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Enevold, Jessica; Thorhauge, Anne-Mette; Gregersen, Andreas

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Contents

Preface

Several chapters in this anthology are based on the research project 'Computerspil, hverdag og familie: afhængighed og problematiske spillevaner i kontekst' (Videogames, everyday life and family: addiction and problem gaming in context). The project ran between 2014 and 2016, and was funded by the Independent Research Fund Denmark. Many of the contributing authors also participated in a symposium titled 'Nordic Research on Problem Gaming from an Everyday Perspective' (held at Lund University in January 2016). Thus, the now presented book is largely the outcome of the research project and symposium.

We would like to thank the peer reviewers and Nordicom for their hard work; we would also like to thank those who have contributed to the project with data. Moreover, we would like to thank 'Center for Ludomani' (Center for gambling addictions) for fruitful collaboration throughout the project period, as well as the attendants at NordMedia 2015 and DIGRA 2015, where parts of this material were presented.

Anne Mette Thorhauge, Andreas Gregersen & *Jessica Enevold*

Chapter 1

Introduction
What's the problem in problem gaming?

Anne Mette Thorhauge, Andreas Gregersen
& Jessica Enevold

By publishing this anthology, we would like to help steer the research agenda away from 'videogame addiction' as a psychological pathology ascribed to the individual and towards a situated understanding of *problem gaming* as something that takes place between people in the socio-cultural contexts of everyday life. That is, we propose that scholars consider substituting the concept of 'problem gaming' for the concept of 'video game addiction' and that the research community as well as the public, seriously question the general assumption that problems related to excessive gaming should necessarily be approached as addiction problems.

The concept of video- or computer game addiction has entered the popular vocabulary as a common way of talking about the conflicts and problems emerging from video gameplay in the socio-cultural contexts of everyday life. Whether it appears in newspaper articles announcing the advent of a new grave diagnosis, or in domestic quarrels between teenagers and their parents with regard to proper ways of spending time, the concept of video game addiction has become a common signifier for the various types of crises and disagreements that may arise within and around the playing of video games. Indeed, 'Internet gaming disorder' is currently being debated as a possible diagnosis in the diagnostic and statistical manual of mental disorders published by the American Psychiatric Association (American Psychiatric Association 2013). Likewise, the World Health Organization (WHO) has proposed 'gaming disorder' and 'hazardous gaming' in the beta version of the forthcoming ICD-11 (International Classification of Diseases) (Bean et al. 2017), a move which sparked a heated debate between critical media studies and clinical psychology (see Aarseth et al. 2016 and the many replies collected in the same themed issue).

The concept of 'video- or computer game addiction' has arguably replaced 'video game violence' as the key trigger of media panics surrounding the new medium. Whereas the 1990's and 2000's offered a plethora of studies and academic debates on the possible effects of video game violence on 'the affect, cognition and behaviour' of the gamers (Carnagey & Anderson 2005), (research) concerns have more recently

Thorhauge, Anne Mette, Gregersen, Andreas & Enevold, Jessica (2018) Introduction. What's the problem in problem gaming? in Jessica Enevold, Anne Mette Thorhauge & Andreas Gregersen (eds.) *What's the Problem in Problem Gaming? Nordic Research Perspectives*. Göteborg: Nordicom.

turned away from the content of video games and toward the time spent playing. This research focus builds on the idea that an excessive amount of gameplay can be a sign of 'addiction' in a manner similar to the way the pathological gambler is addicted to acts of gambling and the drug addict is addicted to a chemical substance. This type of research has almost exclusively been carried out within the disciplines of psychology and neurophysiology. Accordingly, the alleged 'pathology' has been formulated in extension of existing concepts and definitions such as gambling and behavioural disorders within psychology (Griffiths, Davies & Chappell 2004; Chumbley & Griffiths 2006; Grüsser, Thalemann & Griffiths 2006) and the release of dopamine within neurophysiology (Koepp et al. 1998). In this way, the majority of research on video game addiction has emerged by applying concepts and definitions of addiction from existing disciplines to the field of video games.

This anthology can be seen as an extended argument that the 'addiction approach' is in danger of seriously missing what is really at stake in problematic uses of video games. In this anthology we will thus expand and explore the many possible ways 'problem gaming' may be conceptualised and studied once we let go of 'addiction' as the primary framework. We will locate and pinpoint, from a range of perspectives, how gameplay is seen as problematic or is problematized in everyday life and zoom in on the inner logics of the situations in question. Importantly, this does not entail a neglect of the very real worries parents or professionals may have with regard to excessive gameplay. We readily acknowledge that video games are, in certain situations, the cause of problems and conflicts in their contexts of use, and that they are associated with negative directions in individual life courses (Enevold 2016b).

However, a default resort to the addiction analogy excludes a whole range of relevant alternative explanations that may generate more context-specific and, as a direct result, more successful problem-solving strategies for all involved parties. For this reason, the authors will throughout this anthology refer to the concept of *problem gaming* as embracing the many different possible approaches and definitions that appear when we move beyond the narrow addiction-focus of psychology and neurophysiology.

A Scandinavian perspective

This alternative research agenda is not new in a Scandinavian context. Several Scandinavian media- and game scholars have suggested explanatory perspectives with regard to problematic or excessive gameplay. This research has focused on the gameplay community (Linderoth & Bennerstedt 2007), gender and family (Enevold & Hagström 2008; Enevold 2014; Enevold 2015), distinct life phases of the involved individuals (Karlsen 2016, partly reprinted in this anthology), and critical examinations of the concept of video- or computer games addiction as such (Brus 2013).

The research presented in this anthology builds on this previous work, and the anthology itself grew out of a set of related activities. These comprise a panel on problem

gaming at DIGRA 2015 in Lüneburg, Germany (Thorhauge et al. 2015), a symposium at Lund University in Sweden in 2016 at which the editors and several of the anthology authors presented research (Enevold 2016a), and a recent collaborative research project focusing on gameplay patterns among Danish children and youth funded by the Danish research council. All of these activities, to varying extent, involved a range of relevant actors including practitioners and policy makers. In this way, the anthology builds on a strong tradition of questioning mainstream 'video- or computer game addiction' studies within the Scandinavian region.

The chapters of the book

A key aim of the present anthology is to introduce alternative critical theories and disciplines into the discussion. The contributions of the book engage theoretical and disciplinary frameworks not usually employed to explain problem gaming. They create new scientific and academic routes for us to

1. Define and problematize video game play, and
2. Identify the 'problem' in problem gaming.

Thus, the contributions cover a broad range of disciplinary frameworks including media studies, game studies, play studies and youth studies, as well as range of methodological approaches including ethnography, participant observation, diaries and in-depth interviews.

Obviously, this diversity of approaches leads to a set of different ways of addressing the phenomenon of problem gaming. It may be seen as a product of generational conflict (Chapter 4), as the result of conflicting roles and responsibilities in the everyday contexts of gamers (Chapter 3) or the gamers' inability to cope with this complexity (Chapter 5). It may to some extent be built into the design of a game (Chapter 8) or it may be a characteristic of a particular life phase (Chapter 6).

Given the exploratory nature of our book, we are not aiming for *one* ultimate explanation of problem gaming. Instead, we urge a broader view and aim for *a set* of explanations. The elements in this set, however, are not unconnected: They cluster around a number of key themes that we see as comprising a possible framework for future studies of problem gaming. These themes include 'the social uses of addiction', 'the everyday practices of play and gaming', 'the family as the key context of play' and 'life courses and strategies'.

The phrase 'the social uses of addiction' is a tip of the hat to James Lull's classical study of the 'social uses of television' (Lull 1980). In this seminal piece, Lull shifted the focus away from the content of television toward the many pragmatic purposes television serves within the context of family households. In the same manner, 'the social uses of addiction' foregrounds the historical and pragmatic uses of addiction as a concept. For instance, as Rune Kristian Lundedal Nielsen points out in his chapter

(Chapter 2), addiction has a long history of 'usage' within academia reflecting a range of professional and institutional investments. Nielsen's chapter offers a polemical critique of the psychology of addiction targeting the construct validity of the concept. As other chapters demonstrate, the concept of addiction tends to take on a number of different meanings in various contexts, be it that of therapy, as explained by Patrick Prax and Paulina Rajkowska (Chapter 7), or the everyday social interactions of family life, as explained by Anne Brus (Chapter 4). Within all these contexts, the concept of 'addiction' serves a range of pragmatic purposes such as getting access to public funding, explaining failure in life or exerting power over family members. To understand how the term 'addiction' is used and engaged with across disciplinary and empirical contexts represents an important first step in the critical study of 'problem gaming'.

Obviously, the 'social uses of addiction' foregrounds the importance of the empirical contexts in which problem gaming unfolds. Several chapters deal with the empirical context of play as a relevant frame of explanation with the context of family life as the primary focus of attention. Patrick Prax and Paulina Rajkowska (Chapter 7) deal with broken family patterns as a key explanation of the problem in problem gaming and the proper focus of therapeutical treatment. Anne Brus (Chapter 4) deals with generational conflict within families, where problem gaming becomes a key theme around which negotiations of agency and power among family members evolve. Andreas Gregersen (Chapter 3) offers a more general sociological explanation of institutionalized roles and responsibilities at the intersection between family, school and gamer community as way of understanding the structural reasons underlying conflicts related to gaming. In this way, family life seems to be a key context of study when studying problem gaming as a relational and situated phenomenon.

Beyond the social contexts of problem gaming a set of chapters pay attention to more general strategies and life courses as a supplemental perspective on gaming in general and problem gaming in particular. In his chapter, here reprinted with permission by Ashgate, Faltin Karlsen (Chapter 6) suggests that problem gaming is a matter of particular life phases. He ties what he calls 'excessive gaming' directly to the specific life conditions of late teens who have more time and less responsibility, pointing out that such gaming patterns tend to fade out as adult life and its accompanying conditions set in. In a similar vein, Anne Mette Thorhauge (Chapter 5) suggests that problem gaming may be a sign of 'broken life strategies' in the cases where the young person turns out to be unable to take on the responsibilities of adult life. Here, problem gaming becomes one important component in a more general problem of being 'stuck' in a particular situation.

Finally, the specific characteristics of different videogames obviously shape the patterns of play and problem gaming as well. In the final chapter, Ian Sturrock addresses different game design principles as a relevant perspective on problem gaming with a special focus on the motivational frameworks they form (Chapter 8).

To conclude, the presented collection of chapters about problem gaming does not offer one single explanation or definition of the phenomenon. Instead, it offers what

we think is a range of plausible, empirically grounded explanations that together might serve as a framework for future studies.

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The genealogy of video game addiction

A critical account of how Internet gaming disorder came to be proposed as an officially recognized mental disorder[1]

Rune Kristian Lundedal Nielsen

Introduction

A relatively large body of empirical research has emerged globally on the prevalence of the phenomenon commonly known as 'video game addiction'. In the US, the American Psychiatric Association (APA) has proposed the term 'Internet gaming disorder' to cover the phenomenon, included in their official handbook as a disorder for further study in 2013 (American Psychiatric Association 2013). Having been added as a "disorder for further study" is the first step towards fully recognizing the disorder, pending further research. The work group that proposed Internet gaming disorder as a distinct addictive disorder reviewed more than 240 articles on the subject before making the recommendation (Petry & O'Brien 2013). The World Health Organization has also proposed a new disorder that describes addiction to digital games, namely 'gaming disorder'; this disorder has been suggested in a draft version of the upcoming edition of the official handbook, the ICD-11 (Bean et al. 2017).

The APA notes that the decision to include Internet gaming disorder as a distinct addictive disorder rests on research from geographically and culturally diverse areas of the world (American Psychiatric Association 2013). Some of this research stems from Scandinavia.

Purpose

This chapter will map out how Scandinavian research fits into the genealogy of Internet gaming disorder. The term 'genealogy' is fitting in the context of this chapter because of its multiple meanings. On the one hand, it refers to the medical study of family histories. On the other hand, it refers to the philosophical investigation of social beliefs that are otherwise taken for granted and rarely questioned. This chapter will argue that the concept of video game addiction has several significant weaknesses and that these weaknesses can be demonstrated by examining the family history of the concept.

Lundedal Nielsen, Rune Kristian (2018). The genealogy of video game addiction. A critical account of how Internet gaming disorder came to be proposed as an officially recognized mental disorder in Jessica Enevold, Anne Mette Thorhauge & Andreas Gregersen (eds.) *What's the Problem in Problem Gaming? Nordic Research Perspectives*. Göteborg: Nordicom.

Through a close examination of the theoretical underpinnings of the concept of video game addiction, as well as the empirical tools used to measure it, this chapter aims to highlight the problematic genealogy of the concept. In doing so, this chapter will adopt an extremely critical perspective of the evidence. By questioning the validity of the medical model of video game addiction, the chapter aims to pave the way for the alternative conceptualizations of problematic gaming of the rest of the book.

In order to be able to meaningfully discuss game addiction, the next section discusses what the word addiction means and has meant historically.

The multiple meanings of the term addiction

The word 'addiction' has Latin roots and dates back to ancient Rome, where it did not have the insidious and pathological connotations that it does today. Originally the Latin verb *addico* meant 'giving over', which could just as easily be positive as it could be negative. In the positive sense *addico* signaled devotion as in "*senatus, cui me semper addixi*" ('the senate, to which I am always devoted') (Alexander & Schweighofer 1988: 151). This meaning is similar to the traditional English meaning. *The Oxford English Dictionary* in 1933 defined the word addiction as follows:

> […] a formal giving over or delivery by sentence of court. Hence, a surrender or dedication of any one to a master […]. The state of being (self-) addicted or given to a habit or pursuit; devotion. (Murray et al. 1933: 104, in Alexander & Schweighofer 1988: 152)

The word 'addiction' did not attain its current negative medical connotations until the emergence of the nineteenth century temperance and anti-opium movement when it replaced terms like 'intemperance' and 'inebriety' for excessive alcohol and opium use (Alexander & Schweighofer 1988). For the first time, this new usage closely linked addiction to drugs and harm, with strong connotation of illness or vice. Also, it came to be linked with withdrawal symptoms (associated with abstinence) and growing tolerance (associated with increased use) or exposure (Alexander & Schweighofer 1988). This understanding is arguably still the most salient one in our contemporary medicalized understanding of addiction, particularly harmful involvement with drugs that build physiological tolerance and are associated with unpleasant (or even fatal) withdrawal symptoms. Thus, addiction is now commonly understood as a primary, chronic, and relapsing disease of the brain. The American Association of Addiction Medicine (ASAM) (2011) defines addiction as follows:

> Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.

> Addiction is characterized by inability to consistently abstain, impairment in behavioral control, craving, diminished recognition of significant problems with one's behaviors and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death. (ASAM 2011: para. 1)

It is self-evident that people devote (or addict) themselves to digital games today in the same way that Roman senators claimed to be devoted (or addicted) to the Senate thousands of years ago. This chapter is concerned with the question of whether people today can be said to be addicted to digital games in the *medical* understanding of the word addiction.

As mentioned in the introduction, the evidence that game addiction exists comes mostly from questionnaire studies (also known as prevalence studies) (American Psychiatric Association 2013). The following section will introduce the five prevalence studies that, as of this writing, constitutes the entirety of Scandinavian prevalence studies.

Prevalence research in Scandinavia

As far as I can tell, based on my best efforts to find studies on game addiction, Norway is the only Scandinavian country where prevalence studies on video game addiction are conducted. I have found one estimate of the prevalence of 'pathological playing' (Johansson & Götestam 2004b), one estimate of 'excessive playing' (Wenzel et al. 2009), and four estimates of 'game addiction' (Frøyland et al. 2010; Mentzoni et al. 2011; Brunborg et al. 2013; Brunborg, Mentzoni & Frøyland 2014). An overview of Norwegian prevalence studies is presented in Table 1.

Johansson and Götestam (2004b) use a questionnaire developed by Kimberley Young (1998b). Wenzel and colleagues (2009) define everyone who plays for more than four hours a day as excessive players. The rest of the studies use an adapted version of the Game Addiction Scale developed by Lemmens and colleagues (2009). The strength of such screening tools is that they can give an estimate of the prevalence of a given disorder in a population. However, such studies are not designed to determine cause and effect, as correlation does not imply causation.

The quality of a screening tool, therefore, is dependent on how well it measures what it is supposed to measure, more technically referred to as 'measurement validity' (e.g. Bryman 2016: 41). One common critique of quantitative research in the social sciences is that the measurement process may produce an artificial and spurious sense of precision and accuracy (Bryman 2016). In other words, the connection between a given screening tool and the concepts that the tool is supposed to reveal is assumed rather than rigorously demonstrated. We see this problem even with respect to concepts

Table 1. Overview of Norwegian prevalence studies

Year	Authors	Sample	Screening tool	Terminology	Prevalence rate
2004	Johansson & Götestam	A national representative study of 12 to 18 year olds	Diagnostic Questionnaire for Internet Addiction (Young 1998)	"pathological players"	2.7 % (4.2 % for boys; 1.1 % for girls)
2009	Wenzel et al.	A sample of 16 to 74 year olds	Time spent playing > 4 hours per day	"excessive playing"	2.2 % (played for more than 4 hours per day)
2010	Frøyland et al.	The 'Young in Norway 2010' survey	Game Addiction Scale (Lemmens et al. 2009)	"addicted"	0.9 %
2011	Mentzoni et al.	A nationwide survey	Game Addiction Scale (Lemmens et al. 2009)	"addicted"	0.6 % (only males were found to be addicted)
2013	Brunborg et al.	A nationally representative sample of Norwegian eighth graders	Game Addiction Scale (Lemmens et al. 2009)	"addicted"	4.2 % (6.5 % for boys, 2.2 % for girls)
2014	Brunborg, Mentzoni & Frøyland	The 'Young in Norway 2010' and 'Young in Norway 2012' surveys	Game Addiction Scale (Lemmens et al. 2009)	"addicted"	1.5 %

that most people believe to be familiar with, such as 'happiness'. When the world's countries are ranked in terms of happiness, how reliable and valid are the results? This problem, of course, is much more salient when it comes to controversial concepts such as 'game addiction' or 'behavioural addictions' in general. This problem has been referred to as 'measurement by fiat' in the literature (Cicourel 1964, in Bryman 2016).

Because of this inherent uncertainty, the following section will describe the genealogy of the abovementioned screening tools as a way to provide context to the numbers they produce.

Screening tools

This section will primarily deal with the theoretical basis for different screening tools used to measure 'pathological', 'excessive' or 'addicted play'.[2]

Diagnostic questionnaire for Internet addiction

Johansson and Götestam base their studies of 'Internet addiction' (2004a) and 'pathological playing' (2004b) on Kimberly Young's "Diagnostic Questionnaire for Internet Addiction" (Young 1998b). In the book *Caught in the net: How to recognize the signs of internet addiction – and a winning strategy for recovery*, Young (1998a) describes how she was inspired to create a short questionnaire to assess the prevalence of Internet addition. Young had heard Internet use described as an addiction on TV and in

newspaper stories. One night Young receives a telephone call from her friend Marsha, who had been reduced to tears by her husband's Internet use. Young (1998a) describes how Marsha was almost ready to leave her husband because of how she was being neglected and ignored in favor of the Internet. Young based her questions on criteria for gambling and alcoholism and the DSM-IV (American Psychiatric Association 1994):

- Do you feel preoccupied with the Internet (think about previous online activity or anticipate next online session)?
- Do you feel the need to use the Internet with increasing amounts of time in order to achieve satisfaction?
- Have you repeatedly made unsuccessful efforts to control, cut back, or stop Internet use?
- Do you feel restless, moody, depressed, or irritable when attempting to cut down or stop Internet use?
- Do you stay online longer than originally intended?
- Have you jeopardized or risked the loss of significant relationship, job, educational, or career opportunity because of the Internet?
- Have you lied to family members, therapist, or others to conceal the extent of involvement with the Internet?
- Do you use the Internet as a way of escaping from problems or of relieving a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety, depression)? (Young 1998a: 3–4)

In their study, Johansson and Götestam (2004b) made slight changes in wording to make the questionnaire fit digital games instead of the Internet in general.[3]

Game addiction scale for adolescents

Mentzoni and colleagues (2011) use the 7-item version of the Game Addiction Scale originally developed by Lemmens and colleagues (Lemmens, Valkenburg & Peter 2009). Lemmens and colleagues developed the 7-item scale as well as a 21-item scale on the basis of multiple sources: the DSM criteria for pathological gambling (American Psychiatric Association 1980, 1994, 2000), and the seven components of game addiction as defined by Griffiths (2005) and Griffiths and Davies (2005). These authors, in turn, base their components on a letter to the editor of the journal *Nature* by Mark Griffiths (1996) and a book chapter by R. Iain F. Brown (1993).

In the letter, Griffiths argues that despite how most definitions of addiction require ingestion of substances, there are other potential behavioral addictions. He mentions gambling, overeating, sex, exercise, computer-game playing, the Internet, pair bonding, and work. The letter outlines six components: *salience, mood-modification, tolerance, withdrawal symptoms, conflict,* and *relapse*. Perhaps because of the brevity of the letter, Griffiths forgets to credit these components to Brown.

In later writings (e.g., Griffiths & Davies 2005), the components are described as having been originally outlined by Brown (1993) and reworked by Griffiths (1996). Brown's (e.g. 1993) conceptualization of addiction therefore forms the basis of contemporary Scandinavian prevalence studies. Figure 1 is a diagram of the relationships in the outlined genealogy of the concept of video game addiction.

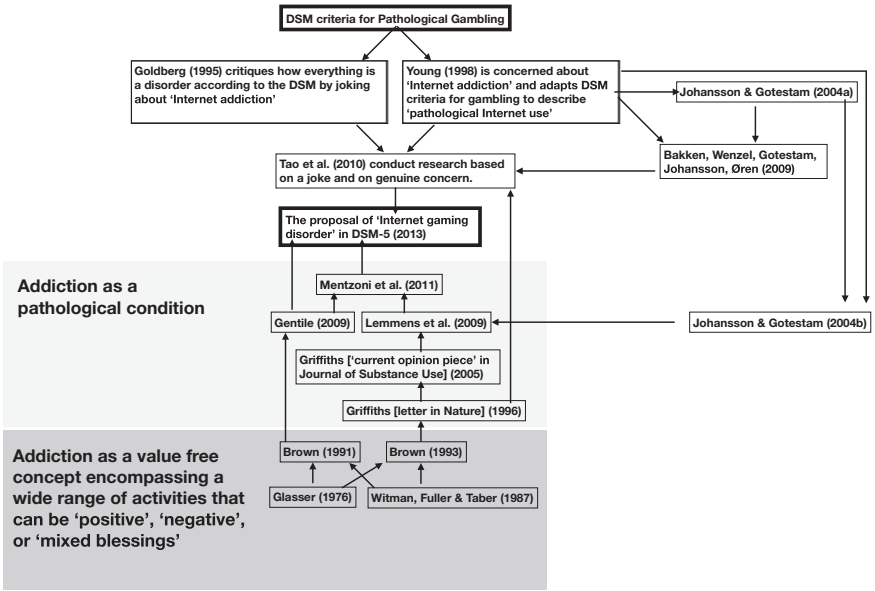

Figure 1. Geneaology of the concept video game addiction

The next section presents Brown's perspective on addiction and why it might not be a suitable foundation for the definition of a mental disorder.

Mixed blessing addiction

R. Iain F. Brown writes about the psychological features of 'gaming and simulation addiction' as early as 1991. The aspects of any addiction, according to Brown (1991) are *salience or precedence over other behaviors, conflict, relief, tolerance, withdrawal effects,* and *relapse and reinstatement*. Brown (1991) describes the case of an academic who attended a conference on gaming and filled out a questionnaire about his involvement with gaming and simulation. The man describes a level of involvement that Brown argues feature all of the aspects of addiction. The man is initially described like a drug addict, as he exhibits the following features of addiction:

(1) The man quite often finds himself thinking of drugs and taking drugs at odd times of the day. Furthermore, he often likes to think about drugs and taking drugs when he is supposed to be engaged in other preoccupations. (This is what Griffiths [1996] refers to as "salience"; and what Brown [1991] calls "salience or precedence over other behaviors".)

(2) The man quite often becomes irritable, tense, depressed and restless when he cannot get his drugs. (This is what Griffiths [1996] refers to as "withdrawal symptoms;" and what Brown [1991] calls "withdrawal effects".)

(3) Quite often the man finds that he must return at the earliest possible opportunity to take a drug to compensate for a bad trip or to repeat a particularly good one even after he has stopped many hours ago. (This is what Griffiths [1996] refers to as "relapse"; and what Brown [1991] calls "relapse and reinstatement".)

(4) Quite often the man finds himself doing drugs when he should be fulfilling some social, educational, or occupational obligation; he quite often finds himself persisting with his drug use despite at least one financial, domestic, social, occupational or legal problem being exacerbated by continuing. Aside from these intrapersonal conflicts the man also experiences interpersonal conflicts: he quite often finds that he is criticized by other people about the time and efforts he devotes to doing drugs (This is what Griffiths [1996] and Brown [1991] both refer to as "conflict").

Brown (1991) later reveals that the object of the man's obsession is not drugs but gaming and simulation. It is unclear to me why Brown does not mention the final two features of addiction, relief and tolerance (what Griffiths [1996] calls mood modification and tolerance) in the description. Given the extent of this man's involvement with games and simulation it would be reasonable to suspect that his behavior could also be described in terms of tolerance and mood modification (or relief). After all, one can hardly imagine a hobby that does not provide some form of pleasure and relief from everyday life. Based on the above-mentioned case, Brown (1991: 111) notes that: "Heavy involvement in or commitment to games and gaming can obviously take on the pattern of an addiction. It is likely that there are several other leisure activities which can do so also."

It is important to note here that Brown does not view addictions as necessarily negative phenomena. On the contrary, he advocates for a value-free use of the word, and he laments the fact that addiction has become a pejorative term to the point that it is "even a panic-mongering 'bogey word'" (Brown 1991: 107). In Brown's view, the word addiction has been coopted by drug enforcement agencies, the American medical establishment, socially conservative groups, and especially by sensationalist media to the point where it is harmful to those labeled as addicts. In opposition to this, Brown argues that addiction-like phenomena can occur in association with behaviors that are not centered on substance use, and as a notable example he mentions gambling. In support of this view, Brown references William Glasser's (1976) book *Positive Ad-*

diction in which Glasser outlines the concept of positive addiction using examples such as running or meditation:

> According to Glasser, [positive addictions] must be new, rewarding activities, such as exercise and relaxation, which produce increased feelings of self-efficacy, and there are six criteria to be fulfilled in the identification of a positive addiction. They must be (1) chosen, non-competitive and needing about an hour a day; (2) easy, so no mental effort is required; (3) able to be done mostly alone, not dependent on others; (4) believed in as having some value – physical, mental or spiritual; (5) believed in that, if persisted in, some improvement will result; (6) involve no self-criticism. (Brown 1991: 111–12)

This leads Brown to write that games, with their potential mix of positive and negative associations, could be considered a "mixed blessing addiction" (Brown 1991: 112).

If games can be mixed blessings, what might some of the positive effects of playing video games then be? Isabel Granic and colleagues (2014) recently argued that games benefit their players in various ways and in diverse domains, but that research on this topic is only now slowly beginning to emerge.[4] Their review of the research literature focuses on cognitive, motivational, emotional, and social benefits of digital game play. Similarly Kevin Durkin and Bonnie Barber (2002), in a sample of American high school students, found that those who played computer games were exhibiting more positive psychological development than those that did not; this was true across all variables from family closeness, activity involvement, positive school engagement, positive mental health, substance use, self-concept, and friendship network, to obedience to parents. A review of this issue is way beyond the scope of this chapter; the main point here is that there is no reason to assume *a priori* that games have only negative consequences.

