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NEOLIBERAL SUBJECTIVITY IN PATHOLOGIZATION OF VIDEO GAMING

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ABSTRACT

In this paper, I presented, analyzed and criticized the potential psychiatric diagnosis of Internet Gaming Disorder (IGD), as proposed in the DSM-5 chapter of conditions for further study. Employing a critical approach, I used the conceptual and structural relations between neoliberalism, diagnostic psychiatry and video gaming as a theoretical setting for my study. I did a critical thematic discourse analysis of 202 IGD-dedicated article abstracts to find out what notions of health and subjectivity are constructed by the scientific discourse related to the issue. Studies represented in the abstracts were largely supportive of the diagnosis and relied exclusively on confirmatory quantitative and brain research. Also, the discourse of the abstracts revealed a portrait of a disordered subject which is impulsive, asocial, of bad mood, potentially hostile, too focused on one thing, and of poor health. After discussing the findings, I proposed critical theories of addiction, neoliberal subjectification, and formal game logic as three sources of contestation of IGD, providing a social-political context in which problematic video gaming should not be viewed as an individual disease. I concluded that the diagnosis of IGD should be refuted on social-political grounds, and that alternative approaches which challenge the logic of neoliberal economy and subjectification on an institutional level should be sought.

INTRODUCTION

Once at a family dinner, when I was about 7 years old, the conversation at the table turned to the then novel topic of personal computers and, soon, to using them for video games. I remember my parents declaring that my playing time is being consciously limited. “Because it’s bad for the eyes?” the grandparents asked. “Yes but, more importantly, because of its psychological harm,” my parents answered. I was deeply impressed by this previously unknown to me perspective on my practices. How I understood the remark was that video games could actually do something bad to my personality without me knowing, almost like alien abduction of which I was also quite afraid at the time (due to having watched *The X-Files*). For some time afterwards, I tried to keep away from games and developed a lofty attitude towards friends who played (more than me), seeing them as somehow contaminated, psychologically flawed. Later, as I got back into playing video games quite regularly, the guilty notion that I was trading enjoyment or leisure for success (as a subject) and losing something of unrevealed importance stayed with me.

The reason why I bring up this memory is that it works as a metonymy to illustrate the complicated relation of technology, psychology and the social. While at first glance my recollection’s explicit content is only about the first two of the mentioned spheres; the third is strongly implied, for how else does one evaluate psychological adequacy if not by comparison to what is socially expected and acceptable? I find this always present and mostly downplayed persistence of the social in the psychological to be at the root of my present inquiry, which is: how does the pathologization of video game practices reflect the psycho-politics of neoliberal capitalism? While video games are a form of culture which appears at the same time as global neoliberal reforms happen, and the notion of video game addiction, together with the proliferation of other so-called behavioral addictions (shopping, sex, exercising...), emerges and becomes popular soon after, analyses which would conceptually connect these seeming coincidences are missing. Despite political critique of psychiatry existing since the sixties, research on video-game addiction happening since the nineties, and the first analyses on the formal and content relations between video games and neoliberalism appearing after the turn of the century, the three binaries

available in the triad of video-games/capitalism/mental health have largely remained separate. This thesis intends to fill this peculiar gap.

Why video-games of all things? Why not some other similar and relatively new technopsychosocial phenomenon such as smartphones, social networks, the Internet or screens in general? There are several reasons. First, video-gaming has become one of the biggest entertainment industries, already surpassing yearly revenues of the music or book industry and catching up with films – and there does not yet seem to be any slowing tendency in its growth¹. With around 2.2 billion people playing video games worldwide,² it is obviously no more just a hobby for young males but a dominant form of leisure or, increasingly, work as in the case of competitive gaming. Second, at the moment of writing this thesis (spring 2018), problematic video game behavior (called addiction, abuse or dependence) in the name of Internet Gaming Disorder (IGD) is under consideration and pressure to become an official psychiatric diagnosis in one of the most important psychiatric diagnostical tools – the 5th edition of the *Diagnostic and Statistical Manual of Mental Illness* (DSM-5) used by the American Psychiatric Association; it is also about to be included in the 11th edition of the *International Classification of Diseases* (ICD-11), to be published later in 2018 by the World Health Organization. Together, the two sources have a huge global influence on psychiatric practices and public attitudes, meaning that video game addiction is on its way from being a figure of speech to becoming a certified illness. Third, the medium of video games is special in that it is an exceptionally individualized and competitive form of entertainment. This makes them a uniquely neoliberal medium, providing privileged insights into both contemporary leisure and work. Last, the choice is personally grounded in my own ongoing experience with engaged video-gaming and effort to understand and evaluate its various psychosocial aspects beyond simple condemnation or endorsement.

Following critical scholarship, I do not claim to write from an anonymous and objective point of view which would limit itself to a supposedly neutral description of the present situation. I start of from a position influenced by Marxist and anarchist critiques of neoliberal capitalism, skeptical views (from a socially oriented position) towards biological approaches in contemporary

¹ NewZoo Games Market Report 2017. Available at: <http://resources.newzoo.com/global-games-market-report-light-2017>

² Ibid.

psychiatry and an ambivalent attitude towards video games as both source and cure of new social problems. I rely on the notion that the proliferation of psychological pathologies seen in the last several decades is mostly due not to new discoveries of by scientific progress but to changes in politics of mental illness on the one hand, and appearance of new social stressors and cultural forms of outlet on the other (Horwitz 2002). When anxiety, depression and addiction become everyday affects of the many, locating the source and end of these problems in the individual becomes questionable and one is compelled to look for social and political reasons behind the phenomenon. I am convinced that video-game practices are exempt neither from psychological problems, nor from political motives, and that they provide examples of both, late capitalist culture and problematic ways of dealing with it. The aim of my thesis is to understand how the particularities of the pathologization of video-gaming allow for (mis)understanding personal distress in late capitalism and build a better-informed strategy of psychological and political resistance.

My thesis is comprised of three main parts. In part one I expand upon the key concepts and contexts of my research: neoliberalism, diagnostic psychiatry, and video games. I define these phenomena and describe their interrelations as a setting for further analysis. Part two introduces Internet Gaming Disorder (IGD) as the core study object, connecting all three main discourses. The majority of the second chapter is dedicated to description and discussion of my case study – a critical thematic discourse analysis (Parker 2011) of 202 article abstracts related to IGD, based on the questions: 1) what portrait of neoliberal subjectivity is constructed in the scientific discourse on IGD? and 2) what are the implicit or explicit political and philosophical premises of the scientific discourse on IGD? Part three provides a critique of the diagnosis of IGD on grounds of critical approaches to addiction, theory of neoliberal subjectivity, and internal logic of video games. I assert that the diagnosis of IGD should be refuted due to broader social-political reasons that explain the intrinsic connection between video-gaming and neoliberalism, and that more socially aware and institutionally oriented approaches to problematic gaming should be developed.

Review of literature

Previous research that I draw on in this thesis spreads across fields of psychiatry, philosophy, media studies and social-political analysis. An inspiration for this thesis came from Mark Fisher's book *Capitalist Realism: Is There No Alternative?* (2009), which proposes a direct connection of neoliberal processes with affects of hopelessness and is a core text in orientating the spirit of this thesis, even if cited sparingly. A historical inspiration comes from the Socialist patients' collective of the University of Heidelberg, whose experience of organizing against psychiatric repressions is described in their publication *Turn Illness into a Weapon* (1987). Other important books, linking politics with mental health, are Allan W. Horwitz's *Creating Mental Illness* (2002) – a study of the history of politics of psychiatry and its recent bias towards biological reductionism and pathologizing adequate reactions to social stressors; Mihnea Panu's *Enjoyment and Submission in Modern Fantasy* (2016) which presents a psychoanalytical critique of neoliberal desires; and Tod Sloan's *Damaged Life* (1996), Carl Walker's *Depression and Globalization* (2008), and Ron Roberts's *Psychology and Capitalism*, all of which provide different in-depth analyses of the negative effects of globalization and capitalism on mental health.

The greatest part of my sources is comprised of articles from the field of critical social psychology. Volume 44 of *International Journal of Drug Policy*, edited and partly written by Suzanne Fraser, provided several most important articles for forming the critique of IGD, presenting grounded doubts and qualitative research data against the disease model of addiction, and offering alternatives. Other articles by Ferraro, Hammer, Lewis, McDonald, Moncrief, Moore, Reinerman, Schmitt and Taylor also directly criticize contemporary psychiatry, its immersion in the neoliberal logic, and meta-scientific biases, grounding the rest of my critique.

At the junction of video games and politics the most prominent analyses have been put forth by Alexander F. Galloway in *Gaming: Essays on Algorithmic Culture* (2006), explaining parallels between gamic and political logic of control, and Nick Dyer-Witheford and Greig de Peuter in their book *Games of Empire: Global Capitalism and Video Games* (2009) where the authors present a critique of both, the material industry and ideological aspects of video games. The authors see many problems with political content and form of games, but also shows how different aspects of gaming can be seen as progressive and be turned against the neoliberal logic. Also, an important source which talks about in-game social dynamics, based on a longitudinal study of 50'000 gamers, is Nick Yee's *The Proteus Paradox* (2014).

