effects

To test to what extent the level of self-confidence, sexism and social anxiety of FC24 players play a mediating role in the relationship between age and gaming addiction, a regression analysis was performed with PROCESS. This multiple regression analysis with the three mediators included in the model and gender as a control variable showed that the total model was significant, $F(2,1269) = 23.89$, $p < .001$, $R = 0.19$, $R^2 = 0.04$. The total effect of age on the level of gaming addiction with the three personal characteristics as mediators and gender as a control variable was significant, $B = -0.02$, $b = -0.16$, $t(1269) = -5.67$, $p < .001$,

95% CI [-0.02, -0.01]. It is striking that when gender is not included in the total model as a control variable, the standardized regression coefficient of the total effect of age on gaming addiction remains the same, namely -0.16. This means that the total effect of age on gaming addiction in the model is not influenced by gender.

Next, the mediating roles of the three personal characteristics in the total model are examined, with gender as a control variable. This shows that the relationship between age and self-confidence is not significant, $F(2,1269) = 1.29, p = .276, R = 0.05, R^2 < 0.01$. The correlation between this predictor and the mediator is not significant, $B < 0.01, b = -0.04, t(1269) = -1.34, p = .180, 95\% \text{ CI } [-0.01, 0.00]$. Based on this finding, no evidence is found that increasing age significantly leads to lower levels of self-confidence. The test for the relationship between age and sexism, on the other hand, appears to be significant, $F(4,1269) = 41.73, p < .001, R = 0.25, R^2 = 0.06$. Age appears to be a significant predictor of the degree of sexism a person displays, $B = -0.03, b = 0.24, t(1269) = -5.80, p < .001, 95\% \text{ CI } [-0.04, -0.02]$. As a person's age increases, his or her degree of sexism decreases according to this model by a value of 0.24 on a 5-point scale. Finally, the regression analysis shows that the test for the correlation between age and social anxiety is also significant, $F(2, 1269) = 64.85, p < .001, R = 0.31, R^2 = 0.09$. This means that age is also a significant predictor of the degree of social anxiety that someone has, $B = -0.04, b = -0.30, t(1269) = -11.35, p < .001, 95\% \text{ CI } [-0.05, -0.03]$. The model states that as someone gets older, his or her social anxiety will decrease by 0.30 on a 5-point scale. The controlling role of gender remains limited here. Only for sexism does gender appear to have a strengthening effect on the effect size of age on the degree of sexism. When gender is not controlled for, the standardized regression coefficient of age on social anxiety appears to change to -0.31, which was still -0.30 in the model that does include gender. This means that gender has a very small strengthening effect on this relationship and that the effect of age on gaming addiction is slightly stronger for men than for women.

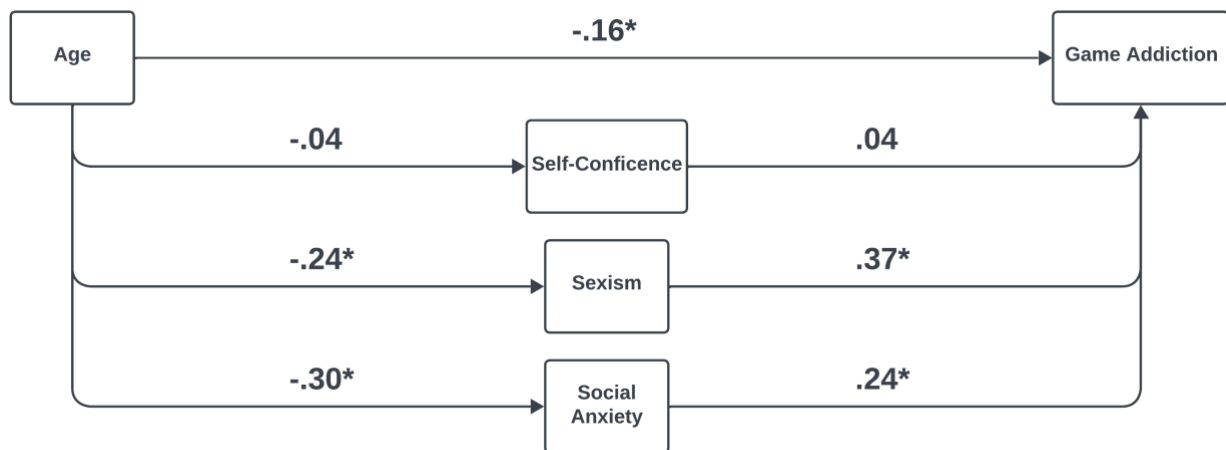
The follow-up question is to what extent these mediators are related to the degree of gaming addiction of FC24 players. The model with gaming addiction as outcome variable and the mediators as predictors appears to be significant, $F(5,1266) = 85.68$, $p < .001$, $R = 0.50$, $R^2 = 0.25$. The model first shows that no significant relationship between the degree of self-confidence and gaming addiction is found, $B = 0.04$, $b = 0.04$, $t(1266) = 1.50$, $p = .135$, 95% CI $[-0.01, 0.09]$. This means that no evidence is found that the relationship between age and gaming addiction is mediated by self-confidence, resulting in a rejection of H2. With regard to sexism, the model shows that there is a significant association with gaming addiction, $B = 0.35$, $b = 0.37$, $t(1266) = 14.31$, $p < .001$, 95% CI $[0.30, 0.40]$. This means that when someone shows a lower level of sexism, he or she also scores lower on the gaming addiction scale. This, combined with the finding that age and sexism are negatively associated, leads to sufficient support to accept H3. Finally, the model also finds sufficient evidence for a significant association between social anxiety and gaming addiction, $B = 0.20$, $b = 0.24$, $t(1266) = 8.94$, $p < .001$, 95% CI $[0.16, 0.25]$. This means that when someone scores one unit lower on the social anxiety scale, he or she scores 0.24 points lower for gaming addiction on a 5-point scale. Since age is also negatively correlated with social anxiety, enough evidence is also found in this case to accept H4.