Is everything addictive then?

If addictions can be negative and positive and if they can involve activities or behaviors as well as substances, are there limits to what the term can be applied to?

Brown (1991) asserts that the range of activities and substances that can be appropriately described with the term addiction is much wider than has previously been believed. With reference to a conference paper by Witman, Fuller and Taber (Witman, Fuller & Taber 1987), Brown lists 40 such activities and substances. Among the perhaps more surprising activities are: "talking for talking's sake," "reading for reading's sake," and "trying to get others to take care of me and do things for me." The list also includes a range of "addictive" substances that some may find equally surprising, including laxatives; antacids, stomach remedies; fatty, oily or greasy foods; and highly seasoned foods.[5]

It seems then that almost any human activity can be described as an addiction and that these addictions might be positive, negative, or mixed. It stands to reason

then, that Brown's (1991) criteria, adapted by Griffiths (1996), translated into questionnaire items by Lemmens and colleagues (2009) and employed by Mentzoni and colleagues (2011), Brunborg and colleagues (2013), and Brunborg and colleagues (2014) to measure game addiction in Norway, do not necessarily measure what we commonly understand as addiction (i.e. primary, chronic, relapsing, neurological disorders). It further stands to reason that these studies do not measure uniquely addictive qualities inherent in video games, per se. Rather they apply criteria that can describe any activity (even health promoting ones) as an addiction. Presumably, the same methodology and theory could be employed to discover as many addictions as there are human activities.

Gambling disorder and addiction

Brown's (1991) notion of addiction is not the only basis for contemporary prevalence research into Internet gaming disorder; gambling disorder has also been influential. Gambling is currently the only behavior officially recognized by the DSM as an addictive behavioral disorder, sex-addiction and exercise addiction are not included, nor does the DSM recognize such categories as shopaholism or workaholism, even if these words have long existed in the lay vocabulary.

Lemmens and colleagues (2009) state that their screening tool is inspired by DSM criteria for gambling disorder, as well as the above-mentioned components model. As mentioned earlier, the first Scandinavian prevalence study on video game addiction (Johansson & Götestam 2004b) is also inspired by the DSM (though in a roundabout way through Kimberly Young's [1998a] concept of Internet Addiction). The next section provides a critical historical account of how pathological gambling became a mental disorder.

Gambling as a mental disorder

Gambling disorder was first introduced in the DSM in 1980; at the time, it was called Pathological Gambling. According to Reilly and Smith (2013) this change came about largely due to the efforts of one man, Dr. Robert Custer. As a clinician, Custer had been working with treatment-seeking gamblers and writing about it for years when the disorder was finally recognized. The diagnostic criteria were based on Custer's and other treatment professionals' clinical experience (Reilly & Smith 2013). The DSM-III (American Psychiatric Association 1980) classified pathological gambling as an impulse control disorder, not as an addiction. The disorder was characterized as an experience of a mounting loss of control over gambling behavior due to inability to resist gambling impulses. The disorder severely damages and disrupts the individual's life in one or more important domains: family, personal, vocational, or financial. The description of the disorder focused on negative consequences such as having been ar-

rested for forgery, defaulting on debts, borrowing money from loan sharks, and losing employment due to absenteeism related to gambling (American Psychiatric Association 1980: 293).[6] Various stressors will typically exacerbate the gambler's preoccupation with gambling, urge to gamble, and gambling activity. The problems that ensue will only serve to intensify the gambling behavior (American Psychiatric Association 1980). Pathological gamblers are described as people who believe that money is the cause of, and at the same time, the solution to all of their problems (National Research Council 1999). According to the DSM-III, 'social gambling', gambling with friends mainly on special occasions and with predetermined acceptable losses, is not a disorder.

With the inclusion of pathological gambling in the DSM, gambling problems were medicalized. No longer did gamblers suffer from a moral failing; they now came to be seen as suffering from a robust disease state (National Research Council 1999). Gambling became a chronic psychiatric illness that the sufferer never fully recovers from. This is in line with the Gamblers Anonymous perspective, where pathological gamblers, like alcoholics and drug addicts, are never fully cured – no matter how long they abstain from gambling, they are in a state of perpetual recovery. However, according to the National Research Council (1999) it is unknown whether it is possible to return to moderate social gambling or not: "There is no direct empirical evidence supporting either the possibility that pathological gamblers can or cannot return to and remain in a state of social or recreational gambling" (National Research Council 1999: 20). The question of whether or not pathological gamblers can ever return to non-pathological gambling might be related to the question of whether all pathological gamblers suffer from the same disorder or whether there are subtypes within the disorder. One review of the literature has argued that pathological gambling can be divided into three such subtypes: behaviorally conditioned, emotionally vulnerable, and antisocial impulsivist (Milosevic & Ledgerwood 2010).

According to the National Research Council (1999), pathological gambling, later known as 'gambling disorder', was included in the DSM-III without further empirical testing of the criteria; the decision was made solely on limited clinical experience. In comparison, the concept of 'Internet gaming disorder' has been introduced into the DSM in more or less the opposite way. Thus, Internet gaming disorder has been proposed as a disorder for further study based primarily on prevalence studies (American Psychiatric Association 2013). The APA has called for more qualitative data on the subject before the disorder can be officially recognized.

The DSM-5 definition of Internet gaming disorder does not focus on negative outcomes like the DSM-III definition of pathological gambling, instead it resembles the DSM-III-R (American Psychiatric Association 1987), which is focused instead on psychological features such as being preoccupied, experiencing tolerance, withdrawal symptoms etc.[7] In other words, features of addiction similar to the ones discussed previously in relation to the work of Brown (e.g., 1991).

The DSM-III-R's focus on psychological experiences such as thinking about something is more ambiguous in terms of negative impact. Borrowing money from illegal

and criminal sources is arguably inherently tied to negative outcomes, whereas simply being preoccupied with something is not necessarily dangerous.

This shift from a focus on negative outcomes to ambiguous psychological experiences creates a necessity for caution when trying to apply the criteria to new domains. Meaningfully applying criteria for gambling disorder to work, sports, hobbies, etc., is made difficult when the criteria focuses on psychological experiences instead of negative outcomes. Further difficulties arise in the translation process between activities (i.e. gambling and playing video games) and between age groups (i.e. adults versus children). To highlight this point, the world's first prevalence study of video game addiction might be instructive. As far as I have been able to ascertain, the world's first prevalence study of video game addiction in children was conducted in Scotland in 1986 by Brown and Robertson (1993), who asked 134 school children aged 12–16 years of age the following five questions adapted from the Gamblers Anonymous' "Twenty Questions":

1) Can you pass a Space Invaders machine without wanting to play?
2) When you have played a game do you always want to play another?
3) Do you sometimes spend more money than you were going to?
4) Do you often leave only when all of your money has run out?
5) Do you often borrow money in order to play the machine?

Based on this questionnaire, the researchers suggest that "a sizeable percentage of the general population of school children may have a significant addiction to video gaming alone" (Brown & Robertson 1993: 453).

However, one might question if it is at all commensurable when adults borrow money from loan sharks (and then risk that money on gambling) and when children borrow money to play video games. I would venture that this problem still haunts video game addiction research today. Questionnaire items such as "How often during the last six months […] Did you think about playing a game all day long?" (Lemmens, Valkenburg & Peter 2009: 95) do not distinguish between the disturbing and intruding thoughts of the tormented addict and the pleasurable feeling of anticipation of the virtuoso (maybe even professional) video game player.

Validity issues

The section above implicitly raises questions about the validity of the construct that is measured by questionnaire studies. We have seen that the Game Addiction Scale for Adolescents, developed by Lemmens and colleagues (2009), forms the basis for prevalence studies of game addiction in Scandinavia (Mentzoni et al. 2011; Brunborg et al. 2013; Brunborg, Mentzoni & and Frøyland 2014). In their paper, Lemmens and colleagues call for more diligence in the study of the validity of using DSM criteria to measure game addiction:

> Despite the widespread adaptation of DSM's pathological gambling criteria to measure addiction to (online) games, little research has been done on the validity of this method. It is generally assumed that the criteria are correlated and together measure the underlying construct of game addiction. (Lemmens, Valkenburg & Peter 2009: 79)

In their examination of the instrument (Game Addiction Scale for Adolescents) Lemmens and colleagues focus on two types of validity: 'population cross-validity' and 'concurrent validity'. The former (population cross-validity) can be assessed by investigating whether the construct found in one sample of a population can also be found in another sample of the same population. The latter (concurrent validity) can be assessed by measuring the correlation of the construct with similar constructs or with variables that are known to be associated with it (Lemmens, Valkenburg & Peter 2009). Lemmens and colleagues assess this type of validity by comparing scores on the game addiction scale with "time spent on games (i.e., usage), life satisfaction, loneliness, social competence, and aggression" (Lemmens, Valkenburg & Peter 2009: 80). The hypothesis is that if the game addiction scale correlates with these concepts in the expected direction that can be taken as validation of the construct. However, this data is insufficient evidence that a causal relationship exists between playing video games, developing an addiction, and suffering negative outcomes as a consequence. It may very well be that a third, underlying, factor is causing both the undesirable psychological states and the increased engagement with video games.

One underlying factor that can be misconstrued as video game addiction is social anxiety (Nielsen 2015). Anxiety can cause lower life satisfaction and increased loneliness and cause people to increase the amount of time they spend on games. This raises the question of whether video game addiction might sometimes be a misnomer for coping strategies. In the last century, when computers first started to enter households, there were concerns that people were becoming addicted to programming. Margaret Shotton (Shotton 1989, 1991), however, argued that computer dependence was not a disorder but a successful coping strategy. Her work reveals how 'microholics' were no more in need of treatment than hobbyists of other kinds. How should one go about the business of discerning whether excessive engagement with video games is best characterized as an addiction or something else entirely? The next section will dig deeper into this question.

Transient coping strategy or chronic disorder?

As mentioned earlier in the chapter, addictions are currently conceptualized as chronic relapsing disorders. Faltin Karlsen (2011, 2013) has conducted participatory ethnographic research on excessive gaming and finds that excessive gaming is a transient phenomenon that is connected to certain life phases. The subjects of Karlsen's research have addiction-like experiences with the massively multiplayer online roleplaying game, *World of Warcraft*. However, their pseudo-addictions stop when they enter a

new phase of their lives, such as moving out of their parents' house, graduating and getting a job, or finding a partner.

Karlsen's (2013) research points to the need for different kinds of investigations of the validity of the notion of video game addiction and the screening tools used to measure it. One such type of validity might arguably be 'face validity'; that is, the degree to which a certain test subjectively appears to be measuring what it purports to measure. One way this can be achieved is to interview the purported addicts, often referred to as 'respondent validation' in the literature. Such interviews can be conducted with the objective of comparing the experiences of purported addicts with the APA's DSM-5 (2013) description of a mental disorder, the DSM-5's (2013) proposed description of Internet Gaming Disorder, and the ASAM's (2011) definition of an addiction, which we reviewed at the start of this chapter. Based on the DSM-5 (2013) definition of mental disorders we might examine whether the purported addicts:

- Experience clinically significant disturbances in cognition, emotion regulation, or behavior
- Experience significant distress in social, occupational, or other important activities because of their gaming,

On the other hand, we might also look for evidence that their gaming behavior might otherwise be described as:

- An expectable (or culturally approved) response (or coping strategy) to a common stressor or loss, such as the death of a loved one,
- Behavior that is not pathological in and of itself, but nevertheless results in conflict with significant others because they consider it to be socially deviant

In these cases, they might not be addicted.

In relation to the American Association of Addiction Medicine's (ASAM) (2011) definition of addiction, we might examine whether the syndrome:

- Appears to be primary (as opposed to a secondary symptom)
- Chronic (as opposed to transient)
- Whether the individuals appear to be able to abstain from playing when necessary, exhibit impaired behavioral control, craving, and diminished recognition of significant problems
- Whether the individuals exhibit recurring cycles of relapse and remission.
- Whether the syndrome appears to be progressive
- Whether it appears to result in disability (or in the worst-case scenario: premature death).

As far as I have been able to ascertain, my own study (Nielsen 2015) is the only study, to date, that has examined the measurement validity of video game addiction screening tools in this way. This interview study found that, for some adolescents playing online, video games might be perceived as the best tool to cope with severe anxiety;

for others, the game playing behavior did sometimes become excessive, but never to an extent where it was not possible to cut back; the players did not experience distress and disability or other hallmarks of addiction; for them, playing seemed to be mostly a 'positive' or 'mixed blessings' addiction in the words of Brown (1991).

Is it the Internet or just games on the Internet?

The work group that decided to include Internet gaming disorder as a disorder for further study did so based on multiple studies (Petry et al. 2014). Among these were two Norwegian studies mentioned earlier in this chapter (i.e. Johansson & Götestam 2004a; Mentzoni et al. 2011), but also a Chinese study by Tao and colleagues (Tao et al. 2010).

Petry and colleagues (2014) acknowledge that the concept of behavioral addictions is controversial. They describe how the DSM-5 workgroup reviewed literature on non-substance addictive behaviors such as gambling, Internet gaming, Internet use generally, work, shopping, and exercise. The work group voted to move gambling disorder to the substance-related and addictive disorders section in the DSM-5 and to include only one other "putative non-substance addiction", Internet gaming disorder. According to Petry and colleagues,

> This decision was based upon the large number of studies of this condition and the severity of its consequences […]. Some reports demonstrated severe consequences, including seizures [Chuang 2006] and deaths [BBC News 2005; Reuters 2007] following lengthy periods of internet game-play lasting days without adequate sleep or food. (Petry et al. 2014: 2)

The description of Internet gaming disorder in the DSM is conceptually muddled. On the one hand, the description of the disorder clearly is about people who play video games, but the workgroup conflates two concepts that are clearly different, 'Internet addiction' and 'gaming addiction', evident in the following quote: "Internet gaming disorder has significant public health importance, and additional research may eventually lead to evidence that Internet gaming disorder (also commonly referred to as *Internet use disorder*, *Internet addiction*, or *gaming addiction*) has merit as an independent disorder" (APA 2013: 796, emphasis added). It speaks to the need for more qualitative data that the DSM does not distinguish between the concept of a game and that of the Internet. The description further states that: "Internet gaming disorder most often involves specific Internet games, but it could involve non-Internet computerized games as well, although these have been less researched" (APA 2013: 796). Going by this logic, a more apt term would be 'computerized gaming disorder'.

That games, not the Internet, should be proposed by the DSM-5 workgroup as potentially addictive is made no less confusing by the fact that they, according to Petry and O'Brien (2013), base the criteria of the disorder on Tao and colleagues'

(2010) paper "Proposed diagnostic criteria for internet addiction". In this paper, Tao and colleagues state that Internet addiction has at least three subtypes: "excessive gaming, sexual preoccupations and e-mail/ text-messaging" (Tao et al. 2010: 556). The DSM-5 work group does not explain why they adopt Tao and colleagues' (2010) description of Internet addiction – an umbrella term encompassing gaming, sexual behavior, and textual communication – and discard two out of the three sub-types. If plenty of research on video game addiction exists, what is the APA's rationale for basing their version of video game addiction on Tao and colleagues' criteria, which do not mention games at all (cf. Tao et al. 2010: 563)?

"It's quite true!"[8]

A proposition is not necessarily false just because it was originally proposed as a joke. Nevertheless, it is worth mentioning that the concept of Internet gaming disorder is based on a joke made by a dry-humoured psychiatist.

Tao and collegues write that: "New York psychiatrist Ivan Goldberg first proposed in 1995 that Internet addiction may be considered a disorder" (Tao et al. 2010: 556). This is funny (or tragic) because Ivan Goldberg apparently proposed the disorder in order to prove a point, namely that the number of disorders included in the DSM had exploded to the point that anything could be seen as a psychiatric disorder. In Goldberg's view, the DSM and the APA had a tendency to over-pathologize 'normal' behavior.

According to the American Mental Health Foundation (AMHF), Dr. Goldberg was one of the first psychiatrists to embrace the Internet in 1986, and Internet addiction was invented because people misunderstood Dr. Goldberg's dry humor:

In 1995 Dr. Ivan made an off-the-cuff comment about the growing problem of Internet Addiction. Those who heard about this did not realize Dr. Ivan's wonderfully dry and ironic sense of humor. Soon, the psychiatric field and media were abuzz with this 'new phenomenon'. When asked about whether there could be support groups for this 'addiction', Dr. Ivan suggested that "support groups for Internet Addiction made about as much sense as support groups for coughing." (William van Ornum 2014)

An article in The New Yorker from 1997 corroborates the idea that Internet addiction was meant as a hoax. In the article, Dr. Goldberg is quoted as saying:

> To medicalize every behavior by putting it into psychiatric nomenclature is ridiculous. If you expand the concept of addiction to include everything people can overdo, then you must talk about people being addicted to books, [etc.]. (Wallis 1997: 28)

The joke comes full circle 18 years later when the DSM-5 workgroup used Tao and colleagues' (2010) criteria as a basis for a new disorder in the DSM.

Tao and colleagues (2010) do not base their study solely on Ivan Goldberg's joke, but also on more recent research. They base their criteria on clinical experience and on previously published diagnostic criteria such as Kimberly Young's (1998) adapta-

tion of DSM criteria and Mark Griffiths' (1996) adaption of R. Iain F. Brown's (1993) features of addiction. As mentioned earlier, however, it is unclear how well the construct these criteria measure fits with definitions of mental disorders (e.g. APA 2013) and definitions of addiction (e.g. ASAM 2011). It may be that these constructs more closely resemble what Glasser (1976) calls positive addictions, in which case it would not make sense to consider them mental disorders or what Brown (1991) himself calls a 'mixed blessing addiction'.

Conclusion

Video game addiction has been officially recognized as a mental disorder in China (APA 2013); in the West, the APA has called for more research on the subject and the WHO has included it in the beta version of the newest iteration of the international standard diagnostic tool (The ICD-11) (Bean et al. 2017). The APA (2013) laments the lack of clinical case studies on the subject and bases its proposed criteria on a Chinese study of Internet addiction (Tao et al. 2010), not specifically game addiction.

The APA is further inspired by the large number of prevalence studies on the subject, among these two Norwegian studies. This chapter has, somewhat provocatively perhaps, asked, what do these prevalence studies measure? The chapter has highlighted the problem that the term addiction can be used to describe unhealthy as well as healthy behavior. Mental disorders, as defined in the DSM, are associated with distress, dysfunction, and impairment in important aspects of daily life. It is problematic that the theoretical underpinnings of the disorder derive from works that see addiction as something that can be either positive, negative, or somewhere in the middle.

On this basis, the chapter has argued that it is problematic to build a concept of a mental disorder on such ambivalent features. The chapter has introduced anecdotal evidence that suggests that Internet addiction was first proposed as satire, only to be turned into an officially recognized disorder. The chapter has further highlighted how problematic it is that concepts such as Internet addiction and game addiction are used interchangeably.

By digging into the genealogy of game addiction screening tools, this chapter has suggested that it is still very much unclear what it is that these screening tools measure. Therefore, they should not be relied on as evidence of the existence of a new disorder.

Notes

1. This chapter is based on the research I conducted in connection with my doctoral dissertation (Nielsen 2017).
2. The one exception is Wenzel and colleagues (2009), who instead of relying on tools that have not been standardized and validated simply categorize anyone who plays more than four hours a day as 'excessive player'. Whether four hours is excessive or not, however, is debatable and one's view is undoubtedly influenced by many factors. I don't have the relevant numbers for Norway, but statistics

from Denmark show that the average Dane watched TV for three hours and 18 minutes a day in 2011 (Thunø 2012). If video game playing replaces TV-watching, four hours may be well within the normal range for certain age groups.

3. The same authors also conducted studies to measure the prevalence of 'Internet addiction' in 2004 (Johansson & Götestam 2004a) and again in 2009 with colleagues (Bakken et al. 2009).
4. However, this may be a truth with modifications as academic interest in the benefits of video games date back more than 30 years at least. According to Geoffrey R. Loftus and Elizabeth F. Loftus (1983: 183), researchers at the 1983 Harvard conference *Video Games and Human Development* presented "positive findings about the effects of video games on everything from medical rehabilitation to cognitive and problem-solving skills to social behavior".
5. The complete lists are as follows:
   Behaviors
   - Stealing, shoplifting, petty theft, etc.
   - Spending just for the sake of spending
   - Work for the sake of being busy
   - Anger, fights and arguments
   - Trying to manipulate and/or control other people
   - Trying to get attention for attention's sake
   - Reading for reading's sake.
   - Trying to get others to take care of me and do things for me
   - Exercise, jogging, playing sports, or working out.
   - Seeking and having sex with another person
   - Seeking and using pornography (sexually oriented pictures, book, etc.)
   - Watching television
   - Talking for talking's sake
   - Searching for, buying and collecting items
   - Lying (for no good reason)
   - Fast and/or reckless driving (not to include driving under the influence)
   - Physical violence

   Substances
   - Fatty, oily or greasy foods
   - Salt from the shaker and/or salty foods
   - Highly seasoned foods
   - Laxatives
   - Nasal decongestants, sprays and inhalants
   - Antacids, stomach remedies
6. DSM-III criteria for pathological gambling (APA 1980: 293):
   (1) arrest for forgery, fraud, embezzlement, or income tax evasion due to attempts to obtain money for gambling
   (2) default on debts or other financial responsibilities
   (3) disrupted family or spouse relationship due to gambling
   (4) borrowing of money from illegal sources (loan sharks)
   (5) inability to account for loss of money or to produce evidence of winning money, if this is claimed
   (6) loss of work due to absenteeism in order to pursue gambling activity
   (7) necessity for another person to provide money to relieve a desperate financial situation
7. DSM-III-R criteria for pathological gambling (National Research Council 1999: 277)
   (1) frequent preoccupation with gambling or with obtaining money to gamble
   (2) frequent gambling of larger amounts of money or over a longer period of time than intended
   (3) a need to increase the size or frequency of bets to achieve the desired excitement
   (4) restlessness or irritability if unable to gamble
   (5) repeated loss of money by gambling and returning another day to win back losses ("chasing")
   (6) repeated efforts to reduce or stop gambling
   (7) frequent gambling when expected to meet social or occupational obligations
   (8) sacrifice of some important social, occupational, or recreational activity in order to gamble
8. The headline is a tribute to Hans Christian Andersen's fairy tale 'Det er ganske vist' ('It's quite true').

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Chapter 3

Games between family, homework, and friends

Problem gaming as conflicts between social roles and institutions

Andreas Gregersen

Introduction

This chapter outlines a theoretical framework for understanding aspects of problem gaming as a very general type of problem, namely that of conflicting social demands from different social actors embedded in social institutions. The chapter is based on the sensitizing idea outlined in the introduction to this anthology, namely that problem gaming can profitably be seen as problematized gaming. When one adopts this viewpoint, it becomes natural to ask 'To whom does this instance of gaming appear as problematic and why?'

One answer, outlined in the present chapter, is: 'This behaviour is seen as problematic by one or more persons who are in some sort of structured, social relationship with the person who is doing that which is seen as problematic.' Thus, the overall aim of this chapter is to situate problem gaming as a social problem – as opposed to being merely an individual problem.

The argument is based on two assumptions. The first is that a significant aspect of problem gaming in relation to youth is recurrent interpersonal conflicts structured around gaming habits. The second is that gaming in general is embedded in the structures of everyday life, and a significant aspect of everyday life consists of social interactions, many of which are structured by institutionalized roles and practices. The chapter brings these two premises together in its outline of a general sociological framework which situates aspects of problem gaming as actors embroiled in conflict due to conflicting social obligations structured by institutionalized social roles. I want to emphasize at the outset that the intention is not to reduce the phenomenon of problem gaming to social conflict, nor to institutional role conflicts. Rather, the intention is to bring to the fore some of the social and relational aspects of problematized gaming and invite the reader to consider how this element of social interaction may often form a significant portion of the full problem.

The chapter proceeds as follows. First, it outlines a sociological framework for understanding particular social problems as role conflicts between institutionalized

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roles. This entails an outline of social institutions, of social obligations cashed out as commitment and attachment, roles and role-sets, and the most pertinent connections between these three levels of analysis. The level of generality exhibited by the first part of the chapter is fully on purpose, since one of the main aims of the following is to thoroughly de-emphasize an individualized notion of problem gaming and instead emphasize its very general, social character. This rhetorical strategy is based on a conviction that our understanding of problem gaming will benefit substantially from seeing it as related to a much more general problem, i.e. conflicting social demands in a network of institutionalized relationships. In that sense, my aim is to show that problem gaming is a lot like other everyday problems – they have an intrinsically social and rather general component.

After outlining this general framework, the chapter seeks to illustrate the utility of this framework with a few worked examples of how gaming might become problematic for the social actors involved; these examples are based primarily on qualitative interviews with young gamers. Problem gaming is here situated in specific contexts of everyday life, where important social institutions are family and school: In a typical instantiation of problem gaming, one of the functions of these institutions is to serve as the wellspring of social obligations that clash with those of gaming. In other words, when gaming is or becomes problematic, it is often because social demands from different social actors and institutions clash.

As stated above, a few worked examples are given at the end of this chapter to serve as illustrations, and examples compatible with the present framework can be found in other chapters in this anthology (this is not coincidental, since all of the contributions have inspired some part of the present framework and its articulation here). The most obvious connections are to the thematic analyses and case summaries given by Brus, both of which pivot around parenting and the concept of generagency. Other examples can be found in the analysis of the structure of everyday life and socially situated reflexive agency given in the chapter by Thorhauge, as well as in the description and analysis of an overall set of relevant relationships between social actors presented in the chapter by Prax and Rajkowska. Finally, the historical analysis of the concept of addiction given by Lundedal Nielsen's chapter shows that one significant aspect of the discourses of addiction hinges on mishandled social obligations, and the present chapter may help to further contextualize this. The main aim is to deliver a general theoretical framework, the idea being that a more substantial analysis of problematized gaming can and should be carried out with theoretical as well as empirical attention to local circumstances.

Theoretical framework

Social institutions and institutional logics

The main underpinning concept for the following is social institution. Although this concept is central to many arguments in sociology, it is difficult to give a single definition. The concept is typically invoked to explain how social structure has a level of endurance across time and space: common examples are the enduring social arrangements observed in marriage, religion, family, and education. To simplify matters, the following proceeds from the overview of institutions given by Scott (2014).

First, it is important to see social institutions as somewhat malleable social structures, which may change substantially over time and exhibit a substantial degree of local variation, and which enable as well as constrain both the short-term and longer term strategic agency of its members. This element of flexibility, change, variation, and 'wiggle space' for individual agency is an important initial point of emphasis, since institutional perspectives are often seen as unduly monolithic and conservative.

Second, still following Scott, it is possible to distinguish between at least three main dimensions or 'pillars' of social institutions, which enable this constraining and enabling endurance: the regulative, the normative and the cultural-cognitive. With the dangers inherent in simplification and paraphrase, Scott's three perspectives can be employed to single out, respectively, an instrumental and explicit focus on rules and sanctions, a less explicit but still normative focus on tacit understandings of correct conduct tied to roles, and the cultural-cognitive aspects of how actors navigate these structures. Scott also hints at a forth pillar, namely the emotional dimension of institutionalized conduct, and this is quite important for the argument I present here.