Even though critical studies make up the bulk of my chosen literature sources – a choice based on my methodological decision to reflect and evaluate IGD in a context of critical theory – the theories of IGD and contemporary psychiatry are still extensively represented not only by the 202 article abstracts on IGD but also by separately cited articles from the same list by Kuss, Griffiths, Lehenbauer-Baum and Fohringer, Sigerson, Wittek, and an anthology of articles dedicated to IGD – *Psychological and Social Implications Surrounding Internet and Gaming Addiction* – edited by Jonathan Bishop (2015). Finally, the core sources of contemporary psychiatry – DSM-5 and IGD-10 are also represented in a separate sub-chapter.

I also include some books on psychiatry and video gaming which represent more liberal and conservative views on the phenomenon. *Game Addiction: The Experience and the Effects* (2009) by Neils Clark and P. Shavaun Scott and *The Multiplicities of Internet Addiction: The Misrecognition of Leisure and Learning* (2009) are academic takes on the potential harm and usefulness of gaming. In addition to these more scholarly texts, there have also been several important recent books of a more popular format which have strongly influenced understanding (judging by number of copies sold and numerous review and debate articles) of what video gaming is or can do, also illustrating the polarity of the most accessible interpretations of the phenomenon. On the one hand, there is Nicholas Kardaras’s *Glow Kids: How Screen Addiction is Hijacking Our Kids and How to Break the Trance* (2016), alarming parents to dangers of screen use (gaming included) by likening it to heroin use. On the other hand, there is Adam Alter’s *Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked* (2017), a journalistic overview of contemporary gaming behaviors, proposing that they can be used for the better good of everyone if properly understood. These sources illustrate mainstream discourses which mirror and popularize scientific approaches towards gaming.

KEY CONCEPTS AND CONTEXTS

Among the triad of neoliberalism, psychiatry and video gaming, there are four possible connections: neoliberalism-psychiatry, psychiatry-gaming, gaming-neoliberalism and

neoliberalism-psychiatry-gaming. I argue that besides historically emerging and developing simultaneously these phenomena are co-constitutive (in a non-exclusive way) and their social meaning and consequences are best understood if analyzed together rather than as independent of each other. In this chapter, I outline the concepts separately and their relations that I deem important for further theorization of IGD.

Neoliberalism

In the 70-ies, significant economic and political changes happened simultaneously in several countries that signified the beginning of a new stage of capitalism and its supporting ideology. Financial markets rose to prominence, the dollar was untied from the gold standard, and new political leaders who endorsed free market fundamentalism came to power. The post-war consensus on welfare economies and carefully regulated markets crumbled and a new stage of neoliberal capitalist order, also known as late, global, or advanced capitalism, began. According to Harvey, neoliberalism is a “theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade (Harvey 2005: 2). Dyer-Witthford and de Peuter suggest the following description:

Familiar components of neoliberal policy include the privatization of state- owned industries, the reduction of social programs, the orientation of the state toward ensuring a “frictionless” business climate, the enhancement of trade and international capital mobility, the deregulation of industry, the lowering of corporate taxes, the assault on organized labor, and the elevation of entrepreneurialism to a higher ideal. Under neoliberalism, in other words, the imperatives of capitalism are almost completely unleashed— which ensures an extraordinarily volatile and, many argue, unsustainable socioeconomic order. (Dyer-Witthford, N. and de Peuter, G. 2009: 160)

Neoliberalism connects classic liberal values of individualism and private property with the capitalist ideal of a market uninhibited by any restrictions to profit. All this under the argument

that increasing overall profit will increase the prosperity and social good of everyone (Harvey 2005: 3).

Neoliberalism functions in different but complimentary ways on the big and the small scale. On the big scale, it operates through legal reforms (e.g. restricting rights to unionize and strike), military action (e.g. defending national corporate interests in foreign countries), corporate action (e.g. outsourcing production to where labor is cheaper) and (de)regulations of international institutions such as the IMF and WTO. Even though free market ideology rejects the regulating role of the state on the economy and the flow of supply and demand is supposed to naturally balance the social order, the role of the state remains very important in its policing function because while the trickle-down argument states that the rich getting richer will eventually mean the poor getting richer too, the wealth gap between the poorest and the richest has been permanently increasing, serving to restore the power of economic elites (Harvey 2005: 19). The ideal neoliberal state's purpose is limited to ensuring security of property and power of the elites, stability of this social order and free flow of capital by controlling dissent, usurping new markets and restricting movement of labor. Neoliberalism is inseparable from increased surveillance, restrictions, imprisonment, warfare and border control.

On the small scale, the personal level, neoliberalism functions as an ideology of consumption, competition and individual responsibility. Following Margaret Thatcher's assertion that "there's no such thing as society. There are individual men and women and there are families"³ the neoliberal subject is supposed to be a "self-made man", unburdened and unsupported by tradition, social institutions and group or community belonging. Whereas the post-war economies tried to ensure full employment and most people could expect to spend their whole careers at the same job, free market fundamentalism incentivized companies to cut on job security and ditch long term planning or commitments for the sake of short term profit, now understood as value for investors. Work intensity increased, conditions became poorer, and personal control over what, how and where one works decreased (Moncrieff 2008: 239). In turn, personal life has become more precarious, requiring quick adaptation to changing conditions, increased mobility, accepting more risks and treating one's own personality as a project (Giddens 1991) to be managed and

³ <https://www.theguardian.com/politics/2013/apr/08/margaret-thatcher-quotes>

profited off (Benwell and Stokoe 2006). The less a subject is entangled by social or moral commitments, the easier it is for them to meet the criteria of success in the neoliberal order. In sum, neoliberalism on a personal level is a turn from mutual dependency and individual investment in public institutions (trade unions, healthcare, education, pension funds) towards rugged individualism and making your own luck.

Diagnostic psychiatry

Today terms such as clinical depression, social anxiety, alcohol addiction or bipolar disorder are well known and mostly understood as referring to discrete and real psychological disorders, same as flu, hemorrhoids or cancer refer to physical disorders. This understanding is relatively new. Early psychiatry of the 19th century dealt with only a very small part of what is now understood as mental illness and treated (or just kept) mostly psychotic patients with clear psychosomatic symptoms in mental asylums. This was the first period of psychiatry. The second period of psychiatry was dominated by psychoanalysis. Freud and his successors greatly expanded the definition of a psychological disorder, introducing the notion that all people had neurotic or psychotic tendencies (Freud 1987). Most of psychiatric practice became about talking to people about their life problems and interpreting deeper meanings of personal narratives rather than working in institutions with serious patients. This was a stage when “psychiatric therapy had become a means of understanding the self and of adjusting to social demands more than a treatment for specific mental disorders” (Horwitz 2002: 53). While this profile popularized psychiatry and psychological explanations of human activity it also increased criticism and ambition of psychiatrists. On the one hand, psychiatry as a discipline aimed to achieve a status of a concrete medical science, requiring more strict methods of practice and proofs of effectivity. On the other hand, it came under a lot of pressure not only from academia but also from social movements which denounced psychiatry as a discipline primarily aimed at controlling and oppressing deviant subjects (homosexuals, artists, political dissidents etc.).

After internal and external struggles, the start of a new period of psychiatry was marked by the publication of the third edition of American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders (DSM-III) in 1980. Psychodynamic explanations of illness

– referring to deeper causes of problems and oriented at personal history – were abandoned in favor of a purely descriptive and codified nosological system supposed to make the manual more scientific and present mental disorders as part of an overall field of medical disorders. To this aim, pathologies were categorized according to symptoms, with different combinations of symptoms making up different disorders. Compared to the previous DSM-II, the new edition introduced 83 diagnoses (265 in sum) and was almost four times bigger (494 pages instead of 134). The application of DSM-III in psychiatric practice marked the ascendance of the so called diagnostic psychiatry. Rejecting interest in any secondary, non-observable causes of mental disorders was its core premise (Horwitz 2002: 132). Accordingly, interest in observable symptoms and their causes grew greatly, opening the way for biological psychiatry which combined methods and premises of biological research in medicine with categories of psychiatric disorders. In other words, all the psychiatric diagnoses that previously existed without biological ground were now trying to find one to appear more scientifically legitimate. Newly developed magnetic resonance brain imaging methods offered new findings related to changes in brain structure and function and pharmaceutical corporations formed during the previous couple of decades eagerly invested in chemical research of psychiatric problems. The industry of psychopharmaceuticals has boomed since and an equally large body of scientific literature has been dedicated to finding and explaining the biochemical aspects of psychiatry. While this paradigmatic change did away with some ungrounded psychiatric theories and speculation (such as pathologization of homosexuality), it also soon excluded other discourses of explaining individual suffering: “The cost of the ascendancy of biological psychiatry has been to minimize arguably more powerful sources of individual distress: culture and social structure” (Horwitz 2002: 157). Since its spread diagnostic psychiatry has been criticized for being atheoretical, biologically reductive, pathologizing normal reactions to stress, needlessly proliferating diagnoses and serving the interests of pharmaceutical corporations (Horwitz 2002; Moncrieff 2008; Roberts 2015).