The controlling role of gender appears to be very limited. When gender is not taken into account, the standardized regression coefficient of self-confidence on gaming addiction decreases from 0.04 to 0.03. For sexism, the standardized regression coefficient also decreases by 0.01, namely from 0.37 to 0.36. The effect size of social anxiety on gaming addiction increases slightly when gender is not controlled for, namely from 0.24 to 0.25. These differences show that gender has a very modest effect on both the direct and indirect effects in the model. With regard to these total indirect effects, the total indirect effect appears to have an effect size of -0.16. The effect sizes of the significant mediator sexism is 0.09 and for social anxiety this is -0.08. For self-confidence, which does not appear to be a significant mediator, an effect size of 0.00 is also found. Finally,

little remains of the non-significant direct effect of age on gaming addiction, $b = 0.00$, $t = 1.18$, $p = .854$, 95% CI $[-0.01, 0.01]$. The different standardized regression coefficients can be found in Figure 2.

Figure 2

Standardized regression coefficients of age, gaming addiction and personal characteristics.



Note: All coefficients are standardized effect sizes, $*p < .001$

Discussion

The aim of this study was to provide insight into the role of different personality traits in the development of gaming addiction and how the presence of these personality traits changes as a gamer ages. Based on the survey conducted, it can be stated that the personality traits sexism and social anxiety are good predictors for the development of gaming addiction among FC24 players. The results of the main effect show that age is negatively related to gaming addiction, which means that as someone gets older, fewer characteristics of gaming addiction are displayed. This finding is in line with previous studies and can be explained by the Socio-emotional selectivity theory (Mentzoni et al., 2011; Kuo et al., 2012; Ahmadi & Saghafi, 2013; Hyun et al., 2015; Wittek et al., 2015). As young adults grow older, they increasingly feel the need to seek emotional stability. This includes obtaining a good job and

building a social network. For many young adults, playing video games does not fall under this need, which makes playing a game like FC24 a lower priority. According to the theory, this results in a lower degree of gaming addiction.

The finding that sexism is a good predictor of the degree of gaming addiction is in line with current knowledge about the role of sexism (Fox & Potocki, 2015; Borgogna & Aita, 2020; Scheer et al., 2022). This means that as someone gets older, less social anxiety occurs, which leads to less gaming addiction. The association can be explained by the fact that people with high sexist attitudes are more likely to have problems with their mental health (Borgogna & Aita, 2020; Scheer et al., 2022). People who exhibit high levels of sexism experience a lot of stress when exposed to circumstances in which traditional stereotypes are not adhered to, which results in more mental problems in this group. These mental problems appear to be able to manifest themselves in, among other things, exhibiting a high level of gaming addiction (Moge & Romano, 2020). For sexist gamers who try to reduce their stress levels by playing a game like FC24, an addiction to the game can be the result.