The notion of social institution that I want to invoke here is thus one that includes institutionalized social obligations, explicit rules and more implicit norms of appropriateness, normative approval and disapproval of conduct as well as sanctions in accordance with rules and norms, and the dimensions of positive and negative affect arising when individuals go about their daily business within these institutional frames. The argument, in a nutshell, is that these elements of social organization are relevant for understanding problematic gaming. In the next sections I will elaborate on these concepts, more or less in the order listed here, although they overlap to some extent.

Institutional obligations: commitment and attachment

I have already stated that my proposal for understanding problem gaming hinges on clashing social obligations. Goffman's observations on institutions are a useful entry point to the general nature of social obligations and their institutionalized character (see Goffman 1961, 1961/1968, 1963). As Goffman sees it, social obligations have the fundamental function of '[tying] the individual to social entities of different sorts' (Goffman 1961/1968: 159).

Goffman's analysis of social obligations distinguishes between *commitment* and *attachment*, where Goffman uses the metaphor of cold and heat to distinguish between the two: commitments, roughly, are 'cold' services rendered in a predominantly instrumental manner, where a particular behaviour merely has to be performed, and this aspect of obligations thus fall along the lines of the instrumental and more explicit logic of institutions. This concrete instrumentality of commitment makes certain aspects of obligations comparatively easy to identify and turn into objects for surveillance mechanisms, and this means that they are more often than not expressed in explicit rules.

The 'warmer' attachment refers to the comparatively more complex issue of various emotional displays of affect and enthusiasm. This distinction thus supplies an ostensibly simple but important dimension to the concept of social obligations: A purely instrumental approach to obligations misses the fact that chores may be done happily or grumpily, and depending on the nature of the instrumental activity, particular displays of attachment will be markedly appropriate or inappropriate. Emotional attachment is often bound up with the perceived values of the institution in question; many institutions call for both concentrated attention (what Goffman calls 'focused interaction') and emotional involvement as visible displays of positive affect, as in e.g. being visibly engaged, happy and joyful at a family birthday and suitably involved in a party game involving the whole family, etc. While such a normative call for attentional focus, positive affect, and inclusion is an element in many social situations, there are certain institutional settings which call for displays of aggression, animosity and exclusion. Chief among these latter settings is the realm of competitive games and sports, and this potential clash between proper expressions of types of affect in different institutionalized settings should be noted already at this point.

Goffman emphasizes that although obligations of commitment and attachment are general and thoroughgoing components of social structure, these social obligations always come with limitations, as captured by his statement that 'one cannot think clearly about the claims of commitment or of attachment that a social entity makes on its participants without thinking of the limits felt proper on these claims' (Goffman 1961/1968: 159). Obligations to social institutions are thus never unconditional, but are invariably set up as ties with acknowledged limitations: There is always some respite from the demands of a given institution, some area where the bonds are relaxed or do not apply at all. This institutionalized guarantee of limited freedom, i.e. that individuals are never bound unconditionally to one or more institutions, may itself lead to conflict. While this result may at first seem paradoxical, certain conflicts related to social obligations arguably arise *exactly because* the character of the obligations is not absolute but instead open to discussion. Such discussions typically involve the various conditions, contingencies and exceptions that may or may not apply, and this element of possible contention is also important for the later examples.

A final point from Goffman's analysis is that social obligations typically involve and invoke a great deal of personal responsibility on the part of the obligated agent, and all parties involved typically recognize this aspect of social obligations.

Roles and role-sets

One way to further formalize these social bonds is to tie them to the concept of roles. Roles are often encountered within social psychology and sociology, but the concept is applied differently by various writers in different traditions; the following outline of role theory is based on Merton's (1957) classic exposition, Goffman (1961), and the more recent overview in Lofland et al. (2006).[1]

The basic idea is that social obligations tend to be formalized into functional bundles that serve as particular roles for people to inhabit or 'step into'. Thus, when people act as parents, teachers, pupils or siblings, they do so in accordance with a particular institutionalized normativity tied to the performance of these roles. Roles can be seen as belonging to role-sets, which comprise a limited and connected set of roles as well as the internal relationships of obligations and responsibilities belonging to a particular institutional setting, as seen in for instance schools where pupils and teachers are the most important roles in that set.

In contrast to some versions of role theory, one of the defining features of the notion of role in the framework employed in this chapter is that a role may be tied explicitly to larger institutions and primarily (but not exclusively) to a specific institution.[2] This means that a role comes with a set of responsibilities not just towards other roles but also towards the institution who 'owns' that role: when individuals are involved in conflicts, it is often a clash between the roles inhabited by the individuals, and when roles clash in this fashion, the clash has ties to the larger institutional context. A conflict between a parent and a child is thus, to some extent, a conflict between institutionalized ways of comporting oneself according to the specific roles involved.

Roles and conflicts within and between role-sets

With regard to the possible conflicts arising between roles, one of Merton's points is especially relevant to the present argument, namely that conflicts between roles can be internal or external to a role-set. Conflicts internal to the role-set arise when the set of connected roles within a single role-set comes into conflict, and this typically happens within the confines of a particular institutional setting. An example would be the child role within the family role set; a large set of social obligations is part and parcel of this role and these are tied to the other roles in the role-set, in that a child routinely interacts with other members of the family, who in turn may inhabit the roles of siblings or parents.

Moving to conflicts external to a role-set, it should be readily visible at this point that many social conflicts are not just conflicts within a role-set but additionally *between* different role-sets: any individual has to play several roles at different times in different circumstances, and each of these roles come with a role-set of their own. To take a simple example, a young boy may be both a son and a pupil, and these two roles have role-sets of their own, which belong to family and school respectively. This

can lead to problems when particular circumstances make different roles 'collapse'. An example would be that a child in a family is also a pupil in school, a friend to some of the pupils (but not to others), and possibly a member of specific communities, for instance a community dedicated to gaming. The institutionalized obligations within and between role-sets, then, is the general structure that enables complex role conflicts. Today's youth has to be members of the household and the family (and the latter is often in plural), pupils, responsible friends, team-mates and players – and the obligations requisite to these different roles have to be fulfilled by a single embodied individual.

Conflicts and coalitions of power

There is an additional and arguably integral aspect to how these role conflicts may play out, namely the distribution of power: Role-sets often come with in-built power differentials tied to the distribution of obligations and responsibilities. Keeping with the example of family, the parent-child relationship exhibits a clear asymmetry in terms of powers to regulate, evaluate and coerce behaviour.[3] A role set thus typically comes with potential conflicts built in, due to demands made by one role to another within this established asymmetry of power and authority.

Merton also identifies the possible formation of 'coalitions of power' within and across role-sets. This term refers to the possibility for several inhabitants of different roles to form a kind of alliance against other roles. An example of such a coalition within the role set internal to family would be an alliance between both parents against their own child, or between child and grandparent against a parent – or children against parents for that matter, as seen in an example later in this chapter.

What I mean to imply here is not just that the basis of many conflicts in families and schools is based on the asymmetry of authority between children and parents and teachers, although the apparent banality of this mechanism should not occlude its importance for understanding the social aspects of problem gaming. I also want to draw attention to the complexity and wider implications of coalitions of power, once they start to span institutional divides. All of the role-sets come with complex bonds of commitment and attachment, and these may be more or less compatible – and this compatibility (or lack of same) will be visible in that intersection occupied by the individual responsible for meeting all these obligations, across roles and role-sets. When situations escalate, a particular kind of *inter-institutional role conflict* may arise where coalitions of power are formed both within but also across institutional divides. I am here thinking in particular of allegiances between parents, teachers, and other institutionally empowered authority figures such as doctors and psychiatrists which may form alliances in opposition to one or more children or young individuals.

From individuals in conflict to institutional values and affect

The power asymmetry mentioned above may be especially easy to see when one focuses on the cold, instrumental side of institutions, where some actors have insti-

tutional power to give orders and issue sanctions if these orders are not followed. But this is only half of the story. Conflict between institutionalized roles is also a conflict between a single individual and the values that underpin the institution in question, and some institutions are major power bases of society at large. As Scott (Op. cit.) and Goffman (Op. cit.) emphasize, the major institutions in society, such as family and school, operate not just in terms of pure instrumentality but also very much in terms of moral emotions such as pride and shame attached to notions of morality, responsibility, and individual and collective identity.

Moreover, as Nippert-Eng (1995) argues, individual actors may at times come to represent the institution as a whole, where a child becomes representative of childhood as such, with all of the implied value orientations that follow from this. I think this representative function is essential to understanding the potential severity of interpersonal conflicts in relation to gaming in the context of family and school. My contention here is that the representational and moral dimensions of institutions are to a large extent 'baked into' social conduct in general, since a larger set of connected values license the structure of the role-set in that institutional setting (as part of the specific 'institutional logic' governing this sphere, see Scott (Op. cit.).

When a young individual rejects a specific demand from his or her parents, for instance a request of paying attention to the immediate surroundings instead of an ongoing game, the individual in question does not just reject this isolated request for attention, commitment, and attachment: S/he additionally rejects the warmth and importance of family values. Such a rejection may carry with it not just irritation, but anger, shame, and a feeling of stigmatization. Conversely, when a pupil does not deliver the required homework because he or she has been up late gaming, that pupil in a very real way rejects and disrespects the idea of education as worthy pursuit and thus rejects a moral self that is devoted to ideas about *Bildung*, empowerment, and improvement of one's social position. At the same time, the problematized individual may feel that other social actors do not treat him or her with the respect accorded to a fully functional individual and that the surroundings may at times gang up on him or her by way of the aforementioned coalitions. In addition, the responsibility for achieving a successful 'life strategy' navigating all these social obligations is, at times, put squarely on the individual, and this can be a supremely difficult achievement for some, as described in the chapter by Thorhauge (Chapter 5).

Problem gaming as problematized gaming

Having presented a general framework designed to capture significant elements of problem gaming as social conflict, I will now turn towards the data from an empirical research project on problem gaming and deliver three worked examples as illustrations of how one might flesh out the problems of problem gaming within this framework. A more detailed presentation of the research project and the resulting data sets can

be found in Thorhauge's chapter (Chapter 5). The following is based primarily on qualitative interviews with young gamers (N=19), and especially the interviews with young males who reported domestic conflicts in both the survey and interviews. The presented analysis is a variant of case-oriented thematic analysis with an explicit element of deductive theory present from the beginning, as outlined by Miles and Huberman (1994). Thus, this is not presented as an inductive categorization akin to variants of grounded theory.[4] On the contrary, I was from the beginning assuming that institutionalized roles and role-sets would be visible in the data and I was looking for ways in which these would manifest themselves in problems related to gaming. Following the framework outlined above, individuals from this age group have several roles to perform, and they are more or less forced to conform to these roles as part of their everyday activities.

Across the interviews, the most relevant social arenas for understanding gaming problems seemed to be family life, school, and leisure contexts. This led me to work with a tentative formulation of three social roles, which each come with a fairly well-defined role-set: son or daughter, pupil, and game player. Each of these roles come with particular institutionalized demands, and a defining feature of two of these three roles is that of strong primary responsibilities towards a particular social institution. Sons and daughters owe primary responsibility to family and especially to parents (and other caretakers where responsibility have been delegated). Pupils owe primary responsibility to school and especially teachers and other pupils; a setting as institutionalized, if not even more so, than that of family. Game players owe responsibility to other game players and especially team-mates in competitive games where failure to comply with game-specific roles may lead to a series of unwanted consequences. These three arenas can obviously be elaborated much further, but the basic premise should be clear.

Based on this theoretical framework and the various sources of data collected (survey, semi-structured interviews, focus groups and field notes) during the problem gaming study, I propose the following as a synthesized prototypical example of a game related domestic conflict:

> A young person is engrossed in a competitive match in a multiplayer game with some of his friends. For some reason, a parent may now see it fit to exercise parental power (as licensed by the parent role) in an effort to make the family member conform to other obligations. Typical demands will be that the gaming individual should instead show commitment to the family member role (respect common norms, do chores, participate in family meals, go to bed etc.), and this might overlap with a parental desire that the young person should instead do something that corresponds to the parent's understanding of physical and social well-being (physical exercise and sports, play an instrument, participate in Boy Scouts activities, get a good night's sleep etc.). Both types of demands will often align with obligations that fit those of the pupil role (stop wasting time and do your homework, or at least do something

productive), and the latter type of demand is typically licensed as more productive by demands from the local school as well as the overall institutional logic of education. The roles of family member and pupil (and the obligations invoked by the parent in relation hereto) will thus conflict explicitly with the demands of the roles of friend and game player. If the player is distracted and plays badly or even exits the match prematurely, he will come to violate both the demands of his friends and the demands of his teammates.

This type of conflict is very clearly focused on the gaming activity itself and the conflicts that may arise when this is interrupted by parents and others. However, as the following three examples will show, the reality of family conflicts around games is often more complex and involves more than just gaming per se. All of the following examples are cases selected from the pool of informants in the problem gaming study. None of them are intended as demonstrations of every aspect of the theoretical framework; rather, the intent is to offer three illustrations of the possible application of the various elements of the framework to different situations.

Three worked examples as illustrations of gaming and problems with commitment and attachment

As the first worked example, the case of one of our male informants may be used to illustrate connections between different institutions as well as the way domestic conflict may escalate internally in a family. This informant has had a fairly high level of social conflict in his life in the recent years, but this seems to have stabilized at a lower level at the time of the interview; this case offers what is arguably a common type of conflict with uncommon levels of escalation. The informant in question will also be referred to in the chapters by Brus and Thorhauge (Chapter 4 and 5); here, as well as in those chapters, this informant will be referred to as Rune.

Rune is a young boy aged 16, who lives with both his parents and his sister. He is clearly devoted to gaming, plays competitive games for six hours most days, and tentatively sees his future vocation within the field. Importantly, however, he does not see a future for himself as a professional gamer, but rather as a streamer (on the platform Twitch). He emphasizes that a Twitch streamer may play any game, as long as he or she does it in ways that draw an audience. He also mentions following several streamers and mentions that late-evening streaming on his phone in bed is part of his general pattern of media consumption. Rune's commitment and emotional attachment here seems to be somewhat generalized, not so much to a particular game as to gaming culture and its manifold presences across media. It is also worth mentioning that he talks about his problems with gaming in very specific terms, and he considers himself 'addicted' to gaming and several times compares gaming to smoking. He is also, to some extent, worried about his spending of real world money on virtual goods.

When asked explicitly about conflicts, Rune says that his parents are generally worried about him gaming too much, at first due to him not getting enough exercise. He then refers to an episode where the conflicts around gaming escalated to the point where he left a note on the kitchen table and took a bus to live five days with his then-girlfriend (who lived more than 100 kilometres away). It turns out that the lead up to this incident was a period of intensified yelling and conflicts, apparently due to problems between Rune and his teachers at school as well as the amount of gaming at home. When teachers had 'written home', i.e. written notes to the parents about skipping school and improper behaviour in school, the parents would 'overreact' by yelling and cutting access to the internet and even 'throwing out [his] PlayStation 3'.

Rune himself summarizes this situation as a fundamental lack of respect for him as an individual, and he feels that his parents were clearly violating his personal boundaries, physically as well as mentally. He also mentions that his sister (who is 3 years older) felt the same way, and that the family had held a family meeting after the run-away incident where the siblings would address their common concern, i.e. lack of respect.

This example shows how coalitions between parents and schools as well as between siblings may play important parts in the formation, development, and resolution of conflicts related to gaming. This focus on respect for individuals and their life projects accords well with the points about reflexive agency and the 'reflexive imperative' mentioned by Thorhauge in her chapter (Chapter 5).

An additional point may bring out the further relevance of reflexivity and responsibility to see the paradoxical situation of this informant: On the one hand, he recommends that parenting must be done with respect for the rights of young individuals. At the same time, he professes that 'his life was a mess' and that problem gaming should be addressed by having stricter rules and enforcement, a shift towards the cold, instrumental and coercive side of institutions.

As a second worked example, I will give two specific examples from one of our focus groups which may deepen the understanding of local notions of proper conduct, regulation, commitment and attachment as well as the formation of coalitions.

First, a young boy, who was not in a problem gaming conflict situation, referred to having his PC use monitored and curtailed by both his mother and father who thus formed an alliance with that explicit purpose. The motivations for this alliance, however, were perceived as quite different by the young boy. From the mother's side, her desire for restriction seemed to be tied to what she perceived as toxic language and problematic emotions in relation to the specific PC gaming communities around *League of Legend*s and *Counter Strike: Global Offensive*. Both of these games are highly competitive, and a certain level of animosity and verbal aggression is common among players of these games. The boy would thus take care to lower his voice and not use expletives when his mother was around. The father seemed to be less worried about language, and instead seemed to be primarily motivated by a desire to make his son use the PC for homework instead. The father would thus intermittently check up on the boy's activities when using the PC system.[5]

This PC system was later revealed (in a post-focus group discussion) to be both expensive and paid for entirely by the young boy through a job in the local supermarket. We did not pursue this potential conflict between property rights and social obligations with this informant, but across our interviews conflicts surrounding privacy and autonomy may at times overlap with conflicts related to responsibility in fiduciary matters.

The second example involves another young boy (from the same focus group discussion), who stated that his mother was very intent on limiting his console playing, apparently because she was worried about violent games and 'brain-washing'. He also mentioned that his older sister thought that he played too much and would at times hide his gaming controller to keep him from playing.

At first, the moderator interpreted this as a relatively simple coalition of power between mother and sister, motivated by a common desire to 'save' the younger boy from improper media content. However, it was later revealed that the boy did not see any such motivation on the part of his sister. Rather, his explanation was that the sister interfered with his gaming behaviour because his console gaming activities were tied to the big screen TV in the common living room, and access to this TV was a scarce common resource in that home. By contrasting these two examples with the previous one, we can see how the distribution of material resources and the delegation of authority within various family structures may alter the local structure of role conflicts.

As the final worked example, one of our cases can be used to illustrate connections gaming culture and obligations cashed out as commitment and attachment. This male informant is 15 years old, and he is a single child living with both parents. He is a competitive player of multiplayer games, mostly *League of Legends* which is also his favourite e-sport. A first example concerns a situation where the informant tried to balance his commitment to boy scouts with his commitments to gaming. The boy referred to the community of the scouts in fairly positive terms, but at the same time stated that the actual activities involved were kind of boring – here we see the communal values taking precedence over the more instrumental side of the boy scouts, who are typically lauded for both the values of community and a practical ethos of outdoor living and being 'always prepared', come rain or snow.

His interest in gaming, in contrast, seem to carry none of these positive values to his parents, although it is clear that the informant is also highly social in his gaming activities and talks about how gaming allows him to connect to other friends (who are also gamers) as well as to the larger gaming community.

The boy thus talks about both the boy scouts and gaming as valuable communities, but his commitment and attachment to gaming had at one point led to an explicit confrontation between him and his parents, where the parents had chastised him for leaving a boy scout camp early in order to prioritize the transmission of the World Cup in *League of Legends*. While the boy felt he had merely chosen a different community of equal value, his parents saw things very differently.

A second example from the same informant shows how the dynamics of commitment and attachment can work in connection with the structure of mediated everyday life. As the interview progresses, it becomes clear that the conflicts between the boy and his parents are not just about excessive gaming, but rather seems to stem from a combination of inattention in social interactions, due to media use, and excessive devotion to activities connected to gaming culture. The boy has taken to using his iPad during most of the day, to an extent that he is watching iPad videos during breakfast and in bed in the evenings – and he has even brought the iPad with him when walking the family dog.

This dog, he explained, was originally acquired partly to serve as a kind of 'attachment anchor' for the boy, since he is an only child. He thus describes how he had begged for a domestic pet over a long period, and he also expresses that he has 'begged his parents for a brother'. He still professes to like the dog, but he finds dog-walking boring when done alone. His interest in gaming and his attachment to the gaming communities seems to have led to the iPad being a constant presence outside of school – the iPad and, by extension, the gaming community have become almost ubiquitous in the informant's life. This presence of a media platform seems to be just as important for triggering the family conflicts, and it has led to the father confiscating the iPad for a full week, with no mention of a full week of gaming abstinence.

Problem gaming as media-enabled de-segmentation of daily life

This last example, where an iPad colonizes almost every aspect of a boy's life, may seem rather specific and perhaps also tangential to excessive gaming, but several of our respondents make reference to streaming and other activities, all of which signify their attachment to gaming culture and gaming communities in addition to the actual act of playing games. These media activities are in some sense not gaming activities per se, but they demonstrate commitment and especially emotional and attentional attachment to the domain of gaming culture – and this emotional attachment is generally frowned upon by the parents.

The common denominator here could be said to be the alteration of the spatio-temporal segmenting of everyday life, a dynamic helped in large parts by the presence and manifold networking of contemporary media: It is this networking, in particular, that allows gamers to participate enthusiastically in communities wherever they are, whenever they want. For scholars such as Goffman (1959/1990), Zerubavel (1997) and Nippert-Eng (1995), the specific configurations of space, time, cognition, and emotion are important patterns in the structures of everyday sociality.

Nippert-Eng refers to the particular *segmented* nature of everyday social life, and by this she refers to a logic which compartmentalizes the social in ways that keep domains of life separate from each other. This idea of segmentation accords extremely well with both Goffman's and Scott's analysis of institutions, where school would be an

instantiation of a heavily segmented and segmenting institution, and the home would be another segment, itself segmented into public and private areas. Conversely, the various bonds of attachment and commitment to various institutions is heavily structured as demarcations of separated times and spaces for these obligations to be fulfilled.

When looking at the lives of our informants through interviews, this segmenting seems to be the typical way of organizing family, school and gaming: School is work and the home is the arena for more leisure-oriented activities. When one looks at the conflicts described by our informants, there are indications that breakdowns in this segmentation can be a key part of the problem of problem gaming. I would thus argue that a kind of super-theme or core category can be found here that might help explain *why* parents and others feel that gaming is such a problem: The problem is a particular kind of *spatio-temporal emotional and attentional de-segmentation* of daily life, where gaming attachment seems to flow unconstrained across boundaries: gamers may be present physically without being really present emotionally; they are physically located in their homes, but they do not participate in family-oriented rituals of commitment and attachment.

Since the family has traditionally claimed the household as the physical site of family life, networked media has a potential for creating conflicts between attachment to different communities and their requisite values by bringing the various gaming communities and their demands for attention and attachment into the home – and all areas of the home. Gaming activity itself, with its own logics of competition and collaboration, as well as enthusiastic commitment and attachment, is one specific driver for domestic conflicts to arise. In addition, gaming-related activities has the potential to become problem-related activities and, in turn, these activities may become problematized in themselves because they signify attachment to gaming values, which are seen as orthogonal to family itself as well and other institutions which are deemed more compatible with family values, such as school, scouts, sports or guitar playing.

Conclusion, limitations and implications for further work

In this chapter, I have attempted to de-individualize problem gaming by providing a general sociological framework for analysing problematic gaming activities as embedded in overall institutional structures. The most important structures are the social obligations between various social roles, which are licensed by the larger institutional set of norms and values. When these obligations clash, a conflict arises. In the examples given above, problem gaming seems to take two main forms which often co-exist. The first is that of excessive gaming, i.e. commitment and emotional attachment to playing games in amounts deemed excessive by parents and teachers – and possibly by the gamer as well. The second, which is closely related to the first, is excessive commitment and emotional attachment to gaming-related activities, often by way of networked

personal media platforms. When both of these issues co-exist and the conflict starts involving school and its institutionalized obligations, the problems may escalate.

Several things have been left out of the argument. First, I have refrained from taking a more specific approach to the notion of family and parenting, and instead opted for a very general outline of family-related problems. In relation to the case stories involving teenagers and conflict, an obvious next step would be to acknowledge the importance of this life phase for certain types of problem gaming, for instance as seen in Karlsen's chapter in the present volume (Chapter 6). One might additionally look towards research into parenting teenagers, e.g. Coleman (2013) and the overview of parenting styles given there.

Second, I have followed the rather pragmatic line evident in Lofland et al. (2006), where roles and role-sets are seen as constructs that may be illuminating depending on both case and the temperament of the researcher. One might thus incorporate various constructionist approaches with the role perspective, for instance by taking variations of understandings of family and reformulating them as different and more local institutionalized logics of family and investigate how the local role-set looks. The present framework should be open enough to incorporate certain aspects from sources like Gubrium and Holstein (1990), as well as those mentioned in Morgan's (2011) brief overview of specific family practices.

Another issue related to that of avoiding 'reification of family' is that the family as an institution is well known to be both historically and locally malleable. The roles, norms and conventions of family life are being negotiated and re-negotiated, both on a daily basis and over the longer term. Modern life arguably involves a higher degree of complexity than in previous times, and this includes, but is not limited to, negotiation and re-negotiation of roles and possible relationships of responsibility. This leads to increased responsibility for everyone inside the family organization: Being a 'proper family' and a 'proper parent' entails a certain kind of responsible parenting but also responsible 'offspringing' – i.e. taking responsibility for one's own successful childhood as well as adolescence. Lee, Bristow, Faircloth, and Macvarish (2014) have argued for the rise of 'parental determinism' in society, where parenting is seen by many as a key influence on the success or failure of a child; there are indications in our data material that this issue could be relevant in relation to problem gaming.

A final issue stems from an empirical focus on interviews with the gamers themselves and the very limited attention given to other relevant roles in the role-sets of family and school. As such, the worked examples here offer no insight into how these relationships are experienced from the 'other side', so to speak. Incorporating these other individuals seems an obvious route for further research – and an outline of such an analysis can be found in the chapter by Prax and Rajkowska (Chapter 7).

Notes

1. The present proposal is intended as a 'soft' role theory, i.e. more akin to the pragmatic position offered by Lofland et al. (2006) than to the functionalism associated with a writer like Merton. I am thus not arguing that roles and role-sets are universal and unequivocally functional or dysfunctional in one particular form, but I am arguing for roles as broadly relevant templates of social conduct with probable ties to institutions which tend to structure interaction along particular lines.
2. This emphasis on the institutionalized aspect of roles accords well with the position of writers such as Berger and Luckmann (1966) and Scott (2014), while Goffman's notion of roles is arguably more locally oriented.
3. Although one can discuss at length the various complexities underlying such a simple statement, it should suffice for now to recognize that a general asymmetry exists, and in the majority of family settings this is not in favor of the child. See Brus' chapter in the present volume for examples on how this ties in with problem gaming.
4. The discussions surrounding what a contemporary grounded theory position would amount to are way too complex to enter into here; I use the term here, with some hesitation, to represent any position which seeks to minimize a priori theoretical commitments. The introductions in Bryman (2016) and Punch (2014) outline some of the basic problems with assuming a unified grounded theory position as well as some of the more specific problems that might follow if one follows the recommendations in the original formulations.
5. This type of dual purpose is specific to PCs compared to game consoles.

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Chapter 4

Generagency and problem gaming as stigma

Anne Brus

Introduction

The aim of this chapter is to discuss how generational negotiations and conflicts related to gaming are embedded in structures of everyday life. I will examine this question with regard to young people and how they construct and evaluate gaming as part of their social interactions. Furthermore, I will present a critique of the very notion of problem gaming in itself. When using the term problem gaming, we tend to forget to ask an important question: For whom is problem gaming a problem? Here, we have to consider who is defining gaming as problematic and in relation to whom: Is gaming problematic for the young people's parents or is it problematic for the young people themselves?

In earlier research (Brus 2013, 2014, 2015), I have suggested that young people's problems with gaming are articulated discursively as an addiction in the social interactions between young people and their powerful parents. The parents' worries that their child might be addicted stigmatise some young people and classify them as misfits (Brus 2013). In this chapter I will develop this perspective further, building on results from a new Danish study conducted between September 2014 and February 2015. The main purpose of this study was to develop a sociological understanding of problem gaming (Thorhauge et al. 2016) by focusing on gaming in everyday life (see also Brus 2013, 2015).