Video games

Even though first prototypes of virtual games were created in the 50-ies, it was not until the 70-ies that they emerged as a commercial industry and popular free-time activity. First in

arcades and then through home consoles and PC gaming video games became a new mainstream medium of entertainment. While for a time and in big part due to marketing reasons video gaming was an occupation of mostly teenage boys and men working in the IT sector, this has largely changed. Depending on criteria for what counts as regular video gaming, there are from 1.2-2.3 billion gamers in the world. According to statistics presented by a gaming culture website bigfishgames.com, as of 2017 the average age of a gamer was 35, 41% of all gamers were women and 65% of all households owned a device for playing video games.⁴ Revenue of the video gaming market in 2017 was 108.9 billion dollars⁵ (compared to, for example, 15.8 billion dollars of revenue of the music industry in 2016⁶). Especially culturally significant is the appearance of eSports. Online games such as *League of Legends*, *CS: GO* or *Dota 2* are based on competitive team fighting and played by hundreds of millions of players every month.⁷ Professional competitions of eSports titles attract corporate sponsorship, millions of viewers and nine figure prize pools. Given that the number of practitioners of eSports games already exceeds that of many traditional sports, International Olympic Committee has already recognized eSports as sports and is considering including some games in future Olympics.⁸ In sum, video gaming is no longer a niche activity but a central cultural phenomenon of contemporary global society.

Video gaming has become so widespread and varied that any closer examination requires differentiation of its types and deeper analysis of what is common to or separates them. Video games can be categorized by medium: PC, home console, virtual reality, mobile phone/tablet, internet. The material experience of gaming is different depending on whether the player does it with a mouse and keyboard, a controller, at home or in a bus, in front of a screen or with goggles on, offline or online. Another categorization diversifies by type of design and commitment required of a player – there are casual (mobile, browser), AAA (hardcore, high budget), indie (independent, small budget), MMO (massively multiplayer online) and eSports games. Some of them can be played for five minutes while waiting in a queue, some demand many

⁴ <https://www.bigfishgames.com/blog/2017-video-game-trends-and-statistics-whos-playing-what-and-why/>

⁵ <https://newzoo.com/insights/articles/the-global-games-market-will-reach-108-9-billion-in-2017-with-mobile-taking-42/>

⁶ <http://www.ifpi.org/downloads/GMR2017.pdf>

⁷ <https://dotesports.com/league-of-legends/news/league-of-legends-number-of-players-14488>

⁸ <https://www.reuters.com/article/us-olympics-2018-ioc-esports/olympic-channel-boss-says-ready-to-explore-esports-after-pyeongchang-idUSKCN1G30JM>

hours of gameplay and solitary immersion to compete, while others can be played with friends or family over an evening. Last, games are divided by genres such as RPG (role-playing), strategy, shooter, horror, fighting, simulation, sports and other (with various subcategories). Depending on genre, a player will be required to do highly different tasks and employ different skills – from pressing different combinations of buttons in quick order, to strategizing for half an hour how to best build and position an army to win a battle while the action is on pause, to coordinating hand and eye movement to shoot enemies coming from unexpected directions.

Given all the possible differences, the similarities among video games are formal and not without exceptions. All video games use some sort of virtual medium (though the mobile game *Pokemon GO*, for example, requires walking around neighborhoods too) and employ at least some variables of gamic logic: tasks, rules, reward systems, rankings, narratives (Madigan 2016; Alter 2017). In one of the very few books dedicated to form rather than content of video games, Galloway proposes the category of action as core to the definition of video games: “If photographs are images, and films are moving images, then video games are actions. Let this be word one for video game theory. Without action, games remain only in the pages of an abstract rule book” (Galloway 2006: 2). This definition is useful as it also explains how video games do away with the gap between player and game, subject and object, and create the immersive experience that is at the core of psychosocial discourses on gaming that I will further analyze.

Neoliberal psychiatry

The most prominent parallel between neoliberalism and psychiatry is the focus on the individual and rejection or bracketing of the social. Only the individual remains describable, while social contexts appear as elemental, chaotic and unpredictable (Socialist Patients’ Collective 1987: 16). This is achieved by an almost complete methodological reliance on biochemical/symptomatic approaches to mental health, endorsed at least partly to imitate other medical sciences and thus gain legitimacy. The dominant model of contemporary psychiatry explains mental disorders as rooted in chemical imbalances and structural changes in the brain and endocrine system, which, in turn, can be determined genetically or environmentally. According to Moncrief (2008: 247-248), this approach reinforces capitalist consumerism by suggesting “an ideal state of neurochemical

balance against which everyone can be measured and can measure him- or herself” independently of personal history and social circumstances. Such an idea pathologizes discontent (as a problem in the brain rather than in society) and encourages accepting social-environmental changes created by neoliberal policies (ibid.: 249). Dissatisfaction with one’s mental state and striving for an ideal chemical balance works as an incentive to spend on pharmaceuticals (Horwitz 2002: 205; Fisher 2009: 43), in addition to therapy and leisure as “healing”. People who take medication for their problems have little other choice, as systemic conditions and expectations *require* them to feel well. Finally, these circumstances are especially hazardous to the poor who are much more likely to suffer from depression caused by financial strain (Walker 2008: 140) and to rely on pharmaceuticals rather than on more time- and money-consuming therapies or therapeutic activities. World Health Organization predicts that by 2020 depression will be the global leading cause of disability and disease burden (as cited in Taylor 2012: 51). Thus, almost as if in return for increased flows of patients and income, biopsychiatry enacts, sustains and broadens inequalities created by neoliberalism.

Psychologization of video gaming

Of public discourses on video gaming, the psychologizing one is probably the most prevalent. To the non-gaming society, and especially parents who see their children get into gaming, the main question is – is it good or bad (for the psyche)? On the one hand, games can keep kids off “dangerous streets”, encourage learning or help develop various skills (Nicola 2009). On the other hand, there has been a continuous moral panic about games making people violent, antisocial, apathic or addicted (see Kardaras 2016). The general premise is that games do things to people, and these “things” are usually of a psychological nature. Biological psychiatry takes it up to explain harmful effects of gaming through the activity of dopamine, a brain chemical related to reward-motivated behavior, motor control and hormone regulation: “If a game experience is flooding the brain with dopamine, that means every other experience in life, on our to-do list, can begin to look less satisfying by comparison” (Clark and Scott 2009: 97). According to this logic, games and dopamine push people to seek more games and dopamine. In this cycle, even the perceived psychological motivation and experience of gaming, such as getting excited, learning

something new, connecting with people or doing otherwise impossible things (ibid.), becomes an irrelevant iphenomenon of the deeper causal process.

The psychologizing of games is further strengthened by the game industry itself, which seeks to apply findings in psychiatry to profit more from increased “objective” appeal and “addictive” qualities of video games. According to Alter, makers of video games “run thousands of tests with millions of users to learn which tweaks work and which ones don’t – which background colors, fonts, and audio tones maximize engagement and minimize frustration. As an experience evolves, it becomes an irresistible, weaponized version of the experience it once was” (Alter 2017: 7). In the end, the most addictive games provide a sense of immersion, a sense of achievement, and a social element (ibid. 171; Yee 2014). On the other hand, games are also psychologized by promoting their positive effects. In an overview of psychological findings on gaming, Bean and others (2017: 381) describe games as possibly good for raising self- esteem, finding meaningful social interaction and helping people with autism. In either case, gaming is depicted as something that should or should not be done primarily for psychological reasons.

Played capitalism

Video games would not be a profitable industry if they were not an important object of channeling and enacting neoliberal fantasies of merging work and pleasure. In a thorough research presented in their book *Game of Empire: Global Capitalism and Video Games* (2009) Dyer-Witheford and de Peuter show the many links between games and capitalism: from industry to in-game ideological representations, to the emergence of playbor (paid gaming or gaming for pay). According to the authors, “*video games are a paradigmatic media of Empire – planetary, militarized hypercapitalism – and of some of the forces presently challenging it*” (Dyer-Witheford and de Peuter 2009: xv). Interpretation and mediation of play is one ground on which the battle for and against neoliberal order is waged – “pleasure itself channels power” (ibid. 92).

The most direct way how video games endorse neoliberalism is through ideological sponsorship of its real-life institutions. An (in)famous example of this is the friendship between war game creators and actual armies. Shooters such as *Full Spectrum Warrior*, *America’s Army* or *Kuma War* have been created, financed or endorsed by the US army as training, therapy or

recruitment tools, not to mention the general propaganda content of most shooter (be strong, defend your country, hate its enemies), or game creators paying license fees to depict real guns virtually, thus effectively making purchasing a game an act of supporting the gun industry.⁹

Further, the relation between video gaming and capitalism is illustrated by how the cycle of production and consumption and waste of video games is distributed across the globe. Metals for console production are extracted mostly in Congo, factory production happens in China, the greatest number of games and consoles is created and sold in East Asia, the US and Western Europe, while waste products end up in dumps in Nigeria and India while refurbished consoles and pirated games are resold in the latter and other “developing” countries (Dyer-Witthford and de Peuter 2009: chapter 8). In other words, the culture of video-gaming is most spread and defined in countries of advanced capitalism, with the rest of the world encountering this culture only by proxy.