The significant result stating that social anxiety is a good predictor of gaming addiction is in line with the results of previous studies (Cole & Hooley, 2013; Fayazi & Hasani, 2017; Li et al., 2022). This finding shows that gamers who get older, show less sexist characteristics, which results in a lower level of gaming addiction. The relationship can be explained by previous findings stating that online environments, such as games, offer gamers with high social anxiety the opportunity to forget negative experiences and alleviate negative emotions (Dechant et al., 2020; Giardina et al., 2021). In addition, games offer the opportunity to meet new people with similar interests, while avoiding physical contact and reducing social anxiety. In the case of FC24, however, it is questionable whether this last argument explains the results found. In FC24, gamers have few opportunities to get in touch with other players. Often the player develops negative emotions towards the opponent and

cannot make direct contact with other players in any way, as is possible in other multiplayer games (Kivikangas & Ravaja, 2013).

Self-esteem does not appear to be a significant mediator for the relationship between age and gaming addiction. This finding deviates from the picture sketched by previous studies (Lemmens et al., 2011; Bozoglan et al., 2013; You et al., 2016). On the one hand, this difference in results could be explained by the operationalization of self-esteem, which in this study consisted of only 4 items. Previous studies used more items, such as You et al. (2016), who used the full self-esteem scale of Rosenberg (1965). On the other hand, a difference in operationalization could be the cause of the different results. In previous studies, the samples consist of general gamers and no specification is made regarding the type of games that the respondents play. However, it has been shown that players with a lack of self-esteem are more quickly motivated to play a game in which they have the opportunity to meet new people in a digital environment (Colwell et al., 1995). However, FC24 is not known for being a game where you can easily communicate with other players, which is why gamers who have little self-confidence but want to meet other gamers in an online environment play other games than FC24. Although FC24 is very popular and has many addicted players, the level of self-confidence seems to be an irrelevant motivation for these players to play the game, which explains a non-found effect.

There are several shortcomings that future research should take into account. First, the strength of the validity of this study is questionable. Although this study says a lot about the underlying processes that explain why players of FC24 can show characteristics of gaming addiction, it is difficult to generalize these findings to gamers in general. Studies show that the relationship between personal characteristics, such as social anxiety, and gaming addiction can vary greatly between players of different game genres (Park et al., 2016). The study therefore provides a lot of insight into why players of one of the most popular games in the world, namely FC24, form a risk group for developing a gaming addiction and these findings

can possibly be generalized to other sports-related games. It is questionable whether these findings also apply to gamers of, for example, first-person shooter games and multiplayer online role-playing games. Second, the self-measurement of respondents may have led to a distorted picture. Respondents could complete the survey in their own environment at any time. However, if this survey was filled out after the participant had played and lost an FC24 match, for example, it is possible that this player was feeling emotionally charged, which could have influenced how the questions about sexism and evaluation of FC24 were answered. However, it is difficult to determine to what extent this situation occurred and it is therefore recommended to take this into account in further research. This can be done by asking the question when the respondent last played the game and how he or she experienced the game at that moment.

Another shortcoming concerns the results of the study. Although several significant results are found, the regression coefficients show that the indirect effects can be weak to even very weak. It is therefore important to note that the results should not be overestimated and that the existing, but relatively weak role that personal characteristics play in the development of a gaming addiction among FC24 players should be critically examined. These findings differ from other studies that find stronger relationships (Cole & Hooley, 2013; Li et al., 2022; Scheer et al., 2022). A possible explanation for this is that the studies that applied the same operationalization regarding the applied scales, applied these scales in their entirety. For this study, it was decided to implement only parts of the scales in the research, which could have resulted in relevant items not being included. For follow-up research, it is therefore also recommended to include the entire scales to ensure that all relevant aspects of personal characteristics are examined.

A final relevant shortcoming is that all respondents who participated in the study are active in FC24 groups on Discord, Facebook and Reddit. However, there are also many FC24 players who are not active on these platforms, which is why they were not included in the

sample. These two groups can differ greatly from each other. FC24 players who are very active on platforms such as Discord and Reddit may see this as an extension of a gaming experience. Research shows that people who are active on similar gaming community platforms are more addicted to playing games than gamers who are not active on these platforms (Blinka & Mikuška, 2014). Based on this knowledge, it can be explained that this study finds significant correlations between gaming addiction and personal characteristics. By also including gamers in the sample in future research who are not active on platforms such as Discord and Reddit, a more generalizable picture of the entire population of FC24 players can be drawn up.