The analysis is inspired by the Canadian sociologist Erving Goffman (1990) and his conceptualisation of stigma, and the Irish sociologist Madeleine Leonard (2016) and her concept of generagency. I use generagency to reflect on the relationship between young people and their parents as a key aspect of gaming in young people's everyday life. On one level, the theoretical perspectives indicate an understanding of young people as active agents in their everyday life. On another level, young people also live their everyday life in a society which is 'generationed' (Alanen 2011). Young people's everyday lives are formed by generational structures and through social positions of childhood and adulthood.

Brus, Anne (2018). Generagency and problem gaming as stigma in Jessica Enevold, Anne Mette Thorhauge & Andreas Gregersen (eds.) *What's the Problem in Problem Gaming? Nordic Research Perspectives*. Göteborg: Nordicom.

Obviously, social categories such as class, ethnicity, and gender exert great influence on young people and their agency. However, age is another key category around which societies are structured. In this vein, the Finnish childhood researcher Leena Alanen has usefully suggested the 'generational order' as 'a conceptual starting point and an analytical tool for framing the study of childhood and the children's active presence in generational structures' (Alanen 2011: 163). To some extent, young people have a problematic or ambiguous status in society. Parents have the power to regulate and control their children's lives. Young people are allowed to practise agency, but agency is widely constrained by parents' ideas about good parenting. To many young people, the home is a strictly regulated space, controlled by adults. Young people's agency is thus influenced by the generational structure.

I will begin the chapter with a short presentation of the theoretical framework and the concepts of stigma and generagency. After this, I will present the study on which the analysis is based. On this basis, I will present four general gameplay patterns which capture the most prominent ways in which young people organise gaming as part of their everyday life: gaming as a break, gaming as individual leisure, gaming as a hobby and gaming as a social activity. These four categories are then used as a springboard to discuss how peers' and parents' positive and negative views on gaming are interpreted by young people. Drawing on the notion of generagency, the following discussion identifies a minor group of young people that is more vulnerable to be stigmatised as problem gamers than other groups. I then move on to a case that addresses problem gaming in more detail.

In my conclusion, I will argue that young people's gaming is not problematic per se. Of course, it may be perceived as a problem in practice but in such cases we have to see it in the light of young people's agency and how their lives are influenced by the generational order.

Problem gaming as stigma

Goffman (1990a) invokes different dramaturgical principles in his description of people's social interactions in everyday life. He describes everyday life as a performance on stage, divided into a front region and a back region. The performance includes actors and their audience and while on stage people perform various roles to impress the others. These performances are collaborations between the participants involved, who negotiate and maintain a social order with their actions.

New technologies have extended communication across time and space, and computer-mediated communication represent a new site for impression management. In late modern society, impression management is not necessarily confined to physical spaces (Jenkins 2010). Individuals are able to manage their face-to-face interactions at a distance. An important aspect of the social interaction between the actor and the audience is the fact that the representations of the self are threatened and always at risk of breaking down.

One possible consequence of such a breakdown, according to Goffman, is the threat of being stigmatised. The normative expectations and stereotypes in social interactions may produce a stigma: a discrediting discrepancy between what Goffman (1990b:12) calls the virtual social identity and the actual social identity. The virtual social identity is the normative expectations we hold toward individuals' characters and attributes in social encounters. The actual identity is the character and attributes individual actually possesses.

Of course, the consequences of social interactions are many and varied; encounters may turn out positively as well as negatively. But when an encounter turns out negatively, it might involve a demarcation of the individual from the group and a movement of him or her into the margins (Williams 2000). Stigmas vary across historical and cultural settings. They are connected to all kinds of culturally unacceptable norms (Williams 2000). I will use this theory of stigma to discuss how some young people become stigmatised as 'problem gamers'. 'Problem gaming' is generated in a family context but is also a societal reaction to something considered abnormal.

Generagency, inter-generagency and intra-generagency

Generagency is a compound of 'gener' and 'agency' (Leonard 2016). The 'gener' refers to generation and the structural aspects of generational relationships. Both young people and their parents are under the influence of the generational order. The 'agency' part of generagency points toward the role of young people as active and independent creators of culture. Young people contribute and change cultural routines under the circumstances they are offered, and with the various choices and restrictions they are given.

Leonard's concept of 'generagency' derives from a critique of a prominent perspective in the sociology of childhood and the resulting problematic relationship between agency and structure. From this perspective within sociology of childhood, young people's everyday lives are more than a preparation for adult life. Young people are social agents operating in particular contexts and situations. They are competent meaning and decision makers (James & Prout 1997). Moreover, young people do not only take an active part in their lives. They have agency in the sense that they are capable of making things happen (Mayall 2002). In short, young people are actors with agency.

Agency is more than the reproduction of culture. 'Children strive to interpret or make sense of the adult world, children come to collectively produce their own peer worlds and cultures' (Corsaro 2005: 24). Young people produce their own cultures, including their gameplay cultures.

According to Leonard (2016), childhood sociologists have been too uncritical in their use of the concept of agency. Leonard argues that it is obvious that young people are agents. Young people have the ability to challenge adults and their understanding of the world, but generation as a core social structure sets limits on young people's agency. In Leonard's view, young people perform youth within a generational order. In

continuation of this, Leonard raises a range of conceptual challenges to the sociology of childhood and the unresolved questions of agency and structure, including questions regarding the roles of intentionality, reflexivity, power and time (Leonard 2016).

I will not go deeper into all of those elements, but just refer to Leonard's emphasis on power relations as a fundamental principle in the relationship between young people and their parents. According to the Childhood sociologists, such relationships are based on unequal terms as parents have considerable power over their children. However, if we maintain that parents have ultimate power over their children, we risk underestimating young people's possibilities of mobilising any kind of agency in their everyday life. According to Leonard, there always exists a possibility to act differently. In some respect, therefore, it is useful to distinguish between vertical and horizontal power in the context of intergenerational relationships (Kuczynski 2003). Vertical power refers to parents' power over their children; horizontal power is the negotiated power relations in daily interactions. Parents may have the power to set up rules but young people are able to act against them with various forms of resistance.

Leonard (2006: 9) suggests dividing generagency into two sub-categories, 'inter-generagency' and 'intra-generagency'. Inter-generagency concerns the relationships between young people and their parents. The concept highlights various kinds of situations that young people and parents share. Childhood and adulthood are social constructions that are produced and reproduced in everyday life interactions. The social constructions change and are constantly redefined in context. Inter-generagency underlines the importance of taking the power relations between parents and children into consideration in any analysis. Intra-generagency refers to the relationships among young people themselves and directs attention toward young people's agency with peers. Furthermore, the concept draws attention to young people's varying life conditions. Young people experience their lives in multiple ways and in many different contexts. Although school is an age-based institution and thereby a part of the generational order, it brings young people together. Through their interactions with each other, young people adapt to, discuss and sometimes even reject the adult world.

I find Leonard's (2016) concept of generagency and the subdivisions of inter-generagency and intra-generagency useful as an analytical framework for understanding young people's everyday life with (problem) gaming. The subdivision of inter-generagency emphasises the importance of taking into account adults' regulation and control of gaming in young people's everyday lives. To put Leonard's (2016) point into perspective, agency is exercised within and across generational and hierarchical relationships between parents and their children. Young people and their parents contribute to the construction of gaming and problem gaming in ongoing dialogues, discussions and reconsiderations.

I use notions and ideas put forth in Leonard's study (2016) to show the interplay between agency and structure, i.e. how micro and macro aspects of young people's everyday lives interplay with each other. The main argument is that generational issues underpin some of the challenges that appear in young people's everyday lives with

gaming; they exemplify young people's dependence on adults as well as the capacity of young people to have an effect on the generational structures around them.

The study: a mixed-methods approach

The chapter is based on a mixed-methods study conducted in 2014 and 2015. It involved a survey (N=1,560) focusing on young people's gaming habits, which was followed up by semi-structured interviews (N=19) and focus group interviews (N=2) focusing on gameplay in everyday life.

From the survey data, two different types of players in relation to problem gaming emerge: Competitive teamplayers and non-competitive singleplayers (Thorhauge et al. 2016). As stated in other contexts, there seems to be an ongoing conflict between competitive team player boys and their mothers (e.g., Aarsand 2011, Brus 2014, Walkerdine 2007). In stark contrast to this, the non-competitive single players are mostly female players with no domestic gaming problems reported. In order to investigate the two different patterns of gaming and their connection to potential domestic conflicts, this chapter contains an analysis of the qualitative data.

Most of the young people were sampled from the survey. However, the lack of relevant female informants necessitated the use of snowball sampling, so some of the informants were recruited through a network of friends and acquaintances (Weiss 1984).

To capture the perspective of young people, the research design included collection of data in the form of oral, written and visual accounts. Video or photo diaries represented various gaming situations and included the young people's spoken or written comments on what was going on around the screen. This form of diary method allowed the informants to present, in their own words and pictures, their everyday life in relation to others (Alaszewski 2006). These methods can yield important data points that cannot be collected through interviews (Harper 2002).

The diary method was followed up with a semi-structured interview that took place in the young people's home (Brinkmann 2013). The interviews focused on three themes. Firstly, a short presentation of the young people's everyday life, family, school, and leisure situation. Secondly, the young people's comments on the diary data and thirdly, their reflections on computer games as a part of their everyday life.

Young people's everyday life with gaming

The following analysis focuses on young people's gaming in everyday life with particular attention to the importance of peer interactions, how gaming is contextualised in different settings and how parents' approval and disapproval affect young people's everyday life with gaming. As mentioned in the beginning, I have identified four

general gameplay patterns which capture the most prominent ways in which young people organise gaming as part of their everyday life: 'gaming as a break', 'gaming as individual leisure', 'gaming as a hobby', and 'gaming as a social activity'.

In some respects, this categorisation of young people's gaming is at risk of overly simplifying their everyday interactions. However, the patterns serve to highlight young people's gaming interactions with those around them and how those people react to the young people's choices in an everyday life perspective. It is an analytical manoeuvre towards understanding how young people's everyday life with gaming turns out differently depending on various interactions with their peers and their parents.

Gaming as a break

This gameplay pattern could be observed across a large number of participants in the study. The interviewees with the break as a predominant gameplay pattern described gaming as light entertainment that takes place in a variety of social settings. The portability of mobile phones makes it easy to play a social media game or to play cheap or free game apps downloaded from the Internet. In some situations, gameplay is part of a peer community in school. In other situations, the activity fills a break at home. Even though the time consumption varies from a short moment to a whole day, gaming is a momentary priority in the young person's life. Young people and their peer group can be preoccupied with gaming for a period of time but the preoccupation stops if another shared activity becomes more interesting: Gaming can easily be replaced with other activities. The players in this category differ from the other players in the sense that gaming is not a consistent part of their identity.

In general, parents of the young people in this group are aware of their childrens' gaming activities and comment on its possible consequences. The parents pay attention to the gaming activity, but only occasionally and when they feel obliged to react to what they consider a waste of time. The parents lay down gaming rules, for instance on the amount of time allowed to be spent on gaming. According to the young people, the parents' rules tend to be exaggerated: The entertainment is instead seen as relaxing and fun, not harmful. Nevertheless, to some degree the young people comply with their parents' rules. Gaming is clearly an ongoing negotiation between the younger and older family members. To many parents, gaming is not acknowledged as a legitimate leisure activity. However, their children show some independence when they continue to play computer games in spite of their parents' negative attitude towards gaming.

Gaming as individual leisure

Whereas a majority of the young people in the study use gameplay as a way of filling breaks and taking time-outs alone, a few of them have turned this individual activity into their primary way of spending their day. The young people in this group present their game patterns as part of a daily routine. They may have a few other leisure in-

terests but gaming is their number one priority at home. Their gameplay seems to fill an otherwise solitary everyday life. They describe themselves as outsiders and they do seem to be excluded from their peer communities. They may hang out with some classmates in school, but they do not see their peers after school. Moreover, the young people in question prefer singleplayer games. Even if their game offers a multiplayer function,or a possibility to play and communicate with others they play by themselves.

The young people who displays this gaming pattern in the current study also experiences a family situation that is complicated and does not seem to give much room for the modification and shaping of identities and ways of acting. As a result of parents who have divorced, the young people in question have often experienced several familial shifts and new family members during their childhood (e.g. a 'new' mother or father, or 'new' siblings). While gaming in the previous group was described as a point of negotiation between parents and children, gaming to the young people in this group appears to be a matter of 'free' choice. According to them, they spend their leisure time without any adult intervention whatsoever. If gaming is their number one priority, their parents accept this choice without any further discussion – with a few exceptions. Within their divorced families, some of them experience quite different reactions from their parents towards gaming. In one of the cases, the father shows no or only a little interest in the gaming and does not lay down any rules for the activity, while the mother reacts to the gaming with an almost unconditional prohibition. In this context, the young person in question accepts the adult-defined rules without resistance, despite the difference in the parents' socialisation strategies.

Gaming as a hobby

To some of the young people in the study, gaming represents a hobby that is more directly tied to their identities and projects in life. In this group, gaming is of vital importance to the young people's everyday lives and identities. They play different kinds of games, competitive multi player games as well as single player games and while some of them have favourite titles, they are always open for change. The young people in this group are highly engaged with the various possibilities in the games to construct different kinds of identities. Their involvement with games involves a considerable amount of consumption; they buy different kinds of consumer goods such as the latest game titles and computer gear to strengthen their identities as gamers. Moreover, their hobby is shared with other peers. Especially the boys reported having an enriching life with peers both inside and outside the game, and for many of them the peer group goes back to their early school years. They have played, discussed, and watched some of the scenes from the computer games over and over again.

Some of the young people in this category define themselves as outsiders. Yet, this outsider position is described differently as compared to the young people with gaming as an individual leisure. In this case, the young people use the resources available in the games to exercise their agency and from this platform they can counteract

their outsider role and create a new position among online friends. They demonstrate agency when they reformulate their identities and take responsibility for a gaming website, to give one example.

According to the young people in this group, their parents show confidence in their ability to exercise control over their gaming. In most cases, they present themselves as loyal in their relationship with their parents. Some of them refer to an unspoken agreement: If they do well at school and if they conscientiously do their chores at home, then gaming is not an issue to discuss.

In some cases, discussions about the young people's gaming activities do occur. This often concerns how much time they spend playing games. Most of the young people in this group describe these situations as negotiations between them and their parents. In a few extreme situations, the parents have chosen to exercise their power, for instance when the gaming activities involve excessive sums of money. Although the parents have in such cases made ultimate demands to stop, the young people seem to find their reactions reasonable.

Gaming as a social activity

To some of the young people in the study, gaming is primarily a social activity, something to do in order to establish and maintain a network of peers. To this group of young people, gaming is a habit and an activity that is closely related to the young people's social identities as players as well as their gender identities. Gaming is indisputably the most important leisure activity they have. The young people share their gaming activities with close friends they often know from school. Gaming is a way of socialising with friends and involves a strong peer culture that is highly competitive and socially informed. Gaming is about having fun with other young people and, at the same time, about being better than the others. As was the case with those who had the game as a hobby, the gaming equipment is an important part of the young people's identities. Usually, they possess two or three screens, a mouse, headphones and other consumer goods that shape their participation in competitive gaming.

Yet, while gaming as a hobby and gaming as a social activity have much in common on the surface, the most obvious difference is the relationship with the parents. Some of the young people in this group distinguish between the parents' support of their gaming at earlier stages of their lives and the parents' lack of support as they have grown older. They describe how their parents used to buy them the necessary gear and the newest games. However, as they grew older and became more self-governing and autonomous, their parents gradually started to react negatively to their gaming. From the qualitative data, it is not possible to say when and why the parents' attitudes shifted but the young people in question were very aware of the change. While the parents' reactions towards gaming might be linked to their feelings of responsibility toward their children and their well-being, the young people themselves interpret their parents' agenda quite differently. They interpret the new rules as a form of violation

and they experience the parents' negative reactions toward gaming as a stigmatisation of what they consider to be a legitimate social activity.

In sum, I have identified four general gameplay patterns which capture the most prominent ways in which young people organise gaming as part of their everyday life: 'gaming as a break', 'gaming as individual leisure', 'gaming as a hobby' and 'gaming as a social activity'. These are by no means categories that cover all aspects of young people's everyday life with gaming. However, they direct attention towards some important aspects of generagency, both in relation to peers and as part of the relationship between young people and their parents. It is within the boundaries of these relationships that young people exercise agency in a multitude of ways. In the following section, I will discuss problems in relation to gaming as they appear within the four identified patterns.

Problem gaming?

The concept of generagency outlined in this chapter draws attention to young people's agency within a society that is partly structured around the generational order. This section further explores the interdependency between agency and generation in relation to problem gaming. In a combined discussion of the four gameplay patterns presented above, I will define and systematise some of the problems that seem to occur in young people's everyday life with gaming. Firstly, I will address the intra-generagency perspective by showing how interactions with peers may affect young people's gaming activities in positive and negative ways. Secondly, I will address the inter-generagency perspective, i.e. how young people practise their agency in their familial relationships and how this may at times involve a problematisation of their gaming habits.

The four gameplay patterns above show that young people from an intra-generagency perspective unfold their agency in different contexts of social interaction with their peers. Peer groups are important resources for shaping young people's identities and gaming also represents a resource in various ways. Some of the young people construct their entire social world around gaming. This applies especially to those who have gaming as a social activity. For the most part, the young people in the study cherish their gaming in everyday life. According to their statements, gaming is a positive activity they indulge in when they need time to relax, to spend time with peers, to compete and to shape their identities. Gaming provides opportunities to practise agency and to unfold fluid and dynamic identities under the circumstances given by structural positions within as well as outside the game. To a certain degree, the young people include each other in their gaming, which thus forms a platform for social interaction at an intra-generational level. Moreover, some of the young people in the study use gaming as a way to overcome their social position as outsiders. Gaming empowers them and helps them to keep their everyday life problems under control. They are able to transfer their positive identity from gaming to other parts of their social lives.

However, a small group of young people in the study seem to have only little contact with their peers. They describe their gaming in terms that emphasise their active engagement but the agency that they exercise is more or less isolated from others, they seem to be remarkably socially isolated. It is beyond the scope of this chapter to make any conclusive statements as to why they don't interact with their peers, but gaming is definitely an integral part of this pattern. For the most part, however, gaming brings young people together in different kinds of social settings. Gaming represents a space for agency, where young people connect and expand their identities.

At the same time, young people's engagement in gaming is highly dependent on their relationship with their parents. The young people in the study stated that their parents generally support their gaming. According to them, their parents accept a certain degree of independence, and they allow their children to earn their own money, to play the games and to buy the necessary gaming gear. In this sense, most of the family negotiations, according to the young people, are held in a reasonable tone and formed as a dialogue.

Of course, conflicts related to gaming do appear. In these cases, a family conflict will depend on the way power is defined by the actors involved. Parents as well as children have the power to resist and to undermine the others' position. Moreover, the conflicts vary in the severity of sanctions imposed on the young people and how they react to these sanctions.

A few of the young people in the study tell stories about their parents' reactions toward their acquisition of expensive gaming gear or in-game items. In these situations which involve relatively large financial transactions, parents' reactions are generally negative and often involve prohibitions. For the most part, the young people involved accept the parents' authority in these situations by changing their behaviour or reflecting on the consequences of spending money on status elements in the game.

However, among the young people who have gaming as a social activity, more stories tend to emerge where parents exert power over their children by manifesting a hierarchical and unbalanced relationship. Some of the young people in this group experience the parents' behaviour as disrespectful and very humiliating. I will illustrate this situation with a case from the study.

Rune is 16 years old and lives at home with his parents and an older sister. According to him, he experiences certain challenges in his everyday life connected to his parents and his teachers at school. His way of handling this has been to arrive late at school, sometimes even staying away, and only doing his homework occasionally, which has led to bad grades and considerable amount of communication between school and home.

According to Rune, the problems at school have evolved into a disciplinary conflict between him and his parents at home. From their point of view, he has become addicted to computer games and they consider his gaming to be the cause of his problems in school. His parents have therefore tried to change Rune's behaviour by prohibiting gaming for a short period of time. Rune experiences this as a punishment, which

has transgressed his personal boundaries several times. They yell at him and become angry with him, force him out of his bedroom against his will, close his access to the Internet and throw away his gaming equipment.

Rune explains that his parents have misinterpreted his problem. He hates school and particularly one teacher, who humiliates him with questions he is unable to answer. He acknowledges that he spends a lot of time in front of the computer screen but this is because gaming is his hobby, he is good at it and his friends recognise his skills. In the interview, Rune describes how he eventually reacts against his parents' use of power by running away from home. It takes the parents five days to persuade him into coming home again.

Rune's confrontation forces his parents to take a more reasonable attitude towards him and his gaming. In this way his story illustrates that it is actually possible to practise agency within the generational order and to resist parents' power over their children. By confronting his parents and running away, Rune reconstructs the power relations between his parents and himself. This implies a limitation of what is considered to be parents' ultimate power over their children. Maybe Rune's shame of being stigmatised as a computer game addict made him a little uncertain as to how to approach his parent's accusations, but only for a while. By questioning and reacting directly against his parents' way of exercising their power Rune shows that he is also powerful. In this way, parents' ultimate power over their children seems to be theoretical, or rather a hypothesis that is difficult to confirm in this study. Kuczynski (2003) argues that power has to be performed to be realised. It can be accepted in agreements between young people and their parents and it can be challenged when the exercise of power is considered to be too unfair.

However, is it problem gaming when young people are stigmatised as computer game addicts and thereby prevented from engaging with their peers? In this study, the social players were shown to be the group most likely to be singled out as problem gamers. Yet, gaming for the young people in this group is a social activity and part of an enriching peer culture. Through their peer interactions, they share routines, artefacts and values. To a certain degree, gaming as a social activity is under pressure of the power given to parents to regulate and control their children's lives. Yet, although young people are in an asymmetrical relationship, parental power can be challenged by young people's agency.

Conclusion

This chapter has examined young people's everyday life with gaming within the context of peer and family cultures. Building on the model of generagency and the two interrelated sub-concepts of intra- and intergeneragency, the chapter has explored qualitative data based on a Danish study of young people's gaming in an everyday life perspective. Generagency describes the relationships between young people,

their peers and their parents as a generational and unbalanced condition that forms parents' and young people's agency on unequal terms. Young people act from a relational platform that is dynamic and complex. It is from this platform that agency is exercised in a variety of ways.

I have identified four ways in which gaming is part of young people's everyday life: 'gaming as a break', 'gaming as individual leisure', 'gaming as a hobby' and 'gaming as a social activity'. The gameplay patterns illustrate that young people live their lives with gaming in different ways but also that these different gameplay patterns enter the generational order of the involved families in different ways. Some gameplay patterns are problematised more than others.

Most parents in the study treat their children with respect and take the young people's points of view seriously. In spite of parents' traditional rights to advise their children and decide what is in the children's best interest, most parents in this study listen to their children and make space for them to play an active role in their everyday life with gaming. However, young people's agency emerges from the opportunities arising from the positions of childhood and parenthood. For some young people, generational acts predominate to a degree that shows a lack of recognition of young people as human beings. Here, young people's agency is reduced to a minimum.

My key argument is that problem gaming cannot be divorced from the exercise of agency of both young people and their parents. At its most basic level, problem gaming seems to be a result of parents' power over their children. This does not mean that problem gaming only exists on the inter-generagency level; rather the analytical reduction serves to underline the importance of taking both young people's agency and their parents' agency seriously in the discussion of how to define problem gaming. The discourse of addiction implies danger and draws attention to the negative consequences of the excessive playing of computer games and in this way 'produces' a problem. Moreover, this discourse contributes to parents' power over their children. When young people's gaming activities become a threat to their duties at school some parents react with regulation and control. As the analysis illustrates parental power is sometimes accepted by their children and sometimes it is not.

The analysis suggests a dynamic and ongoing negotiation and renegotiation of positions in a family context, where both young people and their parents exercise agency. Young people are able to make decisions of their own despite the asymmetric relationship to their parents. Young people and their everyday life with gaming are shaped and transformed through complex and dynamic social processes. In this respect, the generagency model suggests that problem gaming emerges in the ongoing processes of exercising agency in different contexts, and that it occurs as a clash between different generational perspectives on how gaming ought to be practised in everyday life.

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Problem gaming as broken life strategies

Anne Mette Thorhauge

Introduction

In this chapter, I will suggest Margaret Archers concept of agential reflexivity as a framework of explanation when analysing problem gaming in everyday contexts. While a structurational framework, as represented by Gregersen (Chapter 4), directs attention towards the general structural conditions that tend to place teenage gamers in patterns of opposition vis-à-vis their surroundings, Archers concept of agential reflexivity directs attention to the way different individuals handle and challenge those conditions with various degrees of success. I will argue that problem gaming can be seen as an aspect of 'impeded reflexivity' – that is, situations where the individual struggles to translate his or her concerns into relevant 'life projects' and practices. Moreover, I will argue that this insufficiency can be partly explained with reference to the particular life phase of that individual: When problem gaming tends to appear as a 'conflict of youth' it may be because young people are still in the state of learning to perform agential reflexivity as a key aspect of modern life.

In the following, I will outline Archer's theoretical framework and specify its relevance for the theme of this anthology. After this, I will present the empirical data that form the starting point of the discussion. This involves a mixed-methods study, which maps and explores gameplay patterns in everyday life among Danish children and youth. In this first part of the analysis, I will demonstrate how the documented gameplay patterns can be interpreted as different types of life projects and practices in the lives of the children and young people in the study. This part of the analysis will primarily serve to describe the different ways gaming intersects with other concerns and projects in everyday life, and how gaming may represent a project in its own right. On the basis of this description, I will discuss how the concept of 'problem gaming' may be pinpointed and settle for a definition focusing on problem gaming as an aspect of impeded reflexivity. I will elaborate this perspective with two illustrative cases.

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Agential reflexivity and gaming in everyday life

Margaret Archer centres her theoretical framework on 'agential reflexivity' as a key aspect of social life. She describes agential reflexivity as the ability of social agents to constantly monitor themselves within their social reality. It is by way of this agential reflexivity that we as social agents 'actively mediate between our structurally shaped circumstances and what we deliberately make of them' (Archer 2007: 16). In this way, agency is not a pure reflection of social structure, it is the product of the individual's active reflection involving the 'delineation of our concerns, the definition of our projects and, ultimately, the determination of our practices in society' (Archer 2007: 16). In terms of gaming in everyday life contexts, for instance, all game players can be said to share – to various degrees – the challenge of balancing the demands of school, family life and the gamer community as described by Andreas Gregersen in this anthology (Chapter 4). In Archer's terminology, this challenge involves delineating concerns related to school, family and gameplay communities.

However, the way this challenge is met depends on the agential reflexivity of the individual, and this may lead to different ways of integrating video gameplay into these practices. Archer thus describes the way of life, or 'modus vivendi', as the product of agential reflexivity and as an expression of the reflexive agent's individual choices. In her illustrative cases and interviews, she tends to deal with general or existential life choices, such as choosing a particular education or maintaining a particular balance between work life and family life. However, at a more pragmatic level, agential reflexivity may also be understood as the way we balance various concerns on an everyday basis – that is, how we 'conduct everyday life'. Building on Gerd-Günther Voss (2001), Rasmus Helles defines the conduct of everyday life as 'a logic we apply to make the various parts of our everyday life fit together' (Helles 2012: 337). While the individual components that make up our everyday lives may be highly typical of our age and socioeconomic background, the specific way they are combined in individual cases makes a key difference to the space of possibilities we are given, and we may as individuals apply different types of strategies in 'putting things together'.