In addition, global hierarchies are also reproduced in-game. MMO economies, based on routinely and repetitively killing monsters to gain in-game currency (gold), items and level up to be stronger, allow for out-game economies in which loot and high-level characters are sold for real-life money (Yee 2014). For some, playing to sell has become a full-time occupation. The so-called “Chinese gold-farmers” work in computer sweatshops, playing games such as *World of Warcraft* 24/7 and getting low salaries while their employers get the greater profit of selling the loot to mostly Western players who can afford it. And while some Western players appreciate the possibility of saving “grinding” time to enjoy the game, others gang up on suspicious Chinese (or just non-English speaking) players in-game and repetitively kill their characters for ruining their game, thus repeating the history of harassment of Chinese workers in the US (Dyer-Witthford and de Peuter 2009. 146).

On the other hand, video-gaming cannot be reduced to a completely determined manifestation of capitalism. It is rather over-determined, with hundreds of millions of people’s desires, efforts and enjoyment turning gaming into a phenomenon capable of change of its own. As Dyer-Witthford and de Peuter note, “while game tend to a reactionary imperial *content*, as militarized, marketized, entertainment commodities, they also tend to a radical, multitudinous

⁹ <https://www.theguardian.com/technology/2014/oct/22/call-of-duty-gaming-role-military-entertainment-complex>

form, as collaborative, experimental digital productions” (Dyer-Witheford and de Peuter 2009: 223). I will return to question of the form of video games later as I explore how it interacts with neoliberal subjectivity.

PATHOLOGIZATION OF VIDEO GAMING

Diagnostic grounds

To be considered a pathology, a health condition must be institutionally defined and diagnosed. In the field of psychiatry, this is done by various psychiatric associations and World Health Organization (WHO) in the form of official manuals and related practice. Two manuals currently define global psychiatric practice: 1) the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (2013), also known as DSM-5, published by American Psychiatric Association; and 2) *International Statistical Classification of Diseases and Related Health Problems* (1992, frequently revised since) in its 10th edition (ICD-10) published by WHO. ICD-10 is a much bigger classification list than DSM-5, including codes for all health conditions, of which mental conditions are only a small part, and applied globally, while DSM-5 covers only mental disorders and is dominant in the US and Canada. However, in most countries psychiatrists learn both diagnostic systems and are free to choose which one to apply in their practice. As importantly, official diagnoses are strongly bound to corresponding medication and therapy, thus also defining and being defined by the pharmaceutical industry.

Both systems employ a core definition of mental disorder to ground specific diagnoses. This is the definition used in DSM-5:

A mental disorder is a syndrome characterized by clinically significant disturbance in an individual’s cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities. An expectable or culturally approved response to a common stressor or

loss, such as the death of a loved one, is not a mental disorder. Socially deviant behavior (e.g., political, religious, or sexual) and conflicts that are primarily between the individual and society are not mental disorders unless the deviance or conflict results from a dysfunction in the individual, as described above.

This is the definition used in ICD-10:

The term "disorder" is used throughout the classification, so as to avoid even greater problems inherent in the use of terms such as "disease" and "illness". "Disorder" is not an exact term, but it is used here to imply the existence of a clinically recognizable set of symptoms or behavior associated in most cases with distress and with interference with personal functions. Social deviance or conflict alone, without personal dysfunction, should not be included in mental disorder as defined here.

Both definitions are similar and place mental disorders in a space marked out by boundaries of clinical significance (abnormal behavior or bodily expression), personal discomfort and cultural norms. What is also evident is that there can be no hard criteria for what is a disorder, and social expectations determine a lot. Nevertheless, the DSM and ICD define numerous discrete categories and subcategories of disorders.

Internet gaming disorder

Internet gaming disorder (IGD) is a diagnosis under consideration for inclusion with substance-related and addictive disorders in DSM-5 (American Psychiatric Association 2013: 795-798). An analogical diagnosis – based on research following the criteria for IGD – of gaming disorder is to be included in ICD-11 to be published later this year (2018).¹⁰ Given the cooperation between APA and WHO and their effort to harmonize diagnoses between DSM-5 and ICD-11 (ibid. 10-12), I focus on the DSM definition of IGD and its research as defining the dominant

¹⁰<http://www.who.int/features/qa/gaming-disorder/en/>;
http://www.who.int/substance_abuse/activities/gaming_disorders/en/

psychiatric approach. If confirmed, IGD would historically be the second official diagnosis of non-substance (behavioral) addiction, after gambling.

The DSM criteria for IGD follow criteria for substance-related disorders (colloquially known as addictions) and require presence of five or more of the following symptoms over a 12 month period: preoccupation with internet games, withdrawal, tolerance, unsuccessful attempts to control the behavior, loss of interest in other things, related psychosocial problems, lying to others about one's gaming, using games to escape problems, related social or occupational problems (American Psychiatric Association 2013: 795). As Bean and others note, "the diagnosis assumes that such criteria can be applied to two different sets of behaviors with only the name of the behavior changed (e.g., "alcohol" and "gambling" to "video games")" (Bean et al. 2017: 379). The criteria still leave a lot of space for interpretation and methods of measurement. One can rely on personal narrative, observations of family or friends, behavior monitoring, standardized tests (of which there are several kinds and theoretically anyone is free to come up with a new one) or brain imaging to determine whether a criterion is applicable to the formation of diagnosis. Due to this reason, findings on prevalence of IGD vary between 1% and 45% (ibid. 382; Sigerson et al. 2017: 20).

Another important differentiating factor is the specific motivational aspect of online play. Gamers may see internet play as a form of social bonding, achieving status or developing specific skills, thus providing need for separating highly engaged, problem, and compulsive play (Wittek et al. 2015). In China, where competitive internet gaming is most spread, an IGD research group used depressive symptoms, social anxiety symptoms and excessive gaming hours per week as additional criterion measures to check validity of the diagnosis of IGD and found moderate to strong correlation (without excessive overlap) (Sigerson et al. 2017: 22). Another research of *World of Warcraft* players in Germany suggests 30 hours of playing time per week as a threshold between high engagement and addiction, with problematic gamers spending 35.69 and non-problematic gamers 23.97 hours in-game on average per week (Lehenbauer-Baum and Fohringer 2015: 350).

Addiction brain research is an important supporting factor of IGD. Both substance and behavioral addictions share similar patterns of brain activity and changes (Kuss and Griffiths 2012; Alter 2017). This supports the expansion of the notion of addiction beyond concrete substances

and towards indefinite variance of activities, at the same time placing the cause of addiction in the subject rather than the object (no substance itself causes addiction). The basic brain model of addiction defines it as a neurological reward deficit (Kuss 2015: 79) where sufficient satisfaction is only achieved through a particular substance or activity which alters brain circuitry and becomes the most (or only) efficient source of dopamine which fires these circuits. Such observable changes in brain biochemistry are used as confirmation of the pathological nature of addictive behaviors.

Research part

Method

To understand more about how current science is dealing with intended pathologization of video gaming and how neoliberal values and conditions are implied (or not) in research, I decided to analyze all academic articles dedicated to the APA proposed diagnosis of Internet Gaming Disorder. A search for “internet gaming disorder” among English language article abstracts in EBSCO Academic Search Complete database returned 243 results. Due to the high number of articles and their limited accessibility, I chose to focus on the content of their abstracts only. Abstracts of all the articles were extracted using Zotero reference management software. They were then coded using MAXQDA 10 qualitative data analysis software. After an initial review, 52 abstracts turned out to be irrelevant due to focus on other topics than IGD or lack of statements, leaving 202 to be analyzed. The earliest articles were published in 2014 and the latest – in 2018. A full reference list of all the abstracts can be found in the appendix.

In order to reduce the impact of personal bias on categorization of content, I employed a grounded theory approach, coding segments of content from the bottom up, that is, assigning original codes to all statements and findings and only later categorizing these codes into broader categories for critical thematic discourse analysis (Parker 2011), asking what portrait of neoliberal subjectivity is constructed in the scientific discourse on IGD, and what are the implicit or explicit political and philosophical premises of this discourse. In the end, I used 190 different codes 490 times and categorized them under 7 major topics (Figure 1): Brain Research (n=53), Comparisons

(n=42), Critique (n=31), Predictors (n=107), Subject Descriptions (n=159), Supportive Research (n=65), and Treatment (n=33).