In addition to the named recommendations for further research, there are a number of unnamed recommendations that can be focused on in further research. First, it is important to continue providing insights into which personal characteristics can explain the relationship between age and gaming addiction. Since FC24 is often criticized for addictive elements such as opening packages or getting the best players, personal characteristics such as discipline and greed are interesting characteristics to investigate further. Although sexism is very relevant to FC24 due to the addition of female players, it is also very relevant to conduct further research into the role that inclusion-related personal characteristics have in the development of gaming addiction. Think of characteristics such as discrimination, masculinity or racism. Delving deeper into this representation of genders and other groups in video games, an important question is how gamers' views on these gender roles change as a gamer is exposed to this role division in video games for a longer period of time. An example of this is the extent to which FC24 gamers view women's football and women's sports in general differently as they play FC24 for a longer period of time. It is therefore recommended to conduct a longitudinal study in which respondents play a game for a longer period of time in which gender roles play an important role, such as FC24 in which the combination of male and female footballers is an important component. A longitudinal study can determine the extent to which personal

characteristics such as sexism, but also the newly named characteristics such as the degree of discrimination and masculinity, change over time as a result of playing a game.

EA Sports has clearly not lost any gamers with the large-scale changes to their football game FC24, as the game series is still immensely popular among gamers and football fans. However, the desire to become the best FC24 player of a group of friends or to collect all players in the game also ensures that the game can be very addictive for many gamers. Legislative bodies are aware of the concerns about gaming addiction and are looking for laws and regulations that can protect gamers more (Király et al., 2017). To date, however, few regulations have been introduced by bodies such as the European Parliament. However, looking at the current figures regarding the number of gamers who are addicted to gaming, it seems urgent that this changes (Castanedo et al., 2023). This study aims to provide new insights into the underlying processes involved in the development of gaming addiction. The findings of the study show that social anxiety and sexism are good predictors for the development of gaming addiction. These findings can be used in the development of new plans to protect young adults from gaming addiction. Campaigns or social activities can encourage this target group to overcome their social fears and develop less sexist views.

Although the findings of this study are only applicable to FC24 players, the correlations found also seem to apply to gamers who regularly play other sports games, such as NBA and WWE 2K. A worrying development that is exposed in this study is the role that sexism plays in the development of a gaming addiction, which shows that many younger gamers have sexist views. Nowadays, there is more and more talk about inclusivity and how we can work towards a society in which everyone interacts with each other in a peaceful manner and accepts each other. The high level of sexism that many young people display and the influence that this has on, in this case, gaming addiction, is at odds with this goal. In order to tackle the level of sexism among this group of gamers, making games that these people regularly come into contact with more inclusive seems to be a step in the right direction, but to be sure of this, a longitudinal study will have to provide

more clarity. In conclusion, when developing prevention methods for gaming addiction, experts can also focus on addressing personal characteristics such as social anxiety and sexism, but given the scale of the gaming addiction problem, this will certainly not be the last step in tackling this global problem.

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Appendix 1: Questionnaire

{Information 1}

We will start with a few basic questions about yourself. This allows us to compare gaming among groups of players with different age, gender or background.

Q1_1

What is your age in years?

- _____

Q1_2

What is your gender?

- Man
- Woman
- Non-binary
- I prefer not to tell

Q1_3

What is your current employment status?

- Unemployed
- Employed part-time (less than 25 hours a week)
- Employed full-time (25 hours a week or more)
- I prefer not to tell

Q1_4

Compared to people around you of the same age, how much disposable income do you have?

(disposable income is the amount of money you can spend or save in any given month)

- Far below average
- Somewhat below average
- Average
- Somewhat above average
- Far above average

Q1_5

Which country are you from?

- _____

Q1_6

What is your relationship status

- Single
- In a relationship – not living together
- In a relationship – living together
- It is complicated – not sure
- I prefer not to tell

{Information 2}

These questions are all about EA Sports FC 24. This title will often be abbreviated to FC 24 in the following questions. Note that the questions only relate to this game and not any of its predecessors (such as FIFA)

Q2_1

On what device do you play EA Sports FC 24?

- PlayStation
- Xbox
- PC
- Nintendo
- I do not play EA Sports FC 24

Q2_2

Which FC 24 version do you have?