In the first part of my analysis, I will describe how videogames serve different purposes in the individual's 'everyday life conduct' and how this leads to different types of practices and potential conflicts. For instance, gaming may be a key aspect of maintaining social relationships in a group of peers, but it may also represent a key concern in the form of an individual hobby. In both cases it is important to understand the way videogames are integrated into a more general conduct of everyday life and its various projects.

To pinpoint more specifically the 'problem' in problem gaming, two other concepts introduced by Archer are useful. First, Archer introduces the term of 'morphogenesis', which refers to the state of society in late modernity where the role of traditions has gradually diminished due to a general process of rapid change. In this morphogenetic society, the ability of individuals to reflexively handle possibilities and choices, rather than just re-enacting routines, becomes a key perspective (Helles 2016; Archer 2013).

Margaret Archer describes this as a 'reflexive imperative' (Archer 2011); i.e. an increasing demand on individual citizens to exercise their 'agential reflexivity' as compared to earlier ages, were they could, to a larger degree, rely on traditions and norms.

Second, Archer describes the existence of 'fractured reflexives' as the 'casualties of the reflexive imperative' (Archer 2011). Fractured reflexives are individuals unable to exercise their reflexive agency in a manner sufficient for handling challenges in their life. This inability may either be due to a suspension of reflexive powers ('displaced reflexives') or an insufficiently developed mode of reflexivity ('impeded reflexives') (Archer 2003: 298-299). In both cases, it is not the ability to reflect that is lacking; the problem is rather that '*their self-talk provides them with no instrumental guidance about what to do in practice*' (Archer 2003: 298-299), something that leads up to a general state of 'agential passivity' (Archer 2003: 164).

The idea of a reflexive imperative causing a kind of injury to those individuals who cannot meet its challenge offer a relevant frame of explanation with regard to problem gaming in everyday contexts. Problem gaming may thus be interpreted as a state of agential passivity brought about by the suspension or impediment of reflexivity. Problem gaming can be interpreted as an aspect of a more general 'life crisis' where individuals, due to various external factors, have lost control over their lives (suspended reflexivity), and it can be interpreted as an aspect of situations where the challenge of the reflexive imperative is not (yet) met by a sufficiently developed mode of reflexivity in the individual (impeded reflexivity). A prototypical case of the latter is the teenager on the brink of adulthood, struggling to conquer and manage the position as the primary decision maker in his or her own life. This perspective corresponds well with Faltin Karlsen's focus on problem gaming as an aspect of life phases (Chapter 7), and in the forthcoming analysis I will primarily work from this perspective.

Some of Archers own work addresses the genesis of reflexive agency as an aspect of individuals' 'coming of age'. For instance, she deals with the gradual development of agential reflexivity within undergraduate students (Archer 2011), and she does include minors in her studies as well (Archer 2003) However, she does not at any point address specifically the transition from a stage of childhood, where life-changing decisions are primarily taken by the parents, to that stage of early adulthood where this responsibility is passed over to the adolescent. She defines agential reflexivity as an 'emergent personal property' (Caetano 2014: 3) and specifically brings it up as an alternative to socialization theories with regard to explaining individual's practices in society (ibid.). Yet, she does not specify the nature of this emergence – is it a psychological or a social process and, if the latter is the case, how does it differ from socialization? This particular aspect of agential reflexivity is yet to be fleshed out theoretically as well as empirically, by Archer or others.

In the current chapter I will not attempt to resolve this issue, but I will address aspects of it. I will interpret particular instances of problem gaming as crises related to this transition into adulthood. In the context of the 'morphogenetic society', the transition into adulthood is potentially associated with a great deal of anxiety since

the 'reflexive imperative' places much more importance on the reflexive capabilities of the adolescent for managing this responsibility on his or her own. I would argue that instances of problem gaming can be interpreted as crises experienced by parents and adolescents when facing this transition.

A key topic in youth studies which may be relevant in relation to the emergence of agential reflexivity is the hypothesis of a 'prolongation of youth' (Mary 2014). According to this line of thought, young people of today postpone their transition into adulthood, and this has led to new types of life phases such as 'emerging adulthood' (Arnett 2000). Young people's reasons for postponing adulthood is sometimes explained in a rather normative manner with their lack of will, maturity or independence. However, Mary argues that it is more likely due to changing socio-economic conditions: '*Young people simply follow alternative patterns of transition based on available socio-economic opportunities*' (Mary 2014: 416). They face an uncertain economic future that calls for new strategies of transition; this argument fits Archer's characterization of late modern society and with the concept of agential reflexivity as a prerequisite for delineating concerns and translating them into life projects.

The qualitative part of the problem gaming project presented in the following deals specifically with 14-16-year-olds. In Denmark, this age marks a point in life where compulsory school attendance is coming to an end, and the young person will have to decide how to proceed in life with regards to secondary education, which has implications for overall career paths. In this article, I will assume that the challenges of the 'reflexive imperative' and becoming and adult is starting to emerge at this point, and in the forthcoming analysis I will explore this explanatory framework as a perspective on problem gaming.

In the first part of the analysis I will describe how the different gameplay patterns documented in our survey can be interpreted as different ways of integrating video gameplay into the conduct of everyday life. I will then discuss how to deal with the 'problem' in 'problem gaming' from this perspective.

Before moving on, I will briefly touch upon the relationship between our collected data and the analyses presented in the following. Our overall aim of the study was primarily explorative and descriptive, and we did not settle for any specific definitions or theoretical framework from the beginning. Our questionnaire included a range of questions regarding media and gaming behaviour as well as a range of previously established measures of 'lack of well-being' in order to identify possible relations between these variables.

The second wave of qualitative interviews was structured along the same variables, and was not developed with the specific aim of categorising respondents and interview subjects in accordance with Archer's different types of reflexivity. Instead, the concepts of agential reflexivity, impeded reflexivity and the reflexive imperative is invoked here as a way of contextualising and explaining some of the findings from the quantitative data analysis as well as key themes resulting from qualitative data analysis. Accordingly, in the second part of the analysis I will substantiate why 'impeded reflexivity'

may represent a particularly relevant approach to problem gaming and present two illustrative cases to make this clear. Before I set out to do this, however, I will present the empirical study as a starting point for the discussion.

Videogames in everyday life – a mixed-method study

'Video games in everyday life' is a mixed-method empirical study consisting in a national survey (N=1,560) followed by individual interviews (N=19) and focus-group interviews (N=2). The survey was conducted in the late summer of 2014 and the interviews were conducted during the autumn of 2015 as a further exploration of some of the key relations found in the survey. The general focus of the study was the gameplay patterns of children and young people in the context of everyday life and how this may be related to various types of problems. The study was not based on a specific theoretical definition or approach to problem gaming. Rather, it aimed to explore a range of quantitative and qualitative measures of gameplay and general well-being with the context of everyday life as the primary framework.

The survey part of the study maps the gameplay patterns of Danish children and young people aged 10 to 18. It is based on a stratified random sample from the Danish register of social security numbers with a response rate above 70 per cent. As such, the resulting sample allows for both a comparison of different types of players and non-players within this age bracket and a reasonable level of statistical generalisation of specific gameplay patterns to the general population in this age group.

The questions in the survey focus on the specific patterns of gameplay (competitive, cooperative etc.), media habits, other everyday activities (doing homework, being with friends etc.), and different measures of problems and lack of well-being (domestic conflict, bullying, loneliness and physical symptoms such as headaches and insomnia). Cross-tabulation of variables showed a clear relation between specific gameplay patterns (e.g. competitive team play and non-competitive soloplay) with other variables such as communicative patterns, social patterns and gender, with gender representing a remarkably distinctive variable. Accordingly, respondents for the qualitative interviews were sampled with the aim of exploring how the different types of gameplay patterns unfold within the everyday contexts of boys and girls respectively, and the focus-groups interviews were conducted to pinpoint the way gameplay becomes a part of boys' and girls' social interaction. In the following section, I will focus on the role of video gameplay as an aspect of everyday conduct.

Video games as an aspect of everyday life conduct

As mentioned in the previous section, the 'social configuration of gameplay' showed a rather strong relationship with variables such as time spent playing, social and com-

municative patterns and gender. With 'social configuration of gameplay' we refer to different patterns of competitive and cooperative gameplay. Basically, we asked the respondents how often they played against others and how often they played in teams. A cross tabulation of these two variables shows the following pattern:

Table 1. Gameplay patterns (per cent)

		Respondent plays against others		
		Often	**Sometimes**	**Never**
Respondent plays in teams	**Often**	18	6	2
	Sometimes	8	23	4
	Never	3	14	24

Comments: The respondents were asked how often they played in teams and how often they played against others (N = 1,375).

First of all, there is a significant relationship between competitive play and team play indicating that the more you play in teams, the more you play against others (or vice versa). Moreover, the table shows that almost 80 per cent of the player population can be defined within the patterns of 'very competitive team players', 'moderately competitive team players', 'moderately competitive solo players' and 'non-competitive solo players'. This is particularly important because these gameplay patterns correlate significantly with other variables in the material, most notably the amount of gameplay throughout the day, the amount of mediated communication throughout the day and whether respondents have gained new friendships through gameplay.

Before I describe these relations, I will have to make a little note on the way we have chosen to measure these variables. Since the youngest respondents in the target population cannot be expected to give very precise answers to general time questions (i.e. 'how much to you play on a typical day'?) we decided to focus on gameplay on the previous day and to ask about timeslots throughout the day, that is, whether they played in the morning, daytime, afternoon, evening and/or night. In this way, we let go of some precision for the sake of reliability. The resulting constructed variable, measured at the ordinal level, counted the amount of gameplay as the total number of timeslots.

As can be read from the table below, there is a significant relation between gameplay patterns and amount of gameplay throughout the day, indicating that competitive team players are likely to play more often. This is relevant because problem gaming is often associated with the amount of time spent playing, and the pattern presented in Figure 1 indicates that the social configuration of gameplay is an important factor in relation to this.

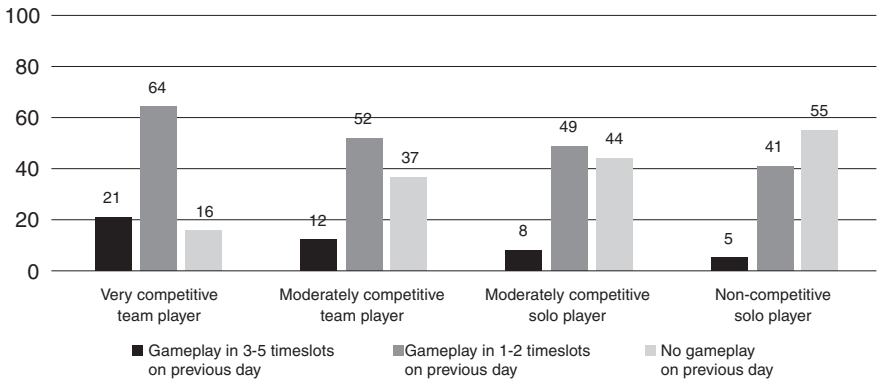

Figure 1. Gameplay patterns and gameplay on the previous day (per cent)

Comments: The percentages are calculated for each subgroup. The respondents were asked if they played videogames on the previous day and, if so, in which timeslots (morning, daytime, afternoon, evening and/or night). As can be seen, 21 per cent of the very competitive team players (n=252) played in 3-5 timeslots as compared to 5 per cent of the non-competitive solo players (n=334).

Moreover, we found a significant relation between gameplay patterns and amount of mediated communication throughout the day, indicating that competitive team players tend to be more communicative than non-competitive solo players, and actually tend to resemble non-players more with regard to this variable (Figure 2). This is in some contrast to a common sensical understanding of problem gaming, namely that it represents an opting out of 'genuine' social relationships.

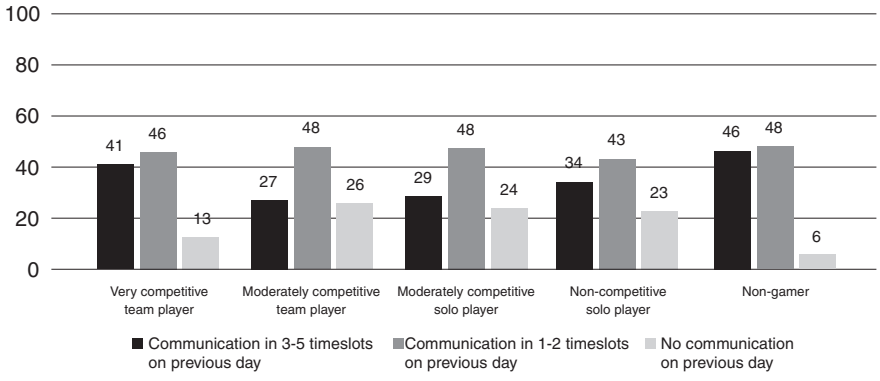

Figure 2. Gameplay patterns and communication (by way of computer or phone) on the previous day (per cent)

Comments: The percentages are calculated for each subgroup. The respondents were asked if they communicated with their peers by way of computer or phone on the previous day and, if so, in which timeslots (morning, daytime, afternoon, evening and/or night). As can be seen, 41 per cent of the very competitive team players (n=252) communicated in 3-5 timeslots as compared to 34 per cent of the non-competitive solo players (n=334). Moreover, while 23 per cent of the non-competitive solo players did not communicate by computer or phone, the corresponding figure for the very competitive team players was 13 per cent.

In line with the above reasoning, Figure 3 (below) shows that an overwhelming majority of competitive team players report to have gained new friendships through their gameplay. In contrast, less than every tenth non-competitive solo player reports to have gained new friends through gaming. In combination, the communicative and social patterns of very competitive team players indicate that gameplay, to this group, is a form of social interaction.

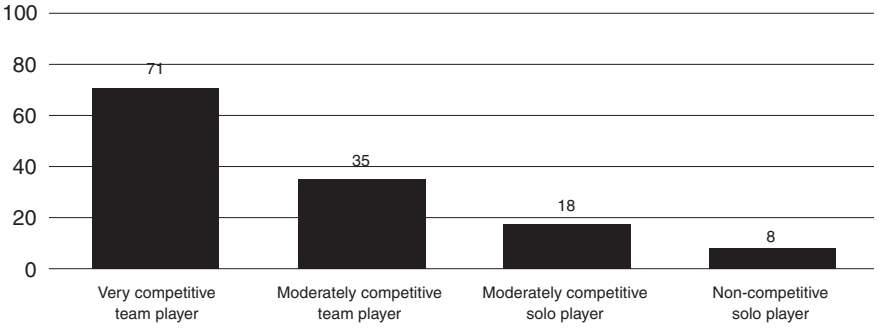

Figure 3. Gameplay patterns and friendships gained through gameplay (per cent)

Comments: The respondents were asked if they had met new friends through their gameplay activity. This was the case for a large majority of the very competitive team players (n=252) while it was only the case for a small minority of non-competitive solo players (n=334).

Finally, the gender distribution turned out to be very pronounced with only 2 per cent of the female player population in the group of very competitive team players and only 9 per cent of the male player population in the group of non-competitive solo players.

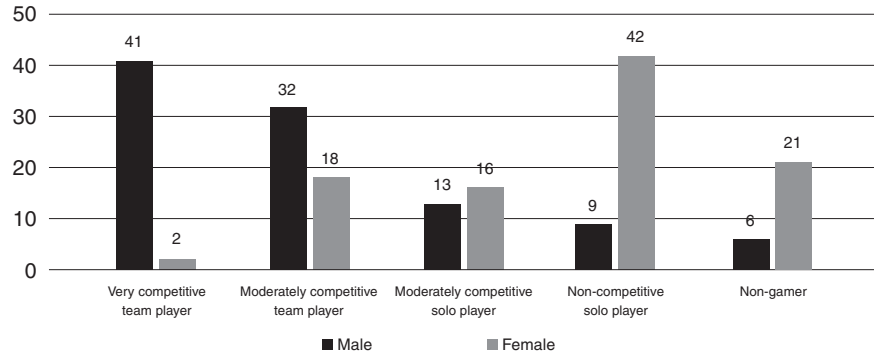

Figure 4. Gameplay patterns and gender (per cent)

Comments: The percentages are calculated across gender. As can be seen, 41 per cent of the male player population (n=761) are included in the category of very competitive team players as compared to only 2 per cent of the female player population (n=623).

One way of interpreting these relations between gameplay patterns, communication, friendships and gender could be that videogames serve very different purposes in the everyday lives of 10-18 years olds, and that gender is a key predictor of this purpose. In accordance with this interpretation, gameplay is on one hand a form of focused interaction comparable to playing football (boys), and on the other hand a kind of individual entertainment comparable to reading books (girls). To relate back to the theoretical framework presented at the beginning of the chapter, gameplay may thus represent rather different life projects and intersect with different everyday concerns such as upholding friendships or seeking entertainment. This is relevant with regard to problem gaming because these concerns serve as an important context when we try to understand situations where gaming becomes a problem.

In order to gain a deeper understanding of the way the observed gameplay patterns were integrated in everyday life, we decided to interview boys and girls (aged 14 to 16 years old) within both ends of the gameplay spectrum. It turned out to be very difficult to recruit any girls that were competitive team players within this age bracket and we only managed to recruit one girl that fit the pattern perfectly. However, we found a few that played competitively enough to allow for a more nuanced discussion.

The general aim of the follow-up interviews was to describe the life situation of the interview subjects, the specific way videogames fit into this life situation and the possible problems and conflicts this combination of life situation and videogame play might involve. In order to ground the interview exchange in gameplay situations, we asked the interview subjects to make photo and/or video diaries throughout the week preceding the interview. Altogether, the interviews confirmed and detailed our interpretation of gameplay as focused interaction and individual entertainment, but they also introduced alternative themes and perspectives.

As regards gameplay as focused interaction, the follow-up interviews allowed us to expand and elaborate our understanding of the different social purposes that gameplay served. To some of the interview subjects, gameplay was a key aspect of social life in their school classes, something they did to fit into a group of peers. To others, gameplay was deeply integrated into their friendships, something they shared with specific friends. To others again, gameplay served the purpose of keeping in touch with old classmates or entering new social circles.

In Archer's terminology, videogames intersected in a range of ways with the general concern of gaining and maintaining social relationships in everyday life. With regards to videogames as individual entertainment, the interviews also yielded material that allowed for elaboration. While videogames in several cases represented a break from other duties in everyday life, the specific nature of those breaks was similarly diverse and defined by the life situation of the interview subjects in question. To some interview subjects, gameplay represented a way of relieving stress and handling pressure in an otherwise demanding everyday life. This was particularly evident among subjects who had to balance sports (in some cases on elite level) and friendships with high demands in schools. To other interview subjects, gameplay was a way of spending time alone

and, potentially, handle loneliness. Particularly one interview subject seemed to have gameplay as a way of handling the loneliness and social stigma caused by the social exclusion she experienced from her classmates[1]. In this way, gameplay as individual entertainment similarly intersected with a range of concerns in everyday life that directly reflected the life situation of the interview subjects in question.

However, the interviews also revealed an alternative kind of purpose that was not covered by the variables in the survey. This was videogame play as hobby and videogames as collectibles, i.e. commodities with cultural and personal significance. To a few of the interview subjects, the games thus represented a purpose or project in themselves rather than an entry-point to friendships or a means for taking a time out. One of the interview subjects had collected all Nintendo hardware platforms as well as a considerable number of game titles for them. Another couple of interview subjects defined their interest for videogame in extension of a more general engagement with 'nerd culture' including comics, roleplaying and the collection of cards such as *Magic: The Gathering*. In these latter cases, video gameplay can be interpreted as a concern and a life project in its own right alongside concerns such and maintaining friendships and keeping up with the demands of school and family.

For the sake of the current argument, the most important conclusion to be drawn from the survey and the follow-up interviews is the way games and gaming are part of the everyday conduct of Danish children and youth. That is, they may on one hand be a component in a general 'concern', such as gaining and maintaining friendships, but they may also represent an important concern in themselves that will have to be delineated and balanced with other concerns in everyday life. Finally, they may be a way of taking a time-out that does not represent a concern in itself. These patterns form an important backdrop if we are to understand those cases where games are related to conflict or problems in everyday life.

What's the problem in problem gaming?

As was mentioned in the introduction to the study, we did not set out with a specific definition of problem gaming, but rather used an established range of measures of lack of well-being to explore their possible relations with patterns of gameplay in everyday life. Accordingly, we included loneliness, bullying, physical symptoms and domestic conflict related to gameplay as possible measures to be explored in the analysis. When translating such variables into potential problems in a broad population, it is important to be aware if one is looking for 'problems of the minority' or 'problems of the majority'. That is, extreme cases of lack of well-being are very likely to appear in only a small minority where statistical uncertainty is so high that the grounds for further analysis is shaky. On the other hand, problems appearing in broader groups of the population are likely to be less extreme and hardly count as 'pathologies' in the way that problem gaming is most often articulated in the general public.

If we focus on problem gaming as 'a problem of the minority', the most extreme cases were quite clearly the female respondents within the group of very competitive team players. Half of this group reported loneliness, physical lack of well-being and victimization from bullying at the grave end of the spectrum (Figure 5).

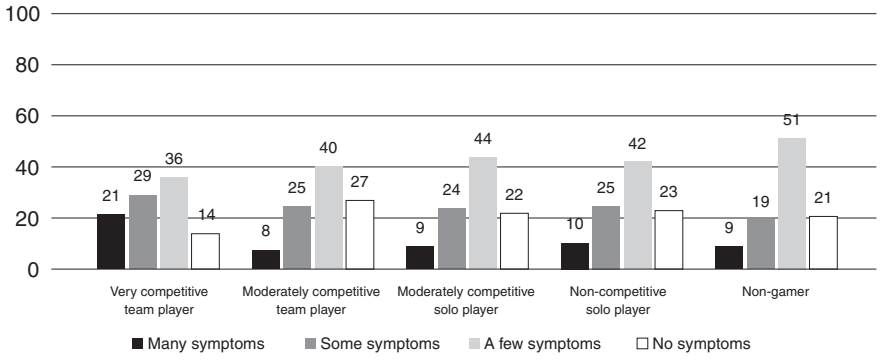

Figure 5. Gameplay patters and symptoms of lack of well among female respondents (per cent)

Comments: The percentages are calculated for each subgroup. The respondents were asked if they had experienced symptoms such as headache, stomach ache or sleeplessness during the previous week. The diagram includes data from female respondents only, and it shows that 50 per cent of the very competitive team players (N=14) say they had experienced some or many of these symptoms (as compared to 28 per cent of the 'non-gamers', N=140).

However, this group is so small that the quantitative analysis comes with considerable statistical insecurity and we did not succeed (in spite of considerable effort) to recruit a sufficient number of respondents for the follow-up interviews to explore this interpretation further.

If we shift the focus towards problem gaming as 'a problem of the majority', domestic conflict appears to the variable with the strongest connection to the observed gameplay patterns. The group of competitive team players is the group that has had the greatest amount of arguments with parents about their gameplay activity within the previous week (Figure 6).

Of course, domestic conflict may relate to a wide range of everyday problems, and in the follow-up interviews we set out to get a deeper and more nuanced understanding of what these conflicts may be about. Though several types of problematic themes did indeed appear in these interviews (e.g. money issues or adherence to familial norms of paying attention at the dinner table), the most typical conflict turned out to be disagreement between adolescents and their parents regarding school and the parents' doubts that the young was able to properly balance responsibilities in school with their gameplay activity. Though this definitely amounts to a 'typical' problem rather than a 'grave' problem, it is quite evident in the data that it creates a considerable amount of tension for the informants, and the relation to gameplay is clear.

In the following sections, I will focus on domestic conflict relating to the balancing of school and gameplay. I will focus on problem gaming as domestic conflict related

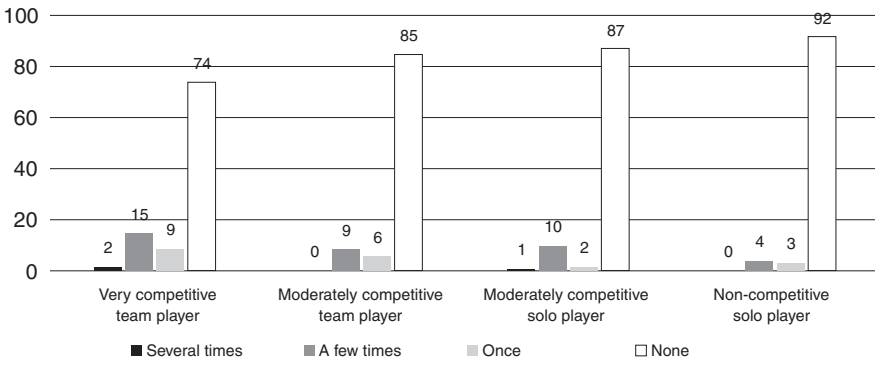

Figure 6. Gameplay patterns and domestic conflict (per cent)

Comments: The percentages are calculated for each subgroup. The respondents were asked if they had had arguments with their parents about their gameplay during the previous week. The diagram shows that 17 per cent of the very competitive team players (N=249) say they had had an argument with their parents a few times or several times (as compared to 4 per cent of non-competitive solo players, N=330).

to the balance between school and gameplay. Two illustrative cases will serve as a background for the discussion.

> Rune is a 16-year-old who lives with his parents and elder sister. He is going to tenth grade (a supplementary level to mandatory elementary school of nine years) at a 'pick-up school' for young people who have not yet figured out their future ambitions. Rune has *World of Warcraft* as a part of his 'dailies' (everyday duties). When engaging in competitive team play, it is primarily with friends from his old school – he does not really socialize with classmates from his new school. Recently, he has had a rather grave conflict with his parents due to his gameplay, which culminated with him running away from home. (Later followed by his sister). According to him, his parents thought the problem had to do with the videogames while it was actually a conflict with a teacher causing a negative spiral of truancy.
>
> Morten is also 16 years old. He lives with his mum and two young brothers and visits his dad every second weekend. The parents are recently divorced and he is still mad at his dad. Earlier on, Morten has primarily had football as a way of hanging out with friends, while video games have been limited to single player gaming in titles such as *FIFA* and *Heroes of Might and Magic*. More recently, he has started playing competitive *League of Legends* as a way of hanging out with friends at his new school, HHX (highschool with a business line). He does experience some game-related conflict with his parents, which primarily has to do with their inability to understand that you do not just log out of a game of *League of Legends* during a match.

While Rune and Morten have a lot in common, they also differ with regard to a number of issues. They are the same age and both use games as a way of staying in touch with and retaining a position within a group of peers. Moreover, both experience a relatively

high level of conflict in their lives, but these have to do with different issues. Morten blames his dad for the parents' divorce and experiences some disagreement with them regarding his gameplay. Rune has had an overt conflict with his parents about his gameplay, which has caused him to run away from home, something that would in most cases be seen as 'problematic'. In the next section I will tie this discussion to the theoretical framework outlined in the beginning of the chapter and show how these issues can be explained within Margaret Archer's framework of agential reflexivity.

Problem gaming as an aspect of impeded reflexivity

As was demonstrated in the previous section, competitive team play is the gameplay pattern that is most likely to lead to domestic conflicts where the balance between gameplay and responsibilities in school is a key issue.