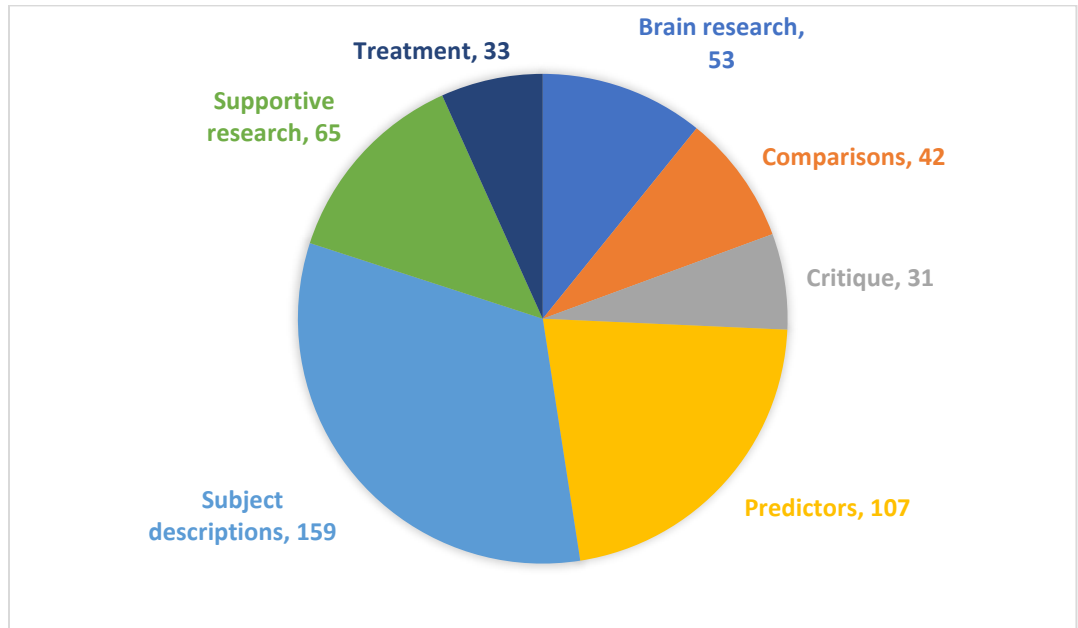


Figure 1

There were many overlaps between the categories. As I show further, Subject Descriptions and Predictors are very close categories, essentially making up more than half of all the content. That was useful as it allowed me to better reconstruct an elaborate portrait that scientists create of an IGD subject, relying on the numerous predicates. It is important to note that describing a subject with IGD or naming predicting factors of IGD requires a presumption or assertion about its existence, meaning that, despite Supporting Research making up a relatively small part of all segments, the diagnosis is widely endorsed. Brain Research, Treatment, and Comparison segments also mostly deal with IGD as something to be confirmed and solved rather than questioned, thus making Critique a very small part of the whole scientific discourse. Before moving to a broader discussion of the findings, I present each category in detail.

Supportive research

Segments about research supporting the DSM proposed definition of IGD fell into four categories: Biological Confirmation, National Confirmation, and Refining Efforts. Brain Research could also have been treated as part of Supportive Research due to its mostly confirmatory nature

but the big number of Brain Research segments, difference from DSM methodology and some number of contradictory Brain Research segments led me to creating an independent category.

Biological confirmation. There were four segments which presented biological confirmation of IGD: one about an electroencephalogram study confirming tolerance effects in IGD subjects, one observing biosignal changes among players (“Analysis on the pulse transit time, heart rate variability and skin temperature showed increased sympathetic nerve activities during computer game”²³²)¹¹, and two describing findings of biochemical markers of IGD such as changes in blood plasma and hormone levels. These segments represented research which found various observable biological changes in video game players compared to non-playing subjects.

National confirmation. There were 19 segments in as many different abstracts describing successful efforts at confirming IGD criteria and diagnostics among representative national or international samples. Countries in which IGD was confirmed included Spain, Sweden, Slovenia, Italy, Turkey, the Netherlands, Portugal, Germany and China. In most cases, validity of IGD was confirmed by testing validity and reliability of specific tests created to measure IGD. For example, in Slovenia scientists tested the short form of 9-item IGD scale (IGDS9-SF, attached in the appendix) by having 1071 Slovenian eighth graders fill it out and then conducting confirmatory factor analysis to test whether gathered data corresponds to the proposed measurement model, and obtained “excellent results”¹⁷¹. Other studies mirrored this example. Discovered rates of occurrence of IGD were presented in 20 segments and varied from 0.3% to 14.6%.

Refining efforts. Some abstracts did not directly validate IGD but were supportive in terms of describing improvements in screening tools, findings in differentiating between high and low severity IGD, importance of differentiating recreational and addictive gaming, and pointing out possible weaknesses of the model to be improved, mostly referring to variances and ambiguities of criteria used to describe IGD.

Brain research

As mentioned, segments falling under Brain Research were mostly supportive of the validity of IGD: 47 out of 53 segments described brain changes in “IGD-positive” subjects,

¹¹ I provide appendix row numbers of references for cited article abstracts

observed using functional magnetic resonance imaging (fMRI). Differently from quantitative studies which relied on subjective evaluation, fMRI studies relied on associations of brain functions and structures with certain character traits. On the one hand, this method is more reliable as images don't lie, whereas people can. On the other hand, the greater part of IGD criteria proposed in the DSM (such as deception, escapism, abandonment of other activities or occupational and social problems) are social in nature and require additional theorizing to be converted into brain features. This an exemplary abstract describing relations between brain changes and IGD:

The insula has been implicated in salience processing, craving, and interoception, all of which are critical to the clinical manifestations of drug and behavioral addiction. In this functional magnetic resonance imaging (fMRI) study, we examined resting-state functional connectivity (rsFC) of the insula and its association with Internet gaming characteristics in 74 young adults with Internet gaming disorder (IGD) and 41 age- and gender-matched healthy control subjects (HCs). In comparison with HCs, IGD subjects (IGDs) exhibited enhanced rsFC between the anterior insula and a network of regions including anterior cingulate cortex (ACC), putamen, angular gyrus, and precuneus, which are involved in salience, craving, self-monitoring, and attention. IGDs also demonstrated significantly stronger rsFC between the posterior insula and postcentral gyrus, precentral gyrus, supplemental motor area, and superior temporal gyrus (STG), which are involved in interoception, movement control, and auditory processing. Furthermore, IGD severity was positively associated with connectivity between the anterior insula and angular gyrus, and STG, and with connectivity between the posterior insula and STG. Duration of Internet gaming was positively associated with connectivity between the anterior insula and ACC. These findings highlight a key role of the insula in manifestation of the core symptoms of IGD and the importance to examine functional abnormalities of the anterior and posterior insula separately in IGDs.²⁴²

The essential structural parts of a brain research abstract, as illustrated, were: introducing previous association of brain parts with character traits and capabilities, presenting study methods (either resting state or gaming process fMRI of IGD subjects compared to “healthy controls”), describing observed differences, and confirming association between brain changes,

related personal changes, and IGD. The latter pattern was dominant in the 47 segments about brain research supporting IGD. It is important to note that I applied two codes to these segments: Altered (24) and Disordered (23). Not all authors referred to brain changes as disorders even though the patterns of presenting findings are very similar. An Altered formulation would only declare observations: “These findings suggest that IGD is associated with both functional and structural neural alterations in fronto-striatal and fronto-cingulate regions”²²⁸. A Disordered formulation would attribute a pathological meaning to the changes and use evaluating words [italics mine]: “The attenuated frontostriatal suggests that the emotion-driven gaming urge through nucleus accumbens could not be *well regulated* by the frontal lobe of subjects with IGD”²². These differences might point to a rhetorical and/or value choice of scientists in choosing how to interpret their findings.

Of the remaining segments, one highlighted the importance of some brain regions in preventing addiction, one explained how brain process is the same in “healthy” and “addicted” subjects” (with changes only in structure), two described observed brain enhancements in cognitive regions of IGD subjects, and two presented brains of IGD subjects as both enhanced and disordered.

Comparisons

42 segments compared IGD to other behaviors and problems. The comparisons fit into three categories: comparisons to other mental health problems, to bordering phenomena of internet use and offline gaming, and to gambling.

Of other mental health problems, the most mentioned one (n=17) was substance dependence, including nicotine and alcohol. Declared similarities between IGD and others included neural processes, altered neural mechanisms, genetic commonalities, biological markers, impulsivity, and compulsivity. Declared differences: specific attentional bias in IGD (or lack of it), IGD-specific neural changes, character and temperament differences. Besides substance dependence, two other conditions were presented as comparable to IGD in their impulsive/compulsive nature: obsessive-compulsive disorder (OCD) and attention-deficit and hyperactivity disorder (ADHD).

Gambling is the only currently official behavioral addiction, thus making comparisons of it to IGD expectable. 10 segments compared IGD to gambling, naming similar brain changes and personality traits as similarities, and one study finding internet games to be less addictive than gambling.

Last, 10 segments represented scientists trying to determine similarities and differences of internet gaming, general internet use, and offline gaming. Different studies found or presented internet gaming to be similar to social network addiction, more or as addictive as offline gaming, categorically different from internet addiction, less dysfunctional than problematic internet use, and more stressful than academic online activity.

Treatment

Despite IGD not yet being an official diagnosis, treatment options are already being discussed and tried out. Three types of treatment were described in segments of this category: various therapies, medication, and abstinence. Proposed therapies included cognitive-behavioral therapy, virtual reality therapy, neurofeedback therapy, reality and mindfulness therapy, and magnetic and current stimulation of the brain. One article presented long-term treatment camps as effective in reducing IGD symptoms. Of medical approaches, two studies found bupropion and escitalopram to be effective in managing IDG symptoms, with another study supporting medication with atomoxetine and methylphenidate for IGD subjects with ADHD¹⁵¹. Three studies discussed abstinence with different conclusions – abstinence was found to be both effective in reducing IGD symptoms and causing boredom and drive for stimulation⁹⁸ (which was described as atypical of withdrawal). Four segments described lack of validity and reliability of the various treatment options. A meta review of 30 IGD (or gaming disorder, before IGD) studies found them to have following problems: “(a) inconsistencies in the definition, diagnosis, and measurement of disordered use; (b) lack of randomization and blinding; (c) lack of controls; and (d) insufficient information on recruitment dates, sample characteristics, and effect sizes”⁹⁵.