- Standard Edition
- Ultimate Edition

Q2_3

What Ultimate Team division are you currently in?

- Elite
- 1-2
- 3-4
- 5-6
- 7-8
- 9-10
- Do not play Ultimate Team

Q2_4

What was your highest Weekend League record?

- _____

Q2_5

What is your favorite team to play with in FC 24?

- _____

Q2_6

What is the best FUT card you packed in FC 24?

- _____

Q2_7

EA Sports FC 24 includes players that are women. Please indicate your thoughts on the statements below.

	Strongly disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Strongly agree
I do not like having a mixed team	0	0	0	0	0
I only want male football players on my team	0	0	0	0	0
I know most of the female football players	0	0	0	0	0
I wish they would remove female player cards from the game	0	0	0	0	0
I don't like spending coins on female players	0	0	0	0	0

{Information 3}

In the following questions we make the distinction between week-days (Monday - Friday) and Weekend-Days (Saturday - Sunday).

Q3_1

During a normal work/school WEEK (Monday through Friday) how many days do you play

FC 24?

	0	1	2	3	4	5
Days during the work/school week						

Q3_2

During ONE normal WEEK-DAY (Monday - Friday) how many hours do you spend on FC

24 PER DAY?

[illegible]

Q3_3

During the WEEKEND (Saturday - Sunday) how many days do you play FC 24?

	0	1	2
During the weekend			

Q3_4

During a normal DAY during the WEEKEND (Saturday or Sunday) how many hours do you spend on FC 24 PER DAY?

[illegible]

Q3_5

Please rate FC 24 along the following criteria. The game is:

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
Fun	0	0	0	0	0
Exciting	0	0	0	0	0
Boring	0	0	0	0	0
Entertaining	0	0	0	0	0
Enjoyable	0	0	0	0	0
Interesting	0	0	0	0	0

Q4_1

Please tick the boxes that reflect your view on the statements best regarding FC 24

	Strongly Disagree disagree	Neither agree or disagree	Agree	Strongly agree
I feel competent at the game	0	0	0	0
I am able to meet the challenges of the game	0	0	0	0
I feel a sense of accomplishment in the game	0	0	0	0

I feel that I made progress in the game	0	0	0	0	0
The game provides me with interesting options	0	0	0	0	0
I experience freedom of choices in the game	0	0	0	0	0
I have options to customize or personalize the game	0	0	0	0	0
I am able to play the game the way I want to	0	0	0	0	0
I experience fulfilling relationships in the game	0	0	0	0	0
I feel a connection with the characters I play with	0	0	0	0	0
I feel a connection with other players while playing	0	0	0	0	0
I experience a connection with other players in the community	0	0	0	0	0

{Information 4}

The next few questions are about spending money in FC 24. For these questions we are interested in money you have spent WITHIN the game (so not any possible costs of purchasing the game itself).

Q5_1

Did you spend real money on player packs or points in EA Sports FC 24?

- Never
- Yes, at least once

Q5_2

How much money did you spend on EA Sports FC 24 since its release? (please provide an estimate in Euros). This excludes the purchase price for the game.

- _____

Q5_3

What is your opinion on Player Packs in the game? Player packs are...

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
Fun	0	0	0	0	0
Exciting	0	0	0	0	0
Expensive	0	0	0	0	0
Enjoyable	0	0	0	0	0
Unfair	0	0	0	0	0

Q6_1

Have you watched EA Sports FC 24 content (such as videos or live streams) last month?

- Yes
- No

Q6_2

What type of EA Sports FC 24 content do you watch? (Multiple answers possible)

- Road to Glory Content
- Pack Openings
- Competitive FC24 Matches
- Tactic/Skill Tutorial
- Player Reviews
- Challenges
- Other, namely _____

Q6_3

During a normal day, how many hours do you spend on watching EA Sports FC 24 content?

Hours	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
during a normal day																

Q6_4

Read each statement about your own motivation to watch EA Sports FC 24 content, and indicate to what extent the statement applies to you.

	Strongly Disagree	Somewhat	Neutral	Somewhat	Agree	Strongly
	disagree				agree	agree

When watching FC24	0	0	0	0	0	0	0
--------------------	---	---	---	---	---	---	---

content, I am better
informed about new
game strategies.

Watching FC24	0	0	0	0	0	0	0
---------------	---	---	---	---	---	---	---

content helps me get

information on

learning to play

FC24.