Within the terminology of Margaret Archer, this gameplay pattern seems to pose the greatest challenge to the 'delineation of concerns, the definition of our projects and determination of our practices' (Archer 2007: 16). Moreover, as can be concluded from the two illustrative cases, this may involve various degrees of conflict going from the game as a subject of individual or familial deliberation, over familial disagreements regarding gameplay, to a situation where family life has reached an unbearable level of conflict and the child or young person is unable to uphold a '*modus vivendi that [is] felt to be both satisfying and sustainable*' (Archer 2003: 163). As the quantitative and the qualitative data clearly indicate, this is a rather rare situation. After all, the majority of very competitive team players has not had an argument with their parents during the previous week (see Figure 6) and though several subjects in the follow-up interviews did experience some amount of familial disagreement with regard to their gameplay activity, it only turned into direct conflict in very few cases. One way of explaining these differences could be that the young people meet the challenge of balancing gameplay activities and other aspects of life with different strategies.

As was mentioned in the former section, Rune goes to a 'pick-up school' for tenth graders who have not yet figured out their ambitions for the future. He is still indecisive with regard to his next step in life, though he would like it to somehow reflect his current engagement with videogames. More specifically, he thinks live-streaming might be a way of making a living. He mentions how some people on *Twitch* and *Youtube* have managed to make huge sums of money on this and he reckons that his parents might be able to accept this if he makes it:

> If I get at least 1,000 viewers and can live from it every month, I think they will not have a problem with it […]. They really want me to take my secondary anyway, so I do that […] and if it turns into something on twitch or live-stream, I will do that.

In this way, Rune struggles to translate his current engagement with videogames into a plan for the future. He seems to have accepted his parents' demand that he takes

some sort of secondary education but he has not turned this into an ambition of his own. He seems to be torn between his parents' idea of a viable future plan and his own attempts at formulating one that can unite his own desires with the options available to him. In comparison, Morten has already embarked on a new step by entering HHX and he has a relatively clear idea about what is going to happen next;

> My plan is to do the military service and, if I like it, to do the entire period […]. And when I have done my HHX, I will move away from home; at that time, I will be 19 and I will move to Aarhus or Copenhagen.

Morten is not more specific about his future career than Rune. However, he is a lot more confident and articulate when explaining his plans several years ahead and does not mention his parents' opinion as a relevant factor. He seems to have accepted and embraced the position as the key decision maker in his own life.

If we take a closer look at their gameplay activity, this reflects Rune's and Morten's life situations in interesting ways. Rune has gameplay as a way of keeping contact with a former group of peers. As mentioned in the former section, he does not really socialise with his new classmates and his social interactions in front of his computer is primarily directed toward friends belonging to an earlier point in life. In comparison, Morten has gameplay as a way of entering a new circle of friends. When moving from elementary school to HHX, he also changed his interests from football to *League of Legends*, because this was a relevant way of gaining friendships in his new educational context.

> I just started at HHX and then there was someone talking about [League of legends], so it's me and two classmates who play together now and then.

Morten seems to have embarked on a new life phase by entering a secondary education and he uses videogames as a way of entering a new circle of friends. Rune seems to be caught in a state of 'agential passivity' where gaming is a way of holding on to an earlier point in life. His 'problem gaming' is an aspect of his impeded reflexivity. However, the game is not necessarily the determining factor. Morten's and Rune's more general life strategies are mirrored in the way they play videogames, but it is hard to say to what degree they are caused by it. I will get back to this question in my discussion.

Discussion and conclusion

To sum up, the quantitative data presented in this study indicate a set of distinctive gameplay patterns that relate differently to patterns of communication and socialization and to domestic conflict. The qualitative data confirm that gameplay indeed serve very different functions in everyday life; that is, gameplay activities are integrated in different manners into the general life projects or 'modi vivendi' of the young people in question. Moreover, the qualitative data indicate that domestic conflict in relation

to gameplay is primarily related to parents' doubts that their children are able to balance school and gameplay sufficiently. That is, 'problem gaming' in these cases has to do with generational disagreement over proper life choices. With two illustrative case studies, I demonstrated how this can be interpreted meaningfully within an explanatory framework of agential reflexivity. From this perspective, grave cases of problem gaming can be related to the young person's inability to delineate his concerns and translate them into a 'satisfying modus vivendi'.

In other words, problem gaming can be seen as an aspect of impeded reflexivity. At a more detailed level, however, a number of questions remain unanswered. Firstly, the qualitative interviews clearly indicate that parents and adolescents experience the situations differently. Secondly, it is hard to say whether the problem should be tied to the impeded reflexivity of the individual or the complexity of the social situation. And, thirdly, there are many different ways in which gameplay can be seen as an aspect of impeded reflexivity.

As regards the first question, it is fairly clear that parents and adolescents hold different perceptions of the situation. Put very briefly, parents think the adolescents have a problem with the videogames while adolescents think they have a problem with their parents; this pattern repeats across a considerable number of the interviews in the study. Archer does not really address this disagreement between social agents regarding the 'truth of the situation', but it will definitely have to be dealt with when studying adolescents and their parents: Who defines 'proper life choices'?

As regards the second question, the relative challenge of defining a sustainable 'modus vivendi' depends on the complexity of the situation, and it cannot be concluded from the interviews summarized above whether it is the reflexive capabilities of Rune and Morten or the complexity of situations they face that cause their respective problems. While Morten's situation in a newly divorced family may at first glance seem to be the most challenging one, we cannot really determine this within the confines of our overall research design since it did not, for instance, include an interview with the parents or observations of family conduct.

Thirdly, problem gaming can be an aspect of impeded reflexivity in many different ways. It can be a key factor (excessive gaming prevents agential reflexivity), a contributing factor (excessive gaming is a part of a pattern preventing agential reflexivity), an arbitrary factor (it appears in a number of cases but is neither decisive nor contributing) or a pseudo factor (excessive gaming is initially interpreted as agential passivity while it could be interpreted as the opposite).

As regards the first option, there are several counter-indications to this in the case of Morten and several other informants in the study: Competitive team play does not *necessarily* lead to agential passivity. It is less clear, however, whether the second or the third option is the most truthful interpretation. That is, are games only one among many ways in which adolescents display impeded reflexivity, with excessive television viewing, excessive fitness and exercise or similar obsessions representing comparable patterns, or does gameplay represent a greater risk?

Zooming in on Rune's case, it is very likely that videogames have been an active part of his 'negative spiral of truancy', but it is hard to decide whether he would have succumbed to an alternative pattern of agential passivity in case videogames had not been a key activity. Our quantitative data cannot really speak to this, as this would require, at a minimum, a comparison with alternative 'excesses' and this was not part of the original research design.

Finally, excessive gaming might be a pseudo-factor, perceived by the surroundings as a 'broken life strategy', while experienced by the adolescent as the opposite. For instance, several respondents in the follow-up interviews considered videogames to be a relevant career path, either in the form of becoming a professional e-sports-gamer or becoming a successful 'YouTuber'. While this may seem highly unrealistic to most of the population above the age of 18, e-sports is indeed an expanding field if we are to believe recent coverage in mainstream media. With the advent of new platforms such as Twitch and YouTube gaming, where videogame players can earn fame as well as money by streaming their gameplay activities, it might not be as unrealistic as parents seem to think.

To conclude, Archer's theoretical framework offer a meaningful explanation of those cases where excessive gaming indeed seems to stand in the way of young people's happiness by foregrounding individual strategies and concerns. However, key issues regarding the more direct relationship between gaming and impeded reflexivity, as well as the relationship between the young person, the parents and the more general complexity of the situation, still have to be carved out.

Note

1. It is perhaps worth noting that this particular case falls completely under the radar of established notions of problem gaming or 'game addiction' since she can easily keep her time spent playing at a socially acceptable level while, at the same time, she is the one interview person that most directly expresses social and emotional distress in relation to her everyday life.

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Life phase and meaningful play[1]

Faltin Karlsen

Introduction

Massively multiplayer online role-playing games (MMORPG) is the genre most strongly associated with excessive playing and problem gaming, not least in discussions of whether Internet gaming disorder should become a new diagnosis (Petry et al. 2014; Griffiths et al. 2016). Research on excessive or problem gaming represents, in general, a divide in the academic community, largely due to different focus and theoretical framework. Within psychology, reward mechanisms and game structure have been emphasized as important factors, and a key idea is that interacting with the game may condition the player through rewards, which may lead to behavioural addiction (Charlton & Danforth 2007; King et al. 2010a).

Research employing a more context-sensitive perspective, like ethnographic studies, put more weight on the social sides of gaming and how this influences play practices (Taylor 2006; Karlsen 2009; Chen 2012). Here, excessive playing, like raiding, is researched from within the gamer culture, and the focus is on social activities and how they work within the techno-social environment. A third perspective, which is important when excessive gaming is discussed, focuses on how gaming is situated within the everyday life of the player.

Traditionally, games are described as spaces or activities with their own rules; as a 'magic circle' distinguished from everyday life (Huizinga 1938; Salen & Zimmermann 2004). Nevertheless, the membrane between the game and everyday life is porous and the meaning and significance the player finds in playing travel easily between the two spheres. My own interviews with hardcore *World of Warcraft* players, which this chapter is based on, provide many examples of how idiosyncratic elements from everyday life impact on playing motivation. Love sickness, health issues, physical isolation, a rough neighbourhood, analytical curiosity, competitiveness and social shyness – elements representing aspects as diverse as their physical, emotional, intellectual and social life – all have relevance for their motivation in playing. Meaning and motivation also

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travel the other way – from the game to everyday life. For many adolescents, gaming communities and online games are important socialising arenas and playing provides activities and space for players to learn about themselves.

This brings us to an aspect of everyday life which is often overlooked when problem gaming is discussed, and which is the main topic of this chapter: how age and life phase influence how games are used and what function and meaning they have in a player's life. Here, I'm especially concerned with the role computer games play in the transition from adolescence to adulthood.

Life phases: social norms and cultural scripts

The age cohort around adolescence and early adulthood is where we find the largest percentage of people who play games (Vaage 2012). This is also the age group that is usually associated with problem gaming. The psychologist Jeffrey Arnett has dubbed this phase as 'emerging adulthood' (Arnett 2000). According to Arnett, in developed countries we have stopped entering an adult phase designated by marriages and children at the start of our twenties but, rather, have postponed these transitions until at least the late twenties. This, according to Arnett, 'leaves the late teens and early twenties available for exploring various possible life directions' (Arnett 2000: 471). Arnett defines the period between 18 and 25 years as the age of emerging adulthood and identifies 'love, work and worldview' as the most important areas that are explored during this period. Emerging adulthood is not a biological phase but a culturally and socially constructed phase where young people explore and experiment with their identity.

The transitions between life phases are more generally covered in life course theory, which focuses on how we are culturally scripted to follow specific life courses – for instance, how we move from education, to work, to having children. Life course theory emphasises that life courses are historically and culturally scripted and that parents have a central role in ensuring that their children come of age according to culturally-accepted trajectories (Kok 2007).

From a historical perspective, the phase of adolescence is relatively new. Stanley Hall's book *Adolescence* (1904)[2] is normally regarded as a cornerstone in the modern definition of youth. Adolescence is associated with the teenage years and is considered a transitional period from childhood to adulthood but can, physically, psychologically and culturally, start earlier or later. According to Drotner, adolescence is essentially a psychological age phase of 'tension and susceptibility at the threshold to adulthood, a phase, therefore, that adults have to carefully watch over and guide through' (Drotner 1999: 602).

Life phase is seldom a topic in psychological research on excessive playing but some researchers have suggested that we need more empirical research that examines why some individuals simply 'age out' of their problematic playing behaviour (King et al. 2010b). I believe a cultural perspective connected to life phases, as described by Arnett,

is especially relevant here. Arnett does not describe gaming or leisure time explicitly in his theory, but he suggests that media use might be important, as people in this age bracket spend more time alone than any other age category (Arnett 2000: 476). Not only are they spending a lot of time alone, they often also have quite a substantial amount of time at their disposal, with few responsibilities besides attending school. The combination of having a lot of time to spend on individual interests and a social and cultural acceptance of identity experimentation can be a powerful combination.

Meaningful play: self-reflection and identity

In the following I will use Arnett's term emerging adulthood as analytical lens on my interviews of hardcore *World of Warcraft* players. I will start with the story of Erik, aged 22 at the time of the interview. He started playing *World of Warcraft* at the age of 18 and played excessively in periods lasting from a few months to a year. In the periods with most intensive playing, he played for 14-16 hours each day. These periods resulted in burnouts where he stayed away from the game for weeks or months. When he first started to play, he lived at his mother's house, and his gaming habits led to conflicts with her. Being unable to control his around-the-clock playing excesses, she eventually threw him out of the house. This forced him to find a job and reduce time spent on playing. At the end of his four-year long relationship with *World of Warcraft*, and the time of the interview, his attitude toward the game has changed, as he realises that the gameplay only provides repetitions of earlier challenges. A growing media competence and disenchantment with the game genre is part of his changed attitude toward *World of Warcraft*.

However, there was another topic running through Erik's life that, arguably, had an even stronger influence on his gaming practice: his religious faith. Because of strict religious parents, much of Erik's upbringing had revolved around being a good Christian. Before he started playing *World of Warcraft*, he was a leader of a Christian youth organisation, which took much of his time outside school. He also spent time in other Christian groups where they would sing, pray and read from the Bible. Some of these meetings he found enjoyable, others rather tedious. However, he still endured them since '[s]pending time with God is an important obligation for Christians', he explained. The strict, unselfish and community-oriented Christianity he was brought up with was contrasted to, and partly in conflict with, the competitive, self-promoting playing style he later indulged in. When his playing started to escalate, he broke completely with his Christian community – apparently because he no longer considered himself a good Christian role model. Playing in one of Europe's best raiding guilds also meant that the competition was fierce and time management was obviously also an issue. Even when he spent 14–16 hours each day on the game, there were other players who showed an even higher level of dedication. I asked him what his main motivation for playing was, and he answered:

> It was to be the best player. That's obvious. That's like the main point of playing: to be best, best, best. The best player in the guild, the best player on the server, best in everything.

During the first interview, I understood that his choice of having priests as avatars – three of which he had developed to the max level – was partly a reflection of his struggles with religious issues. He sometimes tried to incorporate his Christian faith into this new environment, and explained to me that '[w]hen you create a character and you are a Christian, you don't run around as an assassin, right. It's not exactly your first choice.' He tried to align these two worlds, to make his life coherent. This was not something he managed very well, and he ended up switching from one arena to the other. For instance, in one of his breaks from the game, he started studying theology at university but quit after a few months and started playing *World of Warcraft* again.

In a follow-up survey conducted 18 months after the interview, he told me he had played a wide range of games since we last spoke, including simpler online games such as *Settlers of Catan*, *FarmVille* and the strategy game *Starcraft: Brood War*, which he played in single-player mode. While the playing still had smaller bursts of intensity, he managed overall to keep the amount down. The tension between his religious belief and gaming had also come to some sort of resolution, and he explained that,

> [s]ince we met, I have been through some changes. I mentioned briefly how my faith as a Christian had been difficult for me. It has been a long process and something I have 'wished for' for a long time but this summer I found my belief in Jesus as an active Christian. This is very valuable to me and has tempered my eagerness to play. I don't want to spend more time on it. When I look back at *World of Warcraft*, it has been the most destructive part of my life, where I have let all responsibility go and made the least out of my life just to be able to focus on gaming.

On one level his playing excesses resemble an old-fashioned teenage rebellion, directed towards the religious tenets and obligations he was brought up with. What is interesting is that the contrast between the community-oriented Christianity and the individual satisfaction that playing represented for him, seems particularly large. In our Western society, individuality is held in high regard, although you still find groups that more generally favour the needs of the group over the individual. The tension between these two value systems seems to play a part in Erik's inner conflict, manifested in his game history.

If we approach his story from an existential perspective, it can be framed as a struggle to fit into his surroundings and a necessary process of coming to terms with who he is supposed to be as a grown-up. The game provided a space that enabled him to reflect on his religious struggles and also to experience what separation from his parish really meant to him. While he himself regarded the playing as harmful, it is not difficult to see how it has also been a tool for him to reflect upon issues that were crucial in his transition toward adulthood. From a life phase perspective, the struggles

he experienced can be related to a phase where explorations of 'various possible life directions' (Arnett 2000: 471) and the postponing of adult responsibility are accepted.

Similar patterns were also recognizable in the stories of my other informants; generally, the periods of excessive playing had started in their late adolescence and correlated negatively with increased responsibilities: moving away from their parents, starting an education at university, having to provide for themselves or becoming a parent were elements that caused them to restrict their playing time, often considerably. This was especially evident in my follow-up survey, as all of the informants told me they had reduced their amount of playing compared to 18 months earlier. Whether the informants really had reduced their playing amount is difficult to assess through a survey, but several offered an explanation for why they had less time for playing. For instance, Lars explained that he still loved playing games but that activities like 'school, volunteer work, social activities, a new job and a girlfriend' had taken priority over gaming. He also expressed hope that someday he would be in a life situation with more time for leisure activities, but without any clear vision of when that would be.

Jesper Juul has described how a life with children, jobs, and general adult responsibilities is not conducive to playing video games for long periods of time. He explains that '[t]he player that at one time was a stereotypical hardcore player may find him- or herself in a new life situation: still wanting to play video games, but only able to play short sessions at a time' (Juul 2010: 51). New responsibilities alter what games it is possible to engage in, steering users from demanding game activities like raiding to casual games that are interruptible and possible to play for a few minutes at a time.

Even those of my informants who had suffered problems in relation to games repeatedly, and over the course of many years, reduced their playing considerably when entering adulthood. Practical reasons and more responsibilities explain part of this or, as Erik stated, 'when you live on your own, you've got to have money to pay the rent and stuff. Then you obviously get less time for playing'. Becoming an adult simply gives less room for self-indulgence and excess. A different reason was voiced by Geir, the informant who estimated having played online games for 1,000 days between the ages of 16 and 27. In the follow-up survey he was 29 years old and he explained that his '[p]laying bursts come more seldom and last shorter than before, as it becomes more and more difficult to defend computer game playing the older you get, in addition to not having the same dedication and patience as earlier'.

What is reflected in this statement, beside the practicalities of entering adulthood, is the view that playing games is more suitable for children and adolescents than for adults. Adults should pursue more worthwhile activities than playing games. Having control over your playing is not only a question of maturity and age but also about priorities and identity, as being a reckless, self-absorbed gamer becomes a less suitable social position the older you get. When most of your peers adjust to the demands of society and focus their attention on family, education and work, you are more likely to do the same. To identify as someone who suffers from problem gaming or to identify as someone who just does not bother about what 'society' or 'grown-ups' think

you should do are two very different mind-frames. For players, like Geir, who have obviously struggled with controlling gaming, to enter a life phase where playing no longer constitutes prominent social capital may make the dedication to controlling the excesses stronger. This again suggests that the player was not completely without the ability to control the excesses in the first place but, rather, that he or she needed to identify or label it as a genuine problem in order to deal with it.

Discussion: ubiquitous media and cultural standing

The way that computer games in the West are associated with children and adolescents also influences how they are treated by society in general. If we move to a culture where computer games have a higher standing, we can see a different image of them. Taylor, in her book *Raising the Stakes* (2012), has described how the e-sport arena in South Korea has become a professional scene on par with traditional physical sports: it is a public spectacle; computer game tournaments are broadcast on television; gaming can become a professional occupation. When gaming has the same cultural clout as soccer, with professional gamers receiving a monthly pay cheque, gaming becomes indistinguishable from other types of work. Taylor contrasts this with an idea of gaming that more of us are familiar with:

> The notion of converting something you love into something you can do as a vocation holds an almost mythical status in our culture, a goal only the luckiest few attain. And yet when it comes to computer games and their highest intensive play, alarm bells often go off. (Taylor 2012: 99)

In the West, gaming events or tournaments rarely reach mainstream media, and earning a living by playing computer games is not really a feasible option. Unsurprisingly, few parents see excessive computer game playing as part of a grander plan for a prosperous life. And while most young people adjust their life trajectory toward work and education according to commonly accepted cultural scripts, there is also a tension between the generations.

With increased leisure time at our disposal and online media being close to ubiquitous, gaming and online socialisation have moved from the fringes of our culture and established themselves much closer to the centre. Online games are part of a larger trend that changes the way we socialise, work and play. It is not surprising that some people find these arenas more worthwhile and meaningful, as the life outside of them can be boring or too challenging. Trying to accomplish something in the outside world can be hard and the criteria for success difficult to understand. Conversely, progress and success are easily monitored in game worlds. And, while they can also be arenas for conflict and abuse, they are usually easier to navigate and master.

Online games offer endless escape and are environments that can fulfil many of our social needs. For some, the escape comes too easily and makes it harder to

focus on other aspects of life; aspects that may need their full attention. But, when we discuss downsides of online games, we must recognise the extent to which online media on the whole are integrated into our lives, especially for the younger generation. Teenagers are, typically, situated in more than one space at a time, whether they are gaming from the laptop while watching television with their family, or updating their Facebook status during a movie with friends. Young people have often integrated online media into their lives to the extent that the online-offline distinction is meaningless to them.

The way media penetrates our society means that there are few situations where children and adolescents are not exposed to some sort of media message. This also changes the role of parenting. Finding ways to handle the constant beckoning of the media, and teaching children time-management skills, is more important now than a generation ago. And while we could wish for a life without the abundance of media, this is the sign of the times: captivating media forms, fiction and games are not going to disappear any time soon. What is important is that we make an effort to understand what coming of age in today's society is like, whether we are parents or researchers, and, when we raise our concerns about media usage, that we remember the broader context of which the media are part.

Notes

1. An earlier version of this chapter has been published in the book *A World of Excesses: Online Games and Excessive Playing* (Karlsen 2013). The version in this volume has been reedited in order to serve as a stand-alone text without the context of the book. It is reprinted by courtesy of Ashgate/Routledge.
2. The full title of the book is: *Adolescence: Its Psychology and Its Relations to Physiology, Anthropology, Sociology, Sex, Crime and Religion.*

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Problem gaming from the perspective of treatment

Patrick Prax & Paulina Rajkowska

Introduction

Problem gaming and game addiction[1] are some of the major contemporary concerns about digital games (Cohen 2006). Problem gaming has not only attracted scholarly attention but is also becoming an issue of politics and policy. The World Health Organization (WHO) is proposing for the next International Classification of Diseases (ICD), ICD-11, to include under section 6D71 'Gaming Disorder' as a disorder caused by addictive behaviour. However, this entry is contested and the discussion around it shows the different perspectives and approaches to problem gaming that can be found in contemporary research.

The WHO is in ICD-11 proposing the categories of 'Gaming Disorder' and 'Hazardous Gaming', which is understood as a condition that can lead up to gaming disorder. The definition of gaming disorder focuses on the continuation of gaming despite negative consequences and the impairment of societal and personal functioning.[2] This proposal has been met with criticism from researchers who point out that it is unclear 'whether problematic gaming represents a "real" disorder or merely symptoms of other pre-existing problems such as depression' (Fergusson 2016: 1573; Kardefelt-Winther 2016). They further claim that there is an 'over-reliance on psychometric evaluations where patient-interviews are needed' (Kardefelt-Winther 2016). Fergusson et al. (2011) suggest that research should investigate treatment outcomes to help the analysis and understanding of problem gaming as we today lack a clear understanding of this phenomenon.

This chapter describes an interview study which aimed to address the lack of research mentioned above. In line with the focus of this anthology on problem gaming in everyday life, the aim of this chapter is to contribute to this discussion with two perspectives on problem gaming, i.e. that of the people who are treating problem gaming every day as well as that of the people who receive treatment, the latter of which are arguably those most impacted by it. Our findings make it possible to problematize the definitions of problem gaming in the existing literature, along the lines of other

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chapters of this anthology. Finally, the chapter will discuss some of the implications of these different perspectives on problem gaming for treatment, identity construction, and societal power structures.

Perspectives on problem gaming

This chapter will provide an overview over the existing theoretical perspectives on problem gaming, starting with the perspective that could be said to be closest to the prognosis proposed in the WHO. This perspective uses the term 'game addiction'.

Game addiction

This particularly influential addiction model comes originally from substance addiction and gambling disorder (Desai et al. 2010). It has then been appropriated and reformulated by Griffiths (2005, modified from Brown 1993). The model uses the criteria of *salience, mood modification, tolerance, withdrawal, conflicts* and *relapse* to define game addiction (Griffiths 2014; Griffiths & Meredith 2009).

However, the way this model appropriates the addiction criteria from substance addiction to gambling (Suisaa 2008), and then further to gaming, has been criticized both because of limitations of this appropriation based on differences between problem gaming and substance abuse (Charlton et al. 2007) and because of the production of an addiction discourse around games that is unjustified (Cover 2006). Based on this addiction model and research inspired by it, Domahidi and Quandt state as a problem that 'online addiction in general and (online) computer gaming addiction are not yet part of the diagnostic standard manual (DSM) in medicine and psychology' (Domahidi & Quandt 2014: 202). The inclusion of a proposal for problem gaming into the DSM-5 is seen from a critical perspective by van Rooij (2016) and Quandt (2017), who call for more exploratory work to understand problem gamers and a broader, undogmatic discussion instead of a rushed diagnosis.

Motivations for gaming

There are a number of competing frames for understanding problem gaming, most of which stress the importance of the social environment for the formation and/or definition of problem gaming. Two of these competing perspectives (Hellström 2015; Forsberg & Wallmark 2002) were recommended by the treatment professionals we interviewed and have been included here.

Hellström (2015) foregrounds the importance of the motivation to play to the probability of a problematic outcome. She finds three motives for gaming – (1) 'fun/social', (2) 'demand/status' and (3) 'escape motives' (Hellström 2015: 46) – which are related to negative social outcomes.

> Gaming for fun or social reasons was associated with a reduced probability of negative social consequences. Gaming because of demands from others or to gain status increased the probability of negative social consequences and escapism motives were the strongest predictor of negative social consequences associated with gaming. (Hellström 2015: 47)

This perspective points out that there is a particular connection between the reason for play, the perspective of the gamer and the impact of the behaviour on the gamer's life. Regrettably, the possible reasons behind an escapist motive for gaming are not further explored (Hellström et al. 2012).

Network perspective

However, focusing on the reasons for play instead of the behaviour of the gamer already constitutes a broadening of the understanding of problem gaming which is also the case for the perspective of Forsberg & Wallmark (2002). Their network approach explicitly takes into account not only one individual, but also its social context.

Causal relations in a system are understood as more circular than linear. A change in an individual person or a single relationship is followed by a response from other individuals, changing the state of the whole system (Forsberg & Wallmark 2002: 29-31). It is thus hard to find unambiguous causes and effects.

The network approach contextualizes problem gaming as both a cause and a consequence of other problems in the gamer's psychosocial well-being. This suggests a system theoretic approach where the problem behavior is seen as a part of complex social relations and processes that take place for example in the families of players (Forsberg & Wallmark 2002).

Co-morbidity

An additional perspective that has not come from the interviewees, but also defines problem gaming through its social outcomes, uses the concept of comorbidity (Karlsen 2013).

Karlsen moves away from a definition of problem gaming that evolves around the behaviour of an individual gamer to also take into account the social contexts and life situations (Karlsen 2013: 113). One of his main conclusions is that life phases are a useful lens to understand problem gaming and that a change in the life circumstances of gamers can lead to a change in gaming behaviour without withdrawal or negative long-term consequences. Another conclusion is that 'to the extent that their gaming can be labelled pathological, their gaming habits seem to be part of a larger picture of problems, indicating some sort of comorbidity' (Karlsen 2013: 112).

The notion that problem gaming could be co-existing with other problems in a relationship of comorbidity has also been proposed by Lemmens et al. (2011: 150) and Wood (2008), while Fergusson et al. (2011: 1577) argue that it could be a symptom of an underlying condition.