Other segments I categorized under Treatment were about prevention and using games as treatment. Two types of possible prevention were presented: education about healthy internet use and Christian education. Of using games as treatment, the segments also suggested two

options: using games for treatment of depression in teens and using specifically designed games to address psychological problems of transgender people.

Predictors

Studies on predicting factors of IGD were abundant in the sample of abstracts. There were many types of predictors – social, biological, psychological and game related – which I put into the following subcategories: Dissatisfaction with Life (17), Game-Related (31), Biological (7), Demographic (26), Psychological Problems (20), and Cognitive (6). Due to the high amount of subcodes under each subcategory, I present each separately.

Biological predictors. While the brain changes observed in brain research articles could potentially also have been considered predictors (if they occur prior to gaming activity), there were relatively few segments which discussed biological factors as predictors of IGD. Three abstracts associated genetic variation with IGD, and one mentioned unspecified neurobiological constitution as one of possible predicting factors.

Cognitive predictors. Some segments mentioned attention bias as a possible predictor of IGD. Only one abstract specified cognitive factors “underlying” IGD: “(a) beliefs about game reward value and tangibility, (b) maladaptive and inflexible rules about gaming behavior, (c) over-reliance on gaming to meet self-esteem needs, and (d) gaming as a method of gaining social acceptance”⁹².

Demographic predictors. Young age was the most often mentioned (n=14) demographic predictor. Another prevalent demographic factor supported in the abstracts was being male. Other segments also presented lower education, unemployment and Chinese ethnicity as possible predictors of IGD. In other words, according to scientists, young Chinese unemployed males with lower education would be the most likely to have/develop IGD.

Dissatisfaction with life. Family problems and lack of sociality were two most repeating themes when talking about environmental conditions related to IGD. Specifically mentioned family problems included constraints to recreation, bad relationships with parents, and parental mental health problems. Lack of sociality was specified as being single, lacking friends, and feeling lonely. Other described quality of life factors were somatic complaints (physical pain) and

poor academic performance. Altogether, lower quality of life was presented as a driving motive for problematic gaming.

Game-related predictors. Most commonly mentioned game-related predictor of IGD was high amounts of gaming time, differently specified as 30.7 and 39.25 hours per week or 9 hours on average per day. Also repeating in different abstracts was the idea that IGD is related to lack of other sources of self-worth than gaming and perceived insufficiencies in one's gaming capabilities (low self-esteem). Other mentioned game related predictors included bonding to one's avatar, high immersion (obsessive passion), seeking increasingly more and bigger in-game rewards, and playing role-playing, first-person shooter or real-time strategy games.

Psychological problems. The abstracts presented vulnerability to stress, neuroticism, introversion, and impulsiveness as generic psychological problems predicting IGD. Of specific psychological disorders, depression and ADHD were singled out. Also mentioned as predictors were anxiety and nicotine use disorder.

Subject descriptions

As mentioned previously, Subject Descriptions was a category very close to Predictors. Probably due to scientific carefulness when implying causality, barely any abstract had statements formed in a way which would directly express that "IGD is caused by x" or "IGD causes x". Logical relations between observations and IGD were defined as association, comorbidity, co-presence, likelihood, and similar nature, avoiding implications (or explanations) of causality. Thus, when, for example, impulsivity was described as highly associated with IGD, it was unclear what kind of association it is – whether impulsivity is a cause or an effect, or both. That means that I used the category of Predictors for statements about likelihood of some condition or behavior preceding IGD, and the category of Subject Descriptions for statements about subject traits observed in subjects which "already have" IGD. In many places, I had doubts about which category to assign a code to, and only rhetoric nuances determined my choice. Therefore, the subcategories of Predictors are largely mirrored in this section, including Decreased Wellbeing (19), Attention Bias (22), Emotional Problems (22), Psychopathologies (24), Social Problems (9), Impulsivity (56), and Non-Negative Descriptions (6).

Impulsiveness. Being impulsive was the most often mentioned trait of IGD subjects, and overall the most prevalent code (n=56). Impulsivity was described as chasing rewards, loss of control, compulsion, impaired decision making, delay discounting, and increased risk-taking. While some studies relied on quantitative methods or behavioral tests to determine impulsivity, in numerous cases impulsivity was explained as caused by brain deficiencies, as in the following example:

*Compared with the HC [healthy controls – B.G.] group, the IGD group showed decreased functional connectivity between left posterior insula and bilateral supplementary motor area and middle cingulated cortex, between right posterior insula and right superior frontal gyrus, and decreased functional integration between insular subregions. The finding of reduced functional connectivity between the interoception and the motor/executive control regions is interpreted to reflect reduced ability to inhibit motor responses to internet gaming or diminished executive control over craving for internet gaming in IGD.*²⁴³

Attention bias. 22 segments described IGD subjects as having game-biased attention. Described forms of attention bias included preoccupation with gaming, craving gaming, and distorted cognition, for example, reacting differently to game-related cues or remembering game-related words better than others. Attention bias was related to brain changes as well.

Emotional problems. IGD subjects were often described as having emotional problems. Specified problems were being emotionally vulnerable, hostile, angry, moody, stressed, suicidal, and having low self-esteem. These traits were described as singled out using various tests and fMRI.

Psychopathologies. As psychopathologies were mentioned as predictors of IGD, so were they also presented as part of IGD. Again, depression, anxiety and ADHD were the three disorders most associated with IGD. Most segments were unclear about whether IGD can be a self-standing source of other disorders. Only one segment described the relation in terms of causality: “Consequences of attachment to technology include lowered social skills, self-motivation, emotional intelligence, and empathy and increased conflict with others, ADHD, and depression in younger populations”¹⁸⁵.

Decreased wellbeing. IGD subjects were described in the abstracts as experiencing overall lower quality of life. Problematic gaming was related to poor health, worse academic performance, procrastination, dissatisfaction of basic psychological needs, and lack of motivation to engage in other activities. Also, gaming of IGD subjects, in contrast to recreational gaming, was described as a dysfunctional strategy of coping with problems and problematic escapism from reality. In other words, playing to relieve stress and avoid problems was considered a sign of disorder.

Social problems. Relatively few (n=9) segments mentioned having social problems as an important aspect of IGD. That is surprising, considering that more than one DSM criterion of IGD is of a social nature. Social problems related to IGD were worsened family relationships, increased lying to others, social isolation, and lack of live interaction. As in other descriptions, it was mostly unclear whether social problems precede problematic gaming, follow it, or both.

Non-negative descriptions. Only 5 out of 159 descriptions of subjects with IGD were non-negative (that is, not necessarily positive as well). One segment described the risk-taking of IGD subjects as unchanged compared to “healthy” group, one mentioned their lack of attention-bias, and three segments presented IGD subjects as having shorter reaction times, which was the only kind of (possibly) positive description throughout the whole sample.

Critique

Critique and doubts about the diagnosis of IGD made up the smallest part of the abstracts’ content. Most of the Critique segments were about methodological concerns (n=25) internal to the proposed diagnosis, only 5 segments voiced broader concerns, and one segment cautioned that not taking IGD seriously could marginalize those affected¹⁰⁹.

Methodological concerns. Flaws in criteria and assessment of IGD were the most common objects of critique. The DSM criteria were described as culturally relative and weak, too heterogenous, inconsistent, under-researched, and not endorsed by gamers. Of concrete criteria, tolerance and withdrawal were criticized for being unreflectively copied from descriptions of substance abuse disorders and without ground in IGD, and high amounts gaming for not causing problems for most players and thus not being a reliable criterion. Research and assessment of IGD were criticized for lacking basic theory, object, and definitions, employing only a confirmatory

approach, lacking qualitative studies, and not differentiating between recreational, highly engaged, and addictive gaming (applying varying cut-off scores). Last, unclear causality of IGD and treating the concept as a reflective (discoverable) rather than formative (constructive-inventive) were presented as deeper problems of interpreting and applying the potential diagnosis.

Broader concerns. Three abstracts addressed broader issues in the context of IGD. Overlooking benefits of gaming, potentially repressing children's play, pathologizing normal social behavior, mistakenly treating coping behaviors as addiction, and spreading unnecessary moral fear were mentioned as potential problems of applying the diagnosis and theory of IGD in clinical practice and popular discourse.

Summary of findings

The dominant message in the discourse of the abstracts was that IGD is a legitimate new type of disorder, valid at least in its basic premises, if not all the details. Quantitative studies found expected symptom relations and a relevant percentage of people for whom internet gaming was associated with significant distress and dysfunction. Brain research further ground the reality of IGD by providing empirical proof of specific gaming-related changes in brain structure, similar to changes in brains of people with other "addictions". Like other subjects suffering from addiction, IGD subjects were found to have diminished self-control, excessive attention towards the object of pleasure, other psychological and social problems, and overall decreased quality of life. While causation of IGD was not strictly defined, it was implicitly or explicitly agreed that developing the disorder is not the subjects fault and can be explained in factors that are not dependent on one's choice: biological predisposition, social vulnerability, and personal traits and health conditions. Dealing with the problem was also considered to be beyond personal power and to require professional external intervention in the form of various therapies and medication, even if their effectivity is not fully agreed upon. Finally, doubts about the framework of IGD comprised a minor part of the scientific discourse and addressed nuances internal to the theory more than possible issues with the theory in a broader context. Barely any research in awareness of or in response to these doubts was represented.