Watching FC24 content helps me to look for information on game tricks.	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

Watching FC24	0	0	0	0	0	0	0
---------------	---	---	---	---	---	---	---

content helps me to

see what game tactics

are out there.

When watching FC24	0	0	0	0	0	0	0
content, I can forget about school, work, or other things.							
When watching FC24	0	0	0	0	0	0	0
content, I can get away from the rest of my family or others.							
When watching FC24	0	0	0	0	0	0	0
content, I can get away from what I'm doing.							

Q7_1

Please reflect on your experiences with FC 24 over the last few months when responding to the statement below.

	Strongly Disagree		Neither	Agree Strongly	
	disagree		agree or disagree	agree	
I start playing even when I should be	0	0	0	0	0
doing other things					
I cannot stop playing even when I should	0	0	0	0	0

Since I play this game, I lost interest in other hobbies or activities be doing other things	0	0	0	0	0
I would consider myself obsessed with this game	0	0	0	0	0
I experienced serious conflicts with my family, friends or partner because of this game	0	0	0	0	0
I experienced serious problems in my performance at work, school, or daily activities because of this game	0	0	0	0	0

Q7_2

The following statements are about gender roles. Please provide your opinion on these statements:

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
Women exaggerate problems	0	0	0	0	0
Women are too easily offended	0	0	0	0	0
Women seek special favors under guise of equality	0	0	0	0	0
	0	0	0	0	0

Most women interpret innocent remarks as sexist	0	0	0	0	0
Women fail to appreciate all men do for them					

Q7_3

The following questionnaires are aimed at evaluating your gambling behavior. Note that this can be any form of gambling or betting, either online or offline.

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
I often gamble more than I intend to	0	0	0	0	0
I often go back another day to win back money I lost	0	0	0	0	0
I feel guilty about my gambling habits	0	0	0	0	0
I feel I have (or had) a problem with betting money or gambling	0	0	0	0	0
Others have criticized my gambling or told me that I have a gambling problem	0	0	0	0	0
I feel like I would like to stop betting money or gambling	0	0	0	0	0
	0	0	0	0	0

I have hidden my gambling from important people in your life	0	0	0	0	0
---	---	---	---	---	---

I have had arguments with people I live
with over my gambling

0	0	0	0	0
---	---	---	---	---

{Information 5}

These last few questions are about your personality.

Q8_1

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
I am good at resisting temptation	0	0	0	0	0
I am able to work effectively toward long-term goals	0	0	0	0	0
People would say that I have excellent self-discipline	0	0	0	0	0
Sometimes I can't stop myself from doing something, even if I know it is wrong	0	0	0	0	0
I tend to spend more than I earn	0	0	0	0	0

Q8_2

These items are about your confidence. Please indicate how strongly you agree or disagree with each statement.

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
On the whole, I am satisfied with myself.	0	0	0	0	0
I feel that I have a number of good qualities.	0	0	0	0	0
I feel I have much to be proud of.	0	0	0	0	0
I take a positive attitude toward myself.	0	0	0	0	0

Q8_3

These items are about your anxiety. Please indicate how strongly you agree or disagree with each statement.

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
I have difficulty making eye-contact with others	0	0	0	0	0
I am at ease talking to people at parties or other social meetings	0	0	0	0	0
When in a group, I worry that I will be ignored	0	0	0	0	0
I have difficulty talking to people I feel attracted to	0	0	0	0	0

{Information 6}

Thank you so much for completing our survey! We would like to compensate you in two ways. First we will send you a €5 gift card. This will be for the console or pc you indicated playing FC24 on.

Q9_1

Please provide the e-mail address where we should send the gift card to. Reminder: We will not share this email address with anyone

- _____

Q9_2

Finally, we would like to ask you to choose a charity organization where you would like us to make a donation to on your behalf. We promise to donate 250 Euros, shared among the organizations below, according to the number of votes they have received from our respondents. If you cannot find an organization you would like to support, please provide an alternative under Other... Thank you very much for your time, effort and sincerity. You have made a wonderful contribution to the thesis research of several students. The charity I choose to support:

- Amnesty International
- World Wide Fund for Nature (WWF)
- Unicef
- Doctors Without Borders
- Oxfam Novib
- Greenpeace
- International Red Cross

- World Cancer Research Fund
- Other, please specify: _____
- I don't know, let others decide

Q9_3

Thanks again for participating! If you would like to leave us a response, you can use the space below. Otherwise, feel free to close the survey.

- _____