The central point of difference between the work based on Griffiths' model and the alternative perspectives presented here lies in the role of the gamer in the frame of problem gaming. These critiques have a valid point. Out of the six criteria for game addiction proposed by Griffiths (2014) only one, *conflict*, is related to the social environment of the gamer/addict; the other five, in contrast, relate to the internal life and actions of the gamer.

This is not to say that social consequences are not reflected in the work based on this model. For instance, Beranuy et al., who also point out the need for a study of gamers in treatment (2012: 151), stress the effect of problem gaming on the social environment and other areas of life, both as a consequence and cause of an addiction.

To sum up, problematic gaming is currently most prominently defined through Griffiths' psychological framework, which most closely resembles the medical definition produced by WHO. This approach focuses on the individual behaviour as a central point of the definition. Alternative approaches present in the field have instead stressed the role of environment and social circles in the development of problematic gaming behaviour. In this chapter, concepts such as life cycles, motivation for play, network perspective, and co-morbidity will be used in the coding and the analysis of the data acquired through interviews with practitioners and patients in order to see how current theoretical approaches are grounded in the reality of treatment.

Method

Interviews and participation

Data collection and the following analytical process have been developed throughout the duration of the project and have gone through several iterations. To better explain the relevance of our findings and make the process more transparent, we will explain how this occurred step by step.

The project began with an exploratory approach and was further shaped through 'unstructured interviewing' (Fontana & Frey 2005: 705) of social workers at Ungdomsteamet [The Youth Team] in Uppsala. Ungdomsteamet is one of the few treatment groups available in Sweden. Their activities are aimed at youth with problems such as, among others, problem gaming. The interviews with Ungdomsteamet were used to develop points of interest and questions for our further inquiries. Unfortunately, we were not allowed to record those interviews; therefore, we are not able to provide any direct quotes from them. Ungdomsteamet also gave us feedback to an early version of this text to make sure that we had understood their perspective correctly as well as introduced us to the theoretical work of Forsman and Wallmark (2002) which they considered a complementary explanation of their approach and which we used to further refine our future interviews. Finally, Ungdomsteamet has been an important contact node between us and their past patients. Thanks to their referral, we were able to get in touch with several families that have previously undergone treatment and

from them we have gathered more data using 'focused semi-structured interviews' (Minichiello et al. 2000).

This method had two major advantages: it allowed for interviews with enough freedom for the interviewees to explain their understanding of phenomena and it made it possible to develop interview guides over the course of the interviews based on the previous findings and topics (Kvale 1997; Kvale & Brinkmann 2009).

After the first wave of interviews conducted in Uppsala, we managed to gain further access to practitioners through contact with Spelberoendes Förening Göteborg [the Game Dependency Organization in Gothenburg]. At Spelberoendes Förening Göteborg we interviewed the project leader and the responsible for their work with problem gaming as well as four youth and two parents who participated in collective meetings at the organization or had personal coaching sessions there. We also participated in a weekly meeting of a support group for gamers. We were even allowed to listen in on a meeting between the organization and their supervising authorities, but once again we were not allowed to record.

Spelberoendes Förening Göteborg had originally worked with gamblers and extended their focus only two years ago (in the frame of a project that is funded by Arvsfonden [the Swedish General Inheritance Fond]). The project will continue until the end of 2017. The organization hosts the support group mentioned above, but also allows for private coaching meetings and offers help and counselling over the phone.

In Uppsala, we conducted a total of three interviews with workers from Ungdomsteamet and two interviews with parent/son groups. In Gothenburg, we interviewed two professionals, four youth and two parents. As regards the professionals, all of them are educated social workers who have worked with either gaming or gambling. As regards the families, the interviewees came from different socioeconomic and personal backgrounds.[3] Due to that fact that we did not manage to reach any type of saturation, we need to point out that there is a risk that important perspectives have been omitted. There is also the risk of a selection bias since the social workers mentioned that the most difficult cases refuse to participate in interviews.

The interviewees gave written consent to the use of the interview data in research. The parents consented for their children. The interviews were primarily conducted in Swedish but included some English, due to the language limitations of the interviewees. After the transcription, the interviews were translated into English by the authors.

Collected data has then been organized and studied through application of thematic analysis (Ryan & Bernard 2003). All recorded interviews have been partially transcribed, omitting the banter that took place for making the interviewees more comfortable, and then coded. The initial codes that emerged from the data have then been iteratively processed into the broader themes (Braun & Clarke 2012) that will be presented in the analytical part of this chapter. In order to be able to contextualize the differences and similarities in their particular approaches, we have also sorted our data based on the different stakeholder groups we interviewed. Transcribing, coding and categorizing has been done by both authors. This has given us the opportunity of

critically reflecting on our methodological process and further improving the conclusions we can draw from our research.

Results and analysis

Here we present the different perspectives of the three groups and the ways they negotiate and problematize problem gaming and relate them to the concepts of co-morbidity and network perspective. These concepts showed to be most prominent in our data and will be used to structure the chapter, although also the notion of life cycles will be mentioned. Finally, the importance of the motivation for play has been subsumed in the headline of personal suffering which has come out of the data. The data will be presented as quotes. As mentioned above, it was not possible to record the meetings with Ungdomsteamet which is why it is not possible to present direct quotes from them.

Co-morbidity and network perspective

From the point of view of the treatment professionals and the parents, problem gaming is characterized by negative consequences in other parts of the gamers' lives. These negative consequences were found in the areas of social life, occupation and education, physical and mental health, and family life. From the side of the professionals, this is evident in the aim of the treatment of both organizations. In both cases, the focus was to help gamers and their families to live a happier and more fulfilling life.

> *Social worker:* We have youth coming to us who just stopped living. They put their lives on pause and we need to work with helping them.

The focus on giving problem gamers back what they had previously discarded also informed the method of treatment. In both cases it consisted of Cognitive Behavioural Therapy (CBT) and coaching. The aim was to find the motivations and aims of the gamers themselves. Coaching was also chosen because it offered some practical help for planning a daily routine and because it afforded a conversation about what the gamers might be missing in their lives which could be a jumping-off point to get them to talk about their situation and their feelings. In principle, it was explained as:

> *Social worker:* The important part is that I see you and I get you started. Make you begin something new. Make you want it, too. That's what coaching helps us with. It helps to find possibilities, find solutions and find the will to do other things. I work with human beings so it's the actual person that's important. Who are you and why have you gotten stuck in the computer?

Ungdomsteamet [The Youth Team] presented this technique and as an example drew a pie chart that represented the time of a day that the gamer could fill with activities until the entire time was used up. Spelberoendes Förening Göteborg [the Game

Dependency Organization in Gothenburg] used a similar round chart that portrayed different areas of life (e.g. social relations, work, and free time) to illustrate the way time and focus was balanced or out-of-balance in the life of the gamer.

From the point of view of the treatment professionals, problem gaming is characterized by the emergence of negative consequences in other parts of the gamers' lives. These negative consequences were found in the areas of social life, occupation and education, physical and mental health, and family life. However, the aim was not to reduce gaming time as an end in itself, or to bring the gamer to stop gaming. The point was not to remove something from the gamers' lives, but to add other things and activities that could balance the time the gamers spent on gaming. The professionals stressed this focus and pointed it out as different from the way addictions to, for example, gambling or alcohol, were treated. There, the focus of the treatment is on the specific problem behaviour, while in the case of problem gaming, the point is to stress the importance of other things in life.

In their discussion of problem gaming, also the parents focused on the importance of passing school and finding and maintaining a workplace rather than the gaming practice in itself. The parents described that their children extended gaming time into sleep time and could not pay attention at school because they were so tired. After having extended gaming time, the next step that the parents described was how the gamers – in order to be able to play longer and without interruption – skipped school completely.

Some parents showed understanding for gaming being a social activity and acknowledged the social relationships and friendships their children had online. All of them mentioned that their children played with others, chatted, and talked over VoIP. Some of the friendships online extended into the real world:

> *Parent 1:* They become really close. So [my son] told me many times: 'Mom, he is my best friend, we are so great and can talk about anything', and of course they play at the same time. They also meet in real life. The boy was here during the summer and [my son] has been there for a week to visit. They just sat in the boys' room and played games the whole time. That's basically what they do together, but that friendship means a lot to my son.

However, others dismissed online relationships completely and called them unreal.

> *Parent 3:* All the time, we said: 'You need to see real friends. Go outside the house. Do something.' 'I have friends', he said. 'I have a lot of friends.' It was impossible to discuss because he was so dependent on the game.

In general, it can be said that in the eyes of the parents, problem gaming was defined as any gaming activity that negatively affected an area of life that the parents saw as essentially important. These areas were, as earlier mentioned, occupation and school, social contacts, health, and family relations.

Besides the understanding of problem gaming, one of the issues that emerged was the low level of knowledge about the games their children were playing. Parents often

did not know the name of the game their child was playing. In any case, the parents' only source of knowledge about the games were their children or the professionals who had been treating them. The parents had failed to acquire detailed knowledge about the games, their aims, culture, or the problems associated with them, by themselves. One parent explained this as follows:

> *Parent 2:* I don't have the time to stand and look when they play. I sometimes ask the youngest son when he plays, but there is no contact. If I stand there and watch I'm disturbing them. That's when the fights start. There is a lot of fighting involved.

This is especially relevant because it ties directly into one of the problems around gaming, the dysfunctional family. In a dysfunctional family, in the way described by the parents, the communication between the parents and the children did not work any longer, which meant that simple rituals like shared meals did not happen any longer, and the main kind of communication was arguing about gaming.

This point has also been stressed by Ungdomsteamet [The Youth Team] who explained that often the solution to problem gaming was not to dictate behaviour rules for the gamer but to remind the family that it was important to spend quality time together and to communicate openly. As soon as the family started doing things together again, gaming became manageable. Ungdomsteamet called this time spent together 'TT' (for 'tid tillsammans', Swedish for 'time together') and recommended the families to start using TT as a pre-defined notion for a shared enjoyable activity in their everyday life. TT also appeared as a central concept from the side of the parents.

This point again stresses the importance of the social surroundings of the gamer for not only the practical development of a problem gaming but also on a more abstract level on what is understood as problem gaming. The exact same gaming time and habits can be integrated better into family life with a higher level of parental knowledge and understanding and a working and friendly family atmosphere because of TT which can make the difference between problem gaming and intense but unproblematic gaming. As summed up by one of the interviewees:

> *Parent 1:* The big change that occurred because of Ungdomsteamet is that we can now easier talk to each other. It's not conflict-free, but we can talk and my son himself keeps track of his presence and what he needs to do to make things work. I also think it is easier for me to understand his gaming.

As soon as the family started doing things together again, gaming became more manageable. This finding is in line with the network approach as defined by Forsberg and Wallmark (2002). Within treatment of problem gaming, the network approach is centred on creating mutual understanding and acceptance inside the network and aims to reduce conflict instead of, for example, pushing playing time under some arbitrary border or creating rules for the sake of rules. This is in line with the findings of Domahidi and Quandt (2014), who also reject a focus on the time spent gaming in diagnosis and treatment of problem gaming.

A topic that was central in the accounts of the gamers was previously existing issues that, in one way or the other, led to the problem gaming. It is important to stress here that none of the gamers saw problem gaming as purely a symptom of a previous condition or situation. Instead, they presented problem gaming as something that, on the one hand, does cause problems and sadness while it, on the other hand, often emerges from a situation with pre-existing underlying problems. These problems can be of varying nature but the most common examples were related to problems in school (like bullying); to cases of death in the family or to a dysfunctional family; to loneliness and separation due to living far away from friends or due to an injury that made it impossible to continue physical activities and sports that had been an important part of their earlier lives.

> *Gamer 2:* There were some incidents that happened. Like my grandpa passed away. And when that happened, you know, I did not see the sunlight for two weeks, I think. 'Cause it was my holidays as well; no, I was unemployed at that time, just straight out of high school. And for two weeks, I did not see the sunlight, basically. I just played, played, played, played. So yeah…

To explain how problematic gaming developed in the first place, the interviewees frequently said that while gaming started as a symptom of an underlying problem it had itself become a new problem and even grown so far that it became the defining problem of the gamers' lives. This perspective is useful for understanding problem gaming not as something static and binary, but as a condition that over time can change in nature and intensity. Here, gaming can start as a benign and even valuable activity that later on develops into an additional problem in an ecosystem with the other, underlying, issues. (For instance, see Beranuy et al. [2012], where the findings show that problem gaming can develop out of the use of gaming as a way to deal with other problems.)

However, this notion of an interaction of problematic issues which together form problem gaming means that the gaming is in a relation of comorbidity with other issues. While gaming, in this view, may still be a problem in itself, to simply remove the gaming behaviour does not necessarily solve the situation. At the same time, though, gaming can still be seen as a problem in itself. Karlsen (2013) also uses the notion of co-morbidity in his analysis of problem gaming, and the here presented data supports this view on the relationship between problem gaming and other issues in the gamers' lives.

The suffering of the gamers

One of the advantages of co-morbidity as a perspective is that it makes it possible to both understand problem gaming as a symptom of other issues as well as an underlying cause of suffering. This is also confirmed by our data as suffering has been a central aspect of the definition of problem gaming, especially from the side of the gamers we interviewed. When approaching the question of problem gaming, the gamers tended

to focus on their subjective experiences of the situation. This means that what parent and treatment personnel understand as the defining factor of problem gaming, the negative consequence of time spent gaming, is for the gamers themselves not the central aspect. The gamers also recognize that their suffering can be caused by the same factors as the other groups see as the core elements of problem gaming. However, this stressing of the emotional reaction of the gamer foregrounds suffering as the deciding element of problem gaming.

Declining physical and mental health are the aspects of problem gaming that are most internal to the gamer. The parents and treatment professionals stressed physical health; depression and subjective suffering were only mentioned implicitly. In their view, what made gaming a problem was physical inactivity, an unbalanced diet, and irregular sleep. This is the most notable difference to the gamers' perspective on problem gaming.

Problem gaming was seen as both cause and effect of mental health problems. While depression and suffering were described as elements of addiction and consequences of gaming, diagnosed conditions like ADHD and social anxiety were mentioned as reasons for the development of problem gaming. Some parents of children with such diagnoses also reported that they initially thought of gaming as helpful for their children, who would become calm and manageable while gaming. This ambiguity of cause and effect can also be observed around other elements of problem gaming. While social isolation was presented as one of the most prominent effects of gaming, it was also mentioned as one of its causes. Lack of social contacts, living far out and isolated on the countryside, but also bullying in school or difficulties finding work were mentioned as triggers of problem gaming.

> *Parent 3:* He felt so bad that he didn't want to continue his life. He was so depressed, yes. There was one moment when I went out of the kitchen and he was sitting with a knife. Because he didn't want... he didn't find any reason to continue his life. And that was because he just played. All friends had just left. [...] He had problems in school too.

In the view of the gamers, the central aspect of problem gaming was their subjective suffering and depression. While gamers recognize that problem gaming creates problems in other areas of life, the main problem seems to be how they feel about these problems. This means that the gamers do have notions of what a fulfilled life looks like and realize that they are not living up to those. An example illustrating this is an interviewee who says that gaming became a problem when it became the only escape from a miserable life outside of the game:

> *Gamer 1:* The reason why I became a gamer, or why I started to go into gaming completely, was because I was bullied in school and the school didn't do anything about it. They actually came forth with some stupid idea that it was my fault in the end. That hit me quite heavily and I went right into the computer and fled from reality. I was in my little bubble and didn't give shit about anything.

Interviewer: Everything else hurt?

Gamer 1: Yeah. And with that came the depression that I felt every time I closed that computer at night.

Another example shows this focus on suffering as the defining factor of problem gaming for a competitive gamer who was the head of a CS:Go team on the verge of international success. He has now given up gaming and identifies himself as a game addict because of way he suffered from the stress of the training and the immense time-commitment of what is essentially two full-time jobs, the regular day-job and the semi-professional gaming.

Gamer 2: I miss the fun parts. But in the end, it was not fun anymore. It just got really strict and it was like, it was your life, you know. Gaming all the time. And you started to lose self-confidence and you just thought you were shit at everything except for the game. So yeah. I just miss, you know, the fun moments with the friends and stuff. Just playing for fun.

Their use of the notion of game addiction as a coping mechanism will be further discussed in the analysis section. However, while their gaming practice would not typically be seen as problem gaming or an addiction, the gamer literally states that what matters from their perspective is how it feels.

Gamer 2: So, there was a time, you know, you were all alone. Well, you weren't. But couldn't see the people close to you. The people who actually cared. That was quite a rough time. It doesn't sound rough, you know, but the feelings were.

Discussion

Definition of problem gaming

While the interviewees did not offer their own definition of problem gaming, it is possible to point out the aspects that made gaming problematic based on their narratives. In summary, it can be said that neither of the three groups focused on the gaming behaviour in their definition of problem gaming. The concept of game addiction, specifically based on the work of Griffiths (2005), is too focused on the individual and misses the surrounding network of elements, i.e. aspects that constitute problem gaming in the perspective presented in this chapter. Griffiths' psychological perspective approaches problem gaming in same way that it approaches substance addiction and gambling. In this view, problem gaming is seen as something that needs to be removed from an addict's life since it is inherently damaging, negative, and without value.

In the view of the gamers, the many hours spent gaming were never mentioned as a measure of problem gaming. Instead, they stressed the effect of this time spent on other areas of life and on the psychological health of the gamer. The understanding

of problem gaming as problems in other areas of life resonates with the network approach used by the treatment professionals. It needs to be emphasized that the Network Approach (Forsberg & Wallmark 2002) applied to problem gaming not only stresses the importance of the social context, but actually defines problem gaming based on aspects related to the gamer's social functioning. However, this approach overlooks the impact problem gaming itself has in the form of psychological and physical health consequences and suffering. Thus, in order to fit our data, it needs to be augmented with the understanding of co-morbidity as used by Karlsen (2013). While we do not have the long-term data necessary to problematize the notion of life phases and problem gaming, it can be said that this notion seems to hold and that the dynamic of comorbidity, where gaming and other issues in concert form problem gaming, is a useful to explain what problem gaming is from the perspective of our interviewees.

Both Ungdomsteamet [The Youth Team] and Spelberoendes Förening Göteborg [the Game Dependency Organization in Gothenburg] discussed whether the term game addiction was warranted to describe what this anthology is calling problem gaming. Here, there was a difference between the perspectives of Ungdomsteamet and Spelberoendes Förening. Ungdomsteamet rejected the term 'game addiction' and instead used the notion of problematic gaming in their meetings with families and their discussions with us.[4] Their reason for rejecting the notion of 'game addiction' was that they felt that such an approach would focus too much on the behaviour of the individual gamer and not enough on the system of social relations that this gamer was a part of – something that, in the eyes of Ungdomsteamet, was a central aspect of problem gaming. 'Game addiction' conceptually focused the attention on the gaming behaviour and the gamer. In the frames of this concept, it is the individual that needed to be changed in order to solve eventual problems. 'Problem gaming', on the other hand, focused on the problems that emerged in some kind of relation (as cause, effect, or both) to the gaming activity and which had to be solved to help the gamers and their close ones to a better life. In the eyes of Ungdomsteamet, it was possible to solve problem gaming without changing the gaming activity by helping the family to communicate, spend time together, and by enabling the gamer to also fulfil their other responsibilities.

Problem gaming as role conflict

In their definition of problem gaming, the interviewees pointed repeatedly to specific areas of life that their gaming behaviour needed to displace in order for it to become problem gaming. School, work, friendships, and family are areas which come with particular social roles and responsibilities. That these very specific aspects are so tightly connected to our interviewees' definition of problem gaming indicates the importance of these societal roles and responsibilities for understanding problem gaming. In his chapter in this anthology, Andreas Lindegaard Gregersen presents a theoretical perspective where problem gaming is understood as role conflict. Linde-

gaard Gregersen's approach partially explains findings of this chapter, especially in relation to the importance of other areas of life for the definition of problem gaming.

The effectiveness of increased communication in the family in resolving problem gaming as represented by the practice of TT also supports the notion of problem gaming as a conflict between different societal roles. The effect of TT could then be explained as an improvement of communication between family members and something that leads to a greater understanding of the conflict between the roles of the gamer. Being a team member in their clan and a young adult and child in their family becomes a topic of mutual agreement and, in that way, defuses problem gaming. That said, this perspective does not fully account for the elements of individual suffering in the definition of problem gaming that is presented in this chapter. Suffering could be seen as an outcome of role conflicts. However, there is nothing in the data that supports this connection. Instead, gamers mentioned that their internal perspectives could even be hard to understand from the outside but were still valid as an element of problem gaming. This does not mean that social role conflict is not a useful lense for investigating problem gaming, but it indicates that it doesn't capture all aspects of this complex phenomenon.

'Game addiction' as a pragmatic resource

The material conditions of the existing treatment options for problem gaming are somewhat poor. Ungdomsteamet's efforts in the area have been discontinued and Spelberoendes Förening will only have funding to deal with problem gaming for another year. These very real threats to any kind of treatment for problem gamers are the backdrop of the acceptance of the game addiction discourse even though the treatment of problem gaming shows that it is, or at least can be, very different from an addiction.

Both Ungdomsteamet and Spelberoendes Förening stated that their aim was to help people have a better life, and the project leader at Spelberoendes Förening pointed out that it would be preferable and morally right to simply help people that are in need of support instead of requiring a diagnosis before freeing up resources. However, as long as that is not a real world possibility, it is necessary to use notions like game addiction in order to be able to help gamers, despite the fact that their problem gaming can't be compared to other addictions in a straightforward manner. The effect of political pressure and the need to manipulate social institutions for access to resources on the definition of problem gaming and game addiction is an area for future research.

Conclusion

In conclusion, it can be said that from the perspective of the three groups of interviewees, treatment professionals, parents and gamers, problem gaming is defined through

the negative effect the gaming behavior has on other areas of life, which then leads to suffering on the side of the gamer. Problem gaming is not seen as the one aspect that needs to be removed from a gamers life in order to resolve it; instead, the gamers life needs to be refilled with the elements that have been lost due to problem gaming. This immediate connection of problem gaming to other areas of life and problems highlights that problem gaming is not exclusively a reason for – or a symptom of – other problems, but that it stands in a relation of comorbidity to them. In order to understand and address problem gaming, it is therefore elementary to analyse the entire network of relationships and practices in which problem gaming occurs instead of focusing on the gamer and their problematic behaviour.

However, our analysis shows that the counter-reaction against a psychological perspective that focuses on the gamers and their behaviour in the definition of problem gaming might have thrown out the baby with the bath water. While the social surroundings and conflicts are certainly the better starting point for defining problem gaming, it is important not to lose track of the emotional life and the subjective perspective of the gamer. If we don't want to risk to lose the agency of the players in the definition of their own lives and happiness, suffering needs to be an essential part of what defines problem gaming.

Notes

1. This chapter is using the term 'problem gaming' instead of 'game addiction' or 'hazard gaming'. Terms like game addiction bring with them a number of fixated notions which this chapter and anthology aims to problematize and examine. However, since the term 'game addiction' does fill a particular role in societal infrastructure and discourse, and since our interviewees use it, we will also use the term during the discussion of theory and in the analysis of the interviews.
2. In section 6D71, gaming disorder is defined as follows: "Gaming disorder is manifested by a persistent or recurrent gaming behavior (i.e., 'digital gaming' or 'video-gaming') characterized by an impaired control over gaming, increasing priority given to gaming over other activities to the extent that gaming takes precedence over other interests and daily activities and continuation of gaming despite the occurrence of negative consequences. The behavior pattern is of sufficient severity to result in significant impairment in personal, family, social, educational, occupational or other important areas of functioning. These features and the underlying pattern of gaming are normally evident over a period of at least 12 months in order for a diagnosis to be assigned, although the required duration may be shortened if all diagnostic requirements are met and symptoms are severe."
3. It has to be mentioned that the choice of informants was limited by the difficulty of access. We were only capable of talking to youth and parents that came forward when prompted by their respective treatment centre.
4. While the two terms are not identical, they are close enough to here be considered as synonyms.

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How the ethical dimensions of game design can illuminate the problem of problem gaming

Ian Sturrock

Introduction

Though various practical guidance on game design exists, the ethical implications of particular design choices have rarely been considered academically. Kultima and Sandovar (2016) point out that where the ethical values embedded in a given game design are studied, they tend to be studied in universities, which differ significantly as an environment from that of a studio. Industry codes of practice, such as those of the International Game Developers Association, thus focus on good contractual practice and employee welfare rather than on the welfare and happiness of the end user (IGDA n.d.).

When academics do consider the issue of ethics, they rarely come to firm conclusions. This is understandable, particularly given that this intersection of ethics and game design is a relatively new field: some degree of exploration will be necessary before consensus is reached. Still, it seems worthwhile to move beyond these initial explorations. To give an example, Foddy (2011) suggests that 'it looks like videogames give rise to behaviours with all the characteristic traits of an addiction', but argues that the real issue is the use by game designers of a variable schedule of reward-based reinforcement (Skinner & Ferster 1957), since that is 'exploitative'.

This is an understandable conclusion, but somewhat surface-level; it takes little or no account of the user's experience, nor of the context of the game as a whole. We might thus ask whether the user considers a game to be a problem, given his or her experience of the game in context, or is it only others – academics, parents, or politicians – who perceive games as inherently problematic, and seek evidence to support their views? It is surely at least possible that some users' concerns about problematic play are due to societal and cultural disapproval and problematisation.

Yet, it would be as wrong to fully dismiss concerns about problematic play as to accept them wholeheartedly, particularly when it comes to the issue of games that may have been designed especially to be 'addictive.' 'Addiction' is thus considered a

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compliment by certain industry actors when it comes to game design: 'we think that quality [addiction] in a game is a good thing' (Adams 2002).

In this chapter, I will first introduce self-determination theory (SDT) and its use for analysing motivation for videogame play. Next, I will consider in-game rewards and, in particular, how they might be understood to either support or undermine intrinsic motivation. Then, I will examine flow theory in relation to games. Next, I will critically analyse two games, in relation to all of the above. Finally, I will consider what makes a particular game design decision problematic, in light of what we have learned so far.

Motivation for play: self-determination theory and games

In efforts to answer questions like 'What is play?', and, very often, 'What is play for?', much has been written about the nature of play. The various answers to these two questions are arguably closely related to the answers to 'What is the motivation for play?' This issue of motivation is key to the problem this chapter addresses, that is, problematic design. This issue is explored in relation to self-determination theory (SDT), a psychological research paradigm that has frequently been used to frame research into motivation for videogame play. I shall start with outlining SDT's approach to motivation.

Existing research into motivational psychology (the overall area within which SDT is a prominent theory), divides human motivation for action into two areas, intrinsic and extrinsic. Intrinsic motivation would be when one performs a task for the sheer joy of doing so; for example, a purely intrinsically motivated violinist may play the violin due to the love of music, the experience of hearing him or herself play as well as the experience of executing musical skill at a high standard. Extrinsic motivations, on the other hand, are external factors influencing one's desire to perform a task. A second musician, motivated purely extrinsically, might play the violin due to a threat of punishment for failure, or because of being paid a fee to play. Other forms of extrinsic motivation include social status, peer group pressure, trophies, grades, etc. Perhaps not surprisingly, research has shown that the type of motivation matters for the nature, experience, and consequences of a performed activity: when people are extrinsically motivated to perform a task or engage in an activity, they tend to perform it with less enthusiasm, less creativity, and more stress than if intrinsically motivated (Deci 1975; Joussemet & Koestner 1999).