Discussion

It is neither in my competence, nor my intention to doubt the facticity of scientific findings (for example, there is no need or ground to disagree that gamers brains are or become different), or that there are people who really suffer while excessively playing video games. Rather, in critically discussing the discourse on IGD, I want to draw attention to philosophical and political premises that ground its logic, and question whether this logic (of addiction) is the best to approach the phenomenon of problem-related gaming.

First thing that draws attention in the overall picture of the scientific discourse revealed in the abstracts is the confirmatory nature of most approaches. The paradigm of diagnostic psychiatric is taken for granted – for example, few question whether clusters of symptoms are enough to make discrete disorders, or how and why the point which divides the scale of health into normality and pathology is determined. The core definition of the disorder is copied from those of substance disorders, does not rely on any theory and is essentially unfalsifiable (Bean et al. 2017: 379). Most scientists take the model of IGD as given and their studies are limited to determining whether empirical data matches some fragment of this theory. Such scientific practice proves that a theory is consistent in its own terms but cannot answer whether it is necessary or useful in a broader context.

The philosophical question implicit in the approach of most scientists towards IGD is “how much is too much?”. Consider the formula of the diagnosis: IGD is at least 5 out of 9 DSM symptoms throughout a 12-month period. Why is 4 tolerable and 5 – too much? Why would 11 or 3 months of problematic behavior not be enough for it to be declared pathological? Even if the cut-off points are statistically arguable, they can barely be said to define a discrete phenomenon. Two people could both be diagnosed with IGD and only share one common symptom:

Subject 1: Migrant teen who has no local friends and is bullied at school. Has taken up playing a popular MMORPG to cope with the bullying and socialize with friends from his home country. Is preoccupied with playing, becomes irritable and sad if unable to play (withdrawal), uses internet games to escape a negative mood, has lost interest in previous hobbies such as

football and drawing, and continues playing despite knowing that it only increases his social isolation in the new setting where he's been living for two years already.

Subject 2: University student with low self-esteem due to never meeting the high expectations of her parents. Was introduced to the competitive online FPS game by her new roommate. The game's competition and reward system turned out to boost her sense of achievement. She started wanting to play more and more (tolerance), nearly dropped out of university because of it, lied to parents that her failed exam was due to a food poisoning, tried to quit playing after this incident but started again after the exam session was over, and continues playing into the third year of her studies despite increased familial and academic stress.

Such two completely different cases of IGD, each presenting five symptoms over a long period of time, could be entirely possible and yet fit the same statistics and receive the same treatment and social interpretation – “he/she is addicted to video games”. Only when one limits oneself to quantitative research can such diversity of experience be reduced to measures and categories which construct a manageable subject-object. The logic of “how much is too much?” presumes and, in effect, creates quantifiable subjects, the diversity and contexts of whose experience cease to matter. This tendency is further emphasized by a notable absence of abstracts describing qualitative studies of IGD.

As with the absence of qualitative studies, what a discourse omits can testify no less about it than what it includes. From a critical perspective, talking about social problems and not talking about economic and material conditions is suspicious. While social factors such as age, gender (for more on addiction and gender, see Dwyer and Fraser (2017)), ethnicity, and education are mentioned more than once as important for predicting IGD, class, income, or material environment are not, despite usually being considered as core social differentials. Poverty and economic stress are some of the most common causes of psychological problems – almost all mental disorders are more prevalent among the lower rather than higher classes (Walker 2008: 145). Not reflecting these factors in one or two studies could mean scientists' conscious self-limitation, but the absence of the topic of class in all of the articles on IGD must refer to a structural expulsion of such issues from the discourse. The logic of diagnostic psychiatry cannot incorporate

systemic social problems into its equations. Differently than brain changes or discrete symptoms, social issues cannot be treated on individual.

Another issue pervading all articles is the already mentioned lack of attention towards questions of causality. IGD is associated with a lot of phenomena, from genetic predisposition to feeling lonely, but caused by none, apparently. Of course, causation is a metaphysical concept, not to be used in scientific discourse without care and additional explanation. The nature of diagnostic psychiatry is to specifically care about symptoms first and foremost. Etiology, in this context, can provide useful information for treatment but is not necessary – diagnosing and treatment can also happen without it. Overall, IGD appears as uncaused (even if predictable) – a disorder in itself, appearing in the encounter of a human subject with a video game. Access to the latter seems to be the only necessary and sufficient condition for developing IGD. This tautology is also named in the DSM-V as the *single* environmental factor related to the diagnosis: “Computer availability with Internet connection allows access to the types of games with which Internet gaming disorder is most often associated” (American Psychiatric Association 2013: 797). On the one hand, such (lack of) an interpretation of causality prevents broader interdisciplinary inquiry into factors contributing to mental disorders, together with a more holistic rather than fragmented (and inefficient) approach to public health. On the other hand, lack of care about causality and context can lead to pathologization of excessive gaming as an adequate reaction to environmental stressors and arbitrary treatment plans, both of which can harm already suffering subjects more than help them.

Finally, the terms in which IGD subjects are described provide an informative overall portrait of a disordered subject, and inversely, of a healthy subject. These portraits reveal the normative framework of neoliberal biopolitics. The disordered subject, as constructed by the discourse, is impulsive, asocial, in bad mood, potentially hostile, too focused on one thing, and of poor health. The healthy subject, the implied opposite, is always in control, extraverted, positive despite anything, non-confrontational, interested in everything, and fit. Such a subject fits perfectly in the neoliberal market which places all economic responsibility on the individual, requires quick adaptation to changing opportunities and demands, as well as relying on social networks for any support because institutional support is withdrawn, promoting one’s personality as a commodity, and being willing to compromise. At the same time, the rest of the subjects, such as “excessive”

gamers, are seen either as disordered and requiring professional help in forms of therapy and medication.

Finally, pathologization of video gaming is strongly based on reliance on the substance-addiction model (also applied for gambling), emphasizing similar brain changes and life problems. Paradoxically, while it is agreed that things by themselves do not cause addictions, the emergence of a new addiction such as IGD implicitly endorses an opposite interpretation. Such a nosological paradigm and the confirmatory nature of IGD research show the unlimited potential of pathologizing any behavior by using the same model.

SOURCES OF CRITIQUE

Debates on addiction

The notion of addiction as disease is relatively new and questionable. In the now classic article on *The Discovery of Addiction*, Levine (1978) traces the history of the concept as it is currently understood to early 19th century. Over time, addiction has come to be understood as a disease of the will rather than liking to drink too much, and later, under pressure of lobbying groups such as Alcoholics Anonymous, an official diagnosis, setting ground for categorizing other addictions as ailing only certain people who are unlucky enough to be predisposed towards them (ibid.). Interestingly, this happened well before brain imaging technology allowed for addiction to become grounded in explanations of biochemical changes in the brain which is the current dominant paradigm of understanding addiction¹².

The (brain) disease model of addiction is promoted by institutions such as the US National Institute on Drug Abuse (NIDA) as better than previous understandings of addiction because it removes moral guilt and burden from the addicted person for their own problem –same as one does not blame a person for having cancerous cells, so does one not blame them for having a brain predisposed to compulsive behavior or use of substances¹³. According to Lewis, “the

¹² <https://www.drugabuse.gov/related-topics/addiction-science>

¹³ <https://www.drugabuse.gov/publications/drugfacts/understanding-drug-use-addiction>

disease model helps explain why it is so difficult to achieve abstinence through the exercise of willpower. It makes sense of individual differences in vulnerability to addiction, based on dispositional factors and environmental stressors” (Lewis 2017: 8). Also, it provides a framework for development of pharmaceuticals to fix the pathological biochemistry (ibid.). Finally, due to the latter reason the model works as legitimation for scientists’ requests for research funding (Hammer 2013: 28) because brain chemistry is easier to define and fix than environmental sources of personal problems.

Even if its empirical findings have been reproduced numerous times, brain research on addiction has significant conceptual problems. First of all, it cannot explain why altered brains are necessarily diseased brains, risking confusion of difference with pathology. The capacity of brains to change is known as plasticity and is hardly abnormal: “Plasticity is a normal and largely beneficial characteristic of human brains, and thus if we made ‘changes in brain structure and function’ a sufficient criterion for disease we would define everyone as diseased” (Foddy 2010: 26). Presumptions about what is a natural healthy brain can easily lead to biopolitical control and false normativity (Fraser 2017: 131). Second, while there are observable correlations between long-term substance abuse or compulsive behavior and brain activity/structure, a correlation is not sufficient to assert that brain *causes* addiction or that actions can only be freely chosen if they have no correlation with human biology (ibid. 28). For example, eating (most of the time) is not considered a pathological compulsion even if an empty stomach and related brain processes are its biological “causes”. Third, the transition from viewing “addicts” as immoral to viewing them as incapable and in need of regime imposed from outside is hardly more empowering (Lewis 2017:16). The image of the “hijacked brain”, akin to demonic possession (Reinarman 2005), arguably projects a subject as even more vulnerable and helpless than having a “weak will”. Last, even if the disease model does not hold individuals responsible for their addiction (and loss of control), it paradoxically responsabilizes them to seek help and recover (Pienaar and Dilkes-Frayne 2017: 147, Fomiatti et al. 2017).