SDT identifies three intrinsic motivations, also known as basic needs: *competence*, *relatedness*, and *autonomy*. Competence is the feeling of effectiveness when exercising skills. Thus, competence motivates people to seek out challenges that will be well-balanced in relation to their capacities, as well as motivating them to hone those capacities. Relatedness is the feeling of connectedness to others, both as individuals and in the context of belonging to a community. Relatedness, though, is not connected to social status or the attainment of specific goals or outcomes; rather, it is a more

generalised need to connect with others. Autonomy is the feeling that one chooses one's own behaviour, rather than being controlled by others (Deci & Ryan 2002).

Extrinsic rewards

Receiving an extrinsic reward is almost always considered to be extrinsically motivating, and to undermine the person's intrinsic motivation (Deci & Ryan 2002).

Obvious extrinsic rewards in gameplay include such things as positions on a leaderboard, prizes, and social acclamation. In open-ended (i.e. not bounded by time constraints) massively multiplayer online roleplaying games (MMORPGs), and similar game types inspired by and/or being remediated versions of *Dungeons and Dragons* (Gygax & Arneson 1974), it also seems plausible to include under extrinsic rewards such things as in-game rewards, that is, virtual 'gold', armour, weapons, and other equipment gained during play to enhance the appearance and in-game capabilities of the player's avatar, as well as other forms of game-mechanical character advancement such as increases in the avatar's game statistics.

The status of such in-game rewards is a complex issue. Massively multiplayer online games (MMOs) share many qualities with physical-world economies, to the point that they have been studied by economists wishing to gain insight into physical-world economies. Research into the neurology of reward mechanisms seems to support the concept that in-game rewards may be treated by the player as a similar type of reward to out-of-game money[1], even if economists might need to treat them differently for some purposes. According to Ariely's (2008) research into behavioural economics, people do think of non-standard economic systems somewhat differently to the way they think of dollars, pounds sterling, etc., in that the more divorced an economic system is from hard currency, the more likely people are to try to cheat or otherwise be dishonest, if given the opportunity. Ariely argues (2008) that this is why investment bankers, given huge sums of what are, in effect, virtual money to play with, seem to be prone to swindling-related scandals; from a Game Studies perspective, virtual economies do not offer quite the same opportunities for dishonesty, and game studios do their best to police the situation, but perceived cheating, or behaviour perceived to be against the spirit of the game, is often policed even more harshly by the gamers themselves, who react viciously against anyone perceived to be a 'Gold Farmer', i.e. a player being paid real currency for in-game gold and goods (Nardi & Kow 2010).

'Real Money Trade' (RMT) is well-established in virtual worlds, with some worlds such as Second Life encouraging or even relying on it, but with most games studios attempting to ban it; despite disapprobation from both players and publishers[2] *World of Warcraft* has an active RMT economy, with the top Google sponsored search hit for 'buy wow gold' claiming eight years in business, and stocks of 800 million gold coins, at prices as low as 0.4 euro per 1,000 gold (Google, n.d.).

Rewards and feedback

In some contrast to the notion that in-game rewards function purely as extrinsic rewards, it has been argued that, at least to some extent, in-game progress such as in-game currency (as described above) as well as improvements to strength, stamina, and equipment, can act instead as feedback, which basically tells the player how well they are doing in the game.

SDT distinguishes between two aspects of feedback, informational and controlling. Informational feedback, such as unbiased, numerical data that measures task performance, tends to support the recipient's feelings of competence, and thus, their intrinsic motivation for a task. Controlling feedback is any feedback which is perceived by the recipient to be primarily an attempt to control them rather than give them information, such as a teacher praising a child's cleverness after a task performance that the child knows is poor.

Any feedback related to an ongoing activity is thought to have both of these aspects, i.e. an informational aspect and a controlling aspect. Following this, it is possible to see some in-game rewards as informational feedback, specifically a form identified as *cumulative competence feedback* (Rigby & Ryan 2011: 24-29, 76). Experimental data shows (Ryan 1982) that informational feedback can support intrinsic motivation (specifically competence), at least relative to controlling feedback, which tends to undermine intrinsic motivation.

The recipient of the feedback will attach more salience to one or other aspect depending on such factors as the form and nature of the feedback, the context, their existing feelings of competence and autonomy (Deci & Ryan 2002); for example, verbal feedback relating to one's performance at a task might be seen as informational if delivered supportively from a trusted mentor or teacher, but the same words could be seen as controlling if delivered by a bullying boss with an underlying threat of being dismissed from one's job or otherwise sanctioned.

Tangible rewards in non-game contexts – monetary salary, vouchers, prizes, bonuses, etc. – are extrinsic rewards (Deci & Ryan 2002), and thus tend to undermine intrinsic motivation, measurably reducing creativity, etc., usually in an even more severe way than the undermining effect of controlling feedback, since tangible rewards are wholly extrinsic whereas most feedback contains both an informational and controlling element. If some or all videogame players do treat some or all in-game rewards as controlling, this could explain compulsive, collusive, or otherwise problematic play.

However, Deci, Koestner and Ryan (1999) have shown, in an analysis of earlier studies, that it is possible to avoid the undermining effect of tangible rewards, if those rewards are not expected by their recipients. Whether this avoidance of undermining is due to the rewards being treated as informational, or purely due to the behaviourist style of reward schedules employed by the game, is another matter entirely – the latter certainly seems the most plausible explanation, since an unexpected reward is unlikely to convey much, if any, informational content. In either case, this has clear implications

for ethical game design: even if an unexpected reward is treated as neither informational, nor controlling, that is an improvement on expected, controlling rewards.

Reward mechanisms and reward schedules

As indicated above, the context and user experience are key factors in determining whether any given reward mechanism is perceived as controlling, informational, or some mixture of the two. The concepts of controlling feedback vs informational feedback originate with SDT researchers' investigations into verbal praise delivered by parents, teachers, bosses, etc. (Ryan 1982).

It seems unlikely that a reward that the user experiences as wholly informational is also experienced as exploitative, and indeed Rigby and Ryan (2010) consider all competence feedback to be inherently supportive of intrinsic motivations rather than being associated with extrinsic motivation or with amotivation. Yet, all these feedback techniques or reward mechanisms can equally well be considered to be deliberate manipulation of the player, using techniques from behavioural psychology to condition players to respond in a manner chosen by the designer of their user experience. Such deliberate manipulation surely, by SDT's own definition of controlling feedback, risks undermining intrinsic motivation if the player is aware of the manipulation.

Many of these manipulation techniques are ultimately derived from experiments in behavioural psychology, originally involving manipulating the 'user', typically a rat or pigeon, to behave in a certain way so as to receive a reward or avoid a punishment, e.g. in Skinner and Ferster (1957). Søraker argues, however, that some uses of these techniques is appropriate, to 'avoid gamers abandoning the game because of the simple and repetitive nature of the gameplay' (2016: 110). Arguably, then, they may be more suited to casual, free-to-play or freemium style games, where the user rarely if ever becomes highly tactically engaged, or enters a flow state, but plays primarily in a light, time-filling way, probably in short bursts several times a day.

Gameplay as flow

Flow theory is closely related to intrinsic motivation, particularly the competence need. Many game designers and theorists have seized upon flow as a key aspect of videogame play, e.g. Jones (1998), Sweetser and Wyeth (2005), McGonigal (2011), and Nacke (2012). Yet, uses and gratifications studies of game players often find players self-reporting activity that would not automatically be associated with the high levels of skill involved with a flow state, such as 'activity/action, solitude/escape, excitement, tension reduction, to pass time, for entertainment, arousal, and stress reduction' (Sherry 2004: 338).

Some researchers do note these distinctions between flow and gameplay, or at least recognise that the situation is not so simple as flow being the state that most

players are in most of the time when playing videogames. McGonigal (2011: 31-33), though suggesting that 'hard fun… positive stress' is a key part of both the enjoyment and importance of videogames, also recognises that some games such as *Bejewelled* and *Farmville* offer only 'busywork… completely predictable and monotonous'. This type of busywork is surely 'easy fun' by definition, if the concept of 'hard fun' used by McGonigal and others is to be considered valid. Yet, McGonigal considers such busywork games to still be fulfilling so long as they are self-chosen. This concept of self-chosen easy fun makes sense from an SDT perspective: self-chosen busywork would primarily relate to an autonomy motivation rather than competence or relatedness. It is, however, very clearly not flow as Csikszentmihalyi (1990: 149) observed it, which after all relies on 'challenging opportunities for action'.

It is likely that some or all these less-engaged players are intrinsically motivated in the ways most associated with flow, notably SDT's competence and autonomy motivations. At the same time, they do not report their state as flow, but rather express motivations as 'to pass time' and 'for entertainment' (Sherry 2004: 338), which suggest a much lower level of engagement and mastery. Indeed, although a flow state implies that the subject loses track of time – '[the subject is] completely involved in something to the point of forgetting time, fatigue, and everything else but the activity itself' (Csikszentmihalyi 2014: 230) – it also requires, as strict prerequisites, 'clear goals' and a 'sense of control' (Jackson & Marsh 1996: 19), which would seem to differentiate it from at least some videogame play. Easy, time-filling, low-concentration videogame play is not necessarily problematic, and again is probably no more harmful than most pastimes and hobbies, but it is far from the refined, high-art experience idealized by advocates for videogames-as-flow-experiences.

It might be reasonable to argue for a continuum from problematic videogame play, likely to be characterized by either feelings of being compelled/controlled by the game, or amotivated; through light, entertaining play, sometimes performed when the gamer has nothing better to do, but also including 'perfectly valid non-fun reasons to use games' (Koster 2012: n.p.) such as story, practice, meditation, and comfort; to the 'hard fun' of more consciously arty, intense, high cognitive load, and risky play.

This more intense form of play does seem to have far more of the characteristics of flow than the others, though even Koster argues that it is not inherently the same as flow, partly because of Marr's (2001: n.p.) comments on flow: 'Flow represents a neurological event that differs in degree rather than type from other similar events, and is no more distinctive than high anxiety is from low anxiety, or running from walking.' If Marr is correct, the second category might be considered a lower-level form of flow in any case: 'lower levels of activation… may not produce self-reports of elation or satisfaction' (Marr 2001: n.p.).

Gameplay as fulfilling busywork

Could the lower-engagement 'busywork' games and casual games offer something resembling the flow experience, but without all its benefits? Juul (2009) argues that casual games afford an easier entry point into much the same pleasures as more game-literate players will find in hardcore games, where casual games particularly appeal to an audience who enjoyed the videogames of the 1970s and 1980s, and who find more recent Triple-A games overcomplex. This stance is at odds with the common complaint among hardcore gamers that contemporary games are too easy. Conway (2012: 29-40) argues that contemporary AAA games negate 'tension, discomfort, and dissatisfaction', because old-school difficulty has been designed away due to the contemporary desire, on the part of studios, to offer a mass-market entertainment experience that can be consumed rather passively.

It seems there is a middle ground where both Conway and Juul are correct: many contemporary games may indeed be overcomplex and have a high barrier to entry, requiring mastery of multiple controls and 3D-visualisation skills to even play them, while they are still able to support a low-level flow state, once that initial game-literacy has been attained. Yet, most contemporary AAA games do justify Conway's (2012) complaints that they are more intended as easy consumer entertainment than as challenging puzzles, which also reflects Koster's (2013: n.p.) observation: 'A tremendous amount of the content pumped through media today has as its goal mere comforting, confirming, and cocooning.'

Traditional, more passive media forms may offer such comforting entertainment, but videogames are considered to be different: after all, they are ergodic, requiring effort on the part of the user to unlock their entertainment potential (Aarseth 1997). Such effort, in the pursuit of a clear goal and supported by informational feedback, is intrinsically motivating as we know from SDT theorists' investigation of the competence motivation (Rigby & Ryan 2011) and from the many theorists who associate gameplay with flow. If this effort is rendered trivial, what remains to hold the player's attention? Likely possibilities are one or both of the other intrinsic motivations, relatedness and autonomy; or the lower-level flow state as proposed by Marr; or extrinsic motivation, including that caused by controlling feedback; or amotivation/boredom, compulsion, addiction, or other highly problematic forms of play.

Designing for such light entertainment-style gaming is likely to involve some similar techniques to designing for more challenging games: consideration of twitch skill vs strategic skill vs chance (Brathwaite & Schreiber 2008), design of puzzles, narrative design, etc. Within the chance element, though, is likely to be an array of complex formulae based not on a traditional cards- or dice-based chance game mechanic, but on the reward schedules found by Skinner and Ferster (1957) to be optimal at getting pigeons and rats in boxes to push buttons in exchange for rewards. These variable schedules, while being perceived as chance by the player, are carefully designed to shape player behaviour, as noted by Søraker:

> Variable schedules... are characterised by high-rate, steady activity – there is no reason to pause because your next trial is the one that may be rewarded. The key is to keep gamers occupied while playing the game, to allow for a pause after having completed the daily 'chores' and then to offer an incentive for returning again later – often in the form of having one's resources renewed at a particular time of day. (Søraker 2016: 110)

Thus, in some designs of game, variable schedules may be necessary. They may even be recognized and accepted as necessary by gamers, even gamers who might feel manipulated or exploited by a similar design in a different style of game. Though one feature of videogames, as contrasted with non-digital games, is that the game mechanics and algorithms are essentially concealed from the player, more and more players are aware of manipulative and exploitative design, particularly since the popular *Extra Credits* (2012) video series did an episode condemning Skinner box game design as an endemic problem. So, in some games, for some users, a variable schedule of rewards will certainly be perceived as exploitative, particularly if the game otherwise fails to be intrinsically rewarding.

Conversely, a game that maximizes the player's opportunities to satisfy the intrinsic motivations of autonomy, relatedness, and competence (Rigby & Ryan 2011) may well be able to use such a reward schedule without players feeling exploited, or, for that matter, addicted. Both player motivation, and the motivation of the designers, are likely to be salient in determining whether a given design feature is exploitative.

Machine gambling as 'negative flow'

Could an amotivated or compulsive, i.e. potentially problematic, gamer be in some form of flow state, too? Research into compulsive machine gamblers offers an instructive example. Machine gamblers seem to self-report a flow-like state, and Schüll (2012: 166) makes the connection explicit: 'intensive machine gambling is characterised by the hallmark psychophysiological shifts and desubjectifying effects of flow', but with the crucial difference that this particular flow state is 'depleting, entrapping, and associated with a loss of autonomy' – quite the reverse of the usual autotelic, fulfilling, positive experience of flow (Schüll 2012: 167).

Schüll's work is situated in a recent tradition of researchers into gambling who consider problem gambling, and problem gamblers, to be one end of a continuum of behaviour, which at the other end includes recreational gamblers, who almost all feel at least some compulsions and report at least occasional problematic play or problematic results of play. She considers it important 'to understand how commercial gambling activities and environments might create the conditions for – and even encourage – such behaviour in consumers' (Schüll 2012: 16).

It should thus be possible to learn from Schüll's research when considering problematic videogame play, too. Though the consequences of problematic videogame play, in terms of the negative impact on relationships, work, and/or finances, tend to

be less severe than problem gambling, and may be overstated in some cases due to societal problematisation of all videogame play, such negative consequences do exist, and they are certainly affected by game design decisions. This is particularly the case when such decisions are deliberately made to maximize 'time on machine' and/or game studio revenue, according to an understanding of behavioural psychology; this approach closely parallels that taken for the design of gambling machines.

There are, however, important differences between machine gambling and videogames. Machine gambling is distinct in its solitaire nature, unlike videogames which are frequently social, multiplayer activities, even when problematic, e.g. as reported by Rigby and Ryan (2011). Machine gamblers exhibit a 'rigorous exclusion of relationality' (Schüll 2012: 193), deliberately and consciously removing themselves from any possibility of the relatedness motivation that is so commonly found in videogame play. Even a solo videogame will often deliberately simulate human relationships, and it seems very likely that the deep emotional connection felt by gamers with computer-controlled characters is almost as strong as that felt for a human-controlled character, at least in co-operative gameplay (Lim & Reeves 2010).

This emotional connection with other characters is associated with the relatedness motivation, 'even when one is playing alone', i.e. only interacting with computer-controlled characters, also known as NPCs (Rigby & Ryan 2011: 69). Much videogame play, especially that of players who play frequently and for long periods, is inherently social, with the Entertainment Software Association finding that 51per cent of the most frequent videogame players play with others, either online or in person, at least once a week (Entertainment Software Assocation 2016). So, there are major dissimilarities between videogame play and machine gambling, despite some similarities.

Reward scheduling: a comparison of two games

As a more concrete example of how rewards and reward scheduling may be implemented in existing video games, the following worked example compares *Minecraft* (Mojang 2011) with *Star Wars: Galaxy of Heroes* (Electronic Arts 2015). Both use variable schedules of rewards, but with quite different design intents and equally different user experiences.

Minecraft is a digital game of crafting, building, mining, and exploration. Among other reward mechanisms such as levelling up, it incorporates one unusual way in which the player can gauge their own progress and success within the game world, in the form of rare blocks or other goods found within the game. From the player's perspective, these rare blocks are generally found according to a variable schedule of rewards, since the player must usually 'mine' or clear a large area of rock before finding a scant few blocks of diamond or other ores. The player can maximise their chance of success by mining in specific areas that have a higher chance of having ore, but the experience is still that of a variable reward schedule.

Even then, it's worth noting that in actual play, exploration, and the satisfaction of intrinsic motivations tend to be the main reasons players explore deep caverns. The discovery of a vein of diamond ore is most commonly experienced as a pleasant side benefit of exploratory, self-motivated spelunking. It is possible to systematically mine out a 'chunk' of rock (a 16 block by 16 block area), at the correct height for finding diamond, and be very nearly guaranteed to find one vein of diamond ore, but this does not seem to be the typical play pattern. As Deci, Koestner, and Ryan (1999) have shown, it is possible to avoid the undermining effect of tangible rewards, if those rewards are not expected by their recipients. Thus, in typical play, where high-value ores are perceived more as a pleasant surprise than as a reward that has been earned for complying with the designer's expectations of 'correct' play, there should be no great feeling of being exploited, on the part of the player. Nor does compulsive or otherwise problematic play seem likely, though the chance of finding diamond may well be a small part of the reason players consider *Minecraft* to be 'addictive', in the colloquial, positive sense of that word among gamers. In any case, for players who are solely interested in the building aspects of Minecraft, and not in mining, combat, or exploration, a 'creative' mode is available, in which the player can spontaneously create any resources they desire. Again, this maximises feelings of autonomy; resources are useful to play the game, but most players appear to prefer to play the more standard 'survival' mode, enjoying the challenge this brings (Minecraftforum.net 2016).

Star Wars: Galaxy of Heroes is a typical MMO-style, freemium mobile game, in that it has enough content to allow for an hour or two of play daily, and focuses entirely on various forms of combat and on mechanical character advancement, incorporating variable reward schedules throughout its design along with similar features inspired by findings in behavioural psychology. For example, it deliberately uses multiple forms of in-game currency and other resources, with bewilderingly arcane relationships both between the different resources, and between out-of-game cash and in-game resources. These include: credits, training droids, experience points, crystals, battle energy, cantina energy, guild coins, guild currency, cantina currency, galactic war currency, arena reward currency, ship credits, ship arena rewards, character shards, ship shards, mods, character stars, ship stars, and gear.

It's hard to gauge how much of this apparently deliberate obfuscation of reward mechanisms, is an attempt to reward system mastery on the part of the player, and how much is more about enticing the player to pay out-of-game-cash for additional currency of one kind or another. Certainly, such a complex system will make it difficult for a player to gauge the real-world currency value of any given in-game resource. As one of the simpler examples: a player may know that £9.99 will buy them 1,340 crystals, that 100 crystals can be used to buy 120 cantina energy, that 8 cantina energy can be used to fight one cantina battle that might or might not drop one character shard for your already 4-star Geonosian Soldier character, that said character needs 65 shards to go from 4-star to 5-star, 85 shards to go from 5-star to 6-star, and 100 shards to go

from 6-star to 7-star… but it is a non-trivial task to work out, given that information, how much money it will cost you, on average, to go from 4-star to 7-star, particularly because the game does not reveal the drop rate of shards, i.e. the chance you will gain a shard in any given battle.

These drop rates bear all the hallmarks of deliberate design for behavioural psychology style operant conditioning. Alongside the deliberate obfuscation of the, wholly optional, financial costs involved in progressing more rapidly through the game, this is ludo-capitalism[3] at its finest, and therefore, also at its most potentially problematic, at least outside of the gambling industry, which also uses similar techniques of obfuscation and conditioning.

The parallels to gambling do not end there. The financial model of this type of freemium game revolves around the 'whale' – this is a term originally from the gambling industry, with a similar meaning to the more well-known 'high roller', but in videogames representing a player who spends so much money that a company can base its entire business model around a small number of whales, with little or no concern for any income that might come from non-whale players. Market research by Swrve found that 60 per cent of the revenue in freemium mobile phone games comes from 0.15 per cent of the players (Swrve 2016).

A whale might spend hundreds or even thousands of dollars a month on their favourite freemium game. This may be acceptable so long as this spend is freely chosen – again, would anyone voice concerns over a horse-riding enthusiast whose stabling and other costs were of a similar amount – but it will be cause for concern if it comes alongside other issues, e.g. financial problems or a pattern of deception of the user's family regarding the amount spent.

Behaviourist-influenced drop rate schedules originate in MMOs, probably starting with *EverQuest* (Daybreak Game Company 1999) but now most notably found in *WoW* (Blizzard Entertainment 2004). In MMOs, they have a different, but related, design aim: to prolong the play experience, increase the player's sunk costs, and generally keep them coming back, month after month, grinded-out quest after grinded-out quest. Again, the user's enjoyment is not the main aim, and the purpose of these low drop rates is somewhat obfuscated by the publisher. That said, with an increasingly game-design-literate user population – given the keen interest in game design found in so many game fans – most experienced adult gamers are well aware that this kind of game will involve a good deal of grinding and farming, and many will happily play the game with that understanding. Still, the mention of *WoW* and similar games, in so many of the accounts of gamers with self-described problematic gaming (e.g. Rigby & Ryan 2011), must give us cause for concern that this style of open-ended MMO is inherently associated with a high risk of problematic play.

When is design problematic?

It is difficult to generalise that any given game, or game feature, is inherently problematic from an addiction/overuse perspective, though it is certainly worthwhile to look for patterns and warn of tendencies. Given that the purpose of behaviourist style design, as described above, is to condition the user to act in a certain manner, it is no surprise that games with a core dynamic – the single thing the game is 'about', and the pattern of gameplay, according to Brathwaite and Schreiber (2008) – that is heavily reliant on a behaviourist design techniques, will also be associated with overuse or other problematic play, particularly in users particularly vulnerable to problematic play for whatever reason. Games with this core dynamic tend to be either a subscription-based MMO such as *WoW*, or a freemium style game such as *Star Wars: Galaxy of Heroes*.

Some games may thus be more likely to be played problematically than others, and some gamers may be more prone to problematic play due to 'emotional stress or malnourished needs' (Rigby & Ryan 2011: 117), but we must also examine the relationship between game and player. Addiction or problematic play does not happen instantaneously, but through repeated building of a relationship between subject (player) and object (game or device): 'rather than a property that belongs solely to one or the other, it becomes clear that objects matter as much as subjects' (Schüll 2012: 17). It will be of little use to further problematise problem videogame players, characterising them as weak-willed escapists, particularly if we also ignore the deliberate act of game creation by game designers and game industry psychologists.

Game designers do run large playtest programmes to examine the player experience, and iterate their designs accordingly, but even an intensive playtest is unlikely to call attention to problematic play or feelings of compulsion. Part of the difficulty here is that playtesters are, to a large extent, likely to be complicit with any genuinely problematic aspects of videogame design; their relationship with the videogame industry is not the kind of counter-play stance identified by Dyer-Witheford and de Peuter (2009), in opposition to the overarching dominion of the twenty-first century entertainment economy, but is closer to the 'collusion' identified by Schüll (2012: 73) as characteristic of the relationship between machine gamblers and the gambling industry. Thus, playtesting will not usually identify aspects of game design that will later cause problematic play in some consumers, and even if it did, such playtest results are not what game designers and playtest supervisors are looking for in a playtest. Particularly in freemium games, compulsive or collusive patterns of play are likely to mean higher revenue, after all.

Conclusion

Though videogame play is an enjoyable, rewarding, and stimulating pastime for most players, a significant problem has been identified and examined in this chapter: collu-

sive or compulsive game mechanics, which will tend to turn pastime into problematic habit, even if they feel amotivated or externally regulated rather than finding play to be fun and creative.

This problem can be avoided or reduced through improved game design. Many mainstream game design processes can be seen to cause or enhance this type of problem, primarily through deliberate design of game mechanics and reward schedules according to behaviourist principles. The core mechanics of the game are designed to control the play experience, and tempt players to continue play even if they lack intrinsic motivation to do so.

Notes

1. See, for example, experiments by Izuma et al. (2008), and Zink et al. (2008).
2. 'Players who buy gold actively support spam, hacks, and keyloggers, and by doing so diminish the gameplay experience for everyone else' (Blizzard Entertainment Inc, n.d.).
3. See Dibbell (2007) for more on ludo-capitalism as a concept.

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Authors

Andreas Gregersen
University of Copenhagen
Department of media, cognition
and communication
agr@hum.ku.dk

Anne Brus
University of Roskilde
Department of people and technology
abrus@ruc.dk

Anne Mette Thorhauge
University of Copenhagen
Department of media, cognition
and communication
annemette@thorhauge.dk

Faltin Karlsen
Westerdals Institute for Film and Media
Kristiania University College
Faltin.Karlsen@westerdals.no

Ian Sturrock
University of Hertfordshire
School of Creative Arts
i.sturrock@herts.ac.uk

Jessica Enevold
University of Lund
Department of arts and
cultural sciences
jessica.enevold@kultur.lu.se

Patrick Prax
Uppsala University
Department of Informatics and Media
patrick.prax@im.uu.se

Paulina Rajkowska
Uppsala University
Department of Informatics and Media
paulina.rajkowska@im.uu.se

Rune Kristian Lundedal Nielsen
Center for Computer Games Research
The IT University of Copenhagen
rkln@itu.dk

NORDICOM

Nordic Information Centre for Media and Communication Research

Contacts

Editor
Johannes Bjerling, PhD
phone: +46 766-18 12 39
johannes.bjerling@nordicom.gu.se

Administration, sales
Anne Claesson
phone: +46 31 786 12 16
anne.claesson@nordicom.gu.se

Postal address
Nordicom
University of Gothenburg
PO Box 713
SE-405 30 Göteborg

+46 31 786 00 00

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WHAT'S THE PROBLEM IN PROBLEM GAMING? is a valuable contribution to the debates about young people's gaming habits and the highly contested concept of *video game addiction*. The chapters in the volume provide a number of perspectives on the issue, such as players' life conditions and lifestyle choices, problem gaming from a family perspective, the voices of treatment professionals, and how game design can become problematic.

How problem gaming is framed is a highly relevant issue that affects policies surrounding the consumption of videogames. This anthology is a just in time contribution and an essential read for researchers in the field as well as for policymakers, social workers, clinical psychologists, teachers and others who encounter problem gaming in their profession.

Jonas Linderoth
Professor of Education and distinguished scholar in the Digital Game Research Association (DiGRA)

NORDICOM
Nordic Information Centre for Media and Communication Research

University of Gothenburg
Box 713, SE 405 30 Göteborg, Sweden
Telephone +46 31 786 00 00 • Fax + 46 31 786 46 55

E-mail info@nordicom.gu.se
www.nordicom.gu.se

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