Another cause of skepticism towards the brain-disease model is based on sociological/environmental approaches to addiction and broader political critique of psychiatrization of everyday experiences. Even if brains can be more or less predisposed towards certain experiences, the social interpretation, incentives and alternatives of these practices are of

great importance as they are determined by collective configurations of meaning and action which influence whole communities, rather than single brains (Horwitz 2002: 5), and can be politically aggravated or improved. Neoliberal societies, for example, demand social detachment and willingness to follow the free market of changing job and income opportunities. According to Alexander, this leads to a general lack of psychosocial integration, which he calls dislocation, and is the greatest incentive towards addiction: “Because western society is now based on free market principles that mass-produce dislocation, and because dislocation is the precursor of addiction, addiction to a wide variety of pursuits is not the pathological state of a few but, to a greater or lesser degree, the general condition in western society” (Alexander 2001: 5). Similarly, writing about children, Alter suggests that they have little other choice but to become addicted to digital gadgets because all symbolic activity of their peers happens in the virtual world and non-participation would mean social exclusion (Alter 2017: 32). When neither relationships, nor occupations, nor locations are stable in life, “addiction” might be a desperate source of stability and comfort. Moreover, many people with addictions do not think of themselves as sick and most of them recover without treatment (Lewis 2017: 8) as in the famous research case where 95% of 19% of US soldiers who got addicted to heroin during the Vietnam war ceased using it after coming back home (Robins et al. 1974). Others have pointed out how addiction is a selective social labeling which is used for socially deviant practices such as recreational drug use but not, for example, regular use of medical opiates for pain (Keane and Hamil 2010). In sum, from a sociological perspective addiction appears not as a personal (brain) issue which causes social problems (“these addicts don’t want to work”) but as an effect of social problems which changes in response to the environment (Fraser 2017).

Finally, there is a political-economic reason for doubting the dominance of the (brain-)disease model of addiction. Research in directions critical of the brain disease model of addiction is institutionally limited because funding for addiction research is mostly distributed by government public health departments, pharmaceutical companies, and the rehab industry, all of which favor biochemically grounded health research (Lewis 2017). This allows for easier and more direct treatment (and profit) of individual symptoms than broader social changes needed to address addiction as a systemic issue, and over-represents one side of the addiction debate in the overall scientific discourse.

Alternative models of addiction

The disease model is a dominant but not the only model for understanding addiction. While it is usual to imagine addiction as something negative – deviant, disabling and dysfunctional – broader research shows this image to be reductive, inefficient at solving its own problem and potentially oppressive. Fraser and others (2017) interpret the “diseasing” of addiction as a biopolitical tool of control rather than an honest public concern with reducing people’s suffering. The transition from seeing addiction as immoral to seeing it as a disease does not remove stigma from the persons concerned and only generates more avoidance, shame and submission (ibid.). Addiction in such case is not a description of behavior or experience but a prescription of status. Thus, one alternative way of understanding addiction is seeing it as “a means by which contemporary liberal subjects are schooled and disciplined in the forms of conduct and dispositions required to belong, and to count as fully human” (ibid. 199). In this view, addiction appears as a political tool for producing and reproducing stigma rather than a concept necessary for improving the wellbeing of the “addicted”.

Addiction can also be used as a concept defining more-than-usual enjoyment as in expressions “I am addicted to this band” or “dancing is my addiction”. Even when it is understood that drugs or activities are not in themselves causes of addiction, one can hardly say “I am addicted to amphetamines” without being understood as confessing a disease. In Pienaar’s and Dilkes-Frayne’s view (2017: 146-148), this is because of limited narrative “scripts” used to socialize certain experiences. There is essentially no script for representing regular mediated enjoyment but that of addiction, and the social acceptability of the mediator of enjoyment determines whether it will be seen as a disease-addiction (drugs, gambling, internet, sex...) or therapy-addiction (sports, arts, books, meeting friends), as illustrated by liberal takes on the issue (see, for example, Nicola 2009: 15). However, that also means that many experiences fall under the concept of addiction, and concrete narratives have shown that “people who self-identify as having an ‘addiction’ actively manage their consumption, organizing it around everyday commitments and responsibilities, or in response to daily demands and pressures” (ibid. 153). In this case, addiction is a framework for explaining various forms of self-indulgence rather than a distinct type of pathology.

Another way of interpreting addiction is seeing it as a conscious compromising health strategy rather than a fall from health. In an Australian qualitative study (Moore et al. 2017) of interviews with 60 people who qualified as addicted to substances (passing DSM-5 or ICD-10 criteria for “substance use disorder” or “dependence syndrome” respectively), authors found ground to question the opposition between addiction and health. On the one hand, some of their respondents did frame their consumption as opposite to health and wellbeing, naming “legal problems, relationship struggles, inauthentic subjectivity, misallocation of money and other resources, and state intervention in child custody” (ibid. 158) as problems cause by drug use. On the other hand, many accounts presented a more complicated picture of negotiating a coexistence of addiction and health, or even depicting addiction as a necessary condition of wellbeing. Some interviewed people worked out every weekday after work and only use methamphetamine on weekends to relax, some treated “addiction” to drugs as an incentive to look for other pleasurable and health activities as alternatives or compensation, some used heroin for a week after burning out and then came back to “normal” life rested, some regularly smoked cannabis to be able to function after spine traumas, and others used methamphetamine to remain productive over intense extended shifts (ibid. 158-160). The moral of this research is that people can negotiate very different patterns of regulating their desires, and addiction can manifest not only as deterioration of subjective wellbeing but also as means of increasing it.

Neoliberal subjectification

When hundreds of millions of people play video games, viewing this activity as a purely individual choice and preference is reductive, at best. Each social system socializes subjects who recognize the symbolic meanings and values of the system, and to some extent reproduce them. Even if played individually, video games have collective meaning and are an activity unique to late capitalist societies – one can hardly imagine video games or their equivalent being a possible pastime in agrarian societies, requiring intense manual labor from each member, or in religious societies which have strict collectively enforced rules of moral behavior. There are concrete demands and expectations towards a subject, that neoliberal societies have, which make video gaming as a global practice possible.

First, global capital flows and their effects result in diminished control over one's life circumstances. A global market means that businesses are free to set up wherever they find the best circumstances. Companies from rich countries with high wages save by outsourcing jobs to countries where labor and materials are cheaper, and taxes are lower. In this setting, capital can have no responsibility or commitment to the local good, leaving labor with little leverage for negotiation of better conditions or stability. Many workers are forced to follow job opportunities around the globe and can no longer hope for dependable life-time employment and social security. In a neoliberal economy, one has to be willing to take economic risks (because stable careers are increasingly scarcer), be ready for change at any time, and become a self-promoting entrepreneur, or face poverty. Even successful careers can collapse due to economic crises, downsizing, harsh competition, new market trends, or political changes. Walker emphasizes the cognitive dissonance that is at the core of contemporary poverty:

It means feeling trapped in a world where you are bombarded with images of wealth, enterprise and social mobility. It can represent a daily struggle to pay bills, to obtain food and clothes for children. It might mean struggling to find sufficient or permanent work that will allow their families to achieve the minimum quality of life to which they are entitled; a quality of life, the paucity of which constantly drives feelings of guilt and worthlessness. (Walker 2008: 143)

Such a socio-economic setting promotes short-time profit and competition, both contributing to increased social stress. As economic and political safeties for reducing stress, such as job security or public social care, are removed, people must look elsewhere for comfort. According to Sloan, late capitalism stabilizes itself by leaning on the lifeworld: "<...> crises in the economic sphere are deflected into the lifeworld realms of culture, society, and personality. Among prices paid for this stability are the loss of meaning, the destruction of solidarity, and psychological crisis" (Sloan 1996: 65). In other words, the starkness of neoliberal economy is compensated by comforts of mass (or niche) media (reality shows, sensationalist news, celebrity shows), initiatives of civic society (humanitarian NGOs, volunteer programs, activist initiatives), and personal projects (e.g., engaging in subcultures, developing a hobby, becoming a celebrity).

The imperative to enjoy is, paradoxically, a necessary part of the neoliberal imaginary. Brand slogans like “Just do it”, “I’m lovin’ it”, “Because you’re worth it”, or “Keep calm and carry on” are global instructions for personal behavior and expectations – be decisive and enjoy whatever happens. In a society driven by such ideals, suffering is not accepted – not only subjects’ socio-economic practices but also affects become an object to be formed by neoliberal initiatives (Anderson 2016: 738; Swenson 2011). In between the real necessity of surviving in a volatile economy and the cult of positivity, the neoliberal subject is overcome by what Fisher calls depressive hedonia – a form of despair “constituted not by an inability to get pleasure so much as by an inability to do anything else except pursue pleasure” (Fisher 2009: 28). Enjoyment in such case is not a possibility but a necessity. Panu notes that the proliferation of official and unofficial addictions in recent psychiatry is not incidental but directly related to the form that contemporary enjoyment takes as a machinic, obsessive urge (Panu 2016: 53). He further remarks that when it becomes systemic, the “injunction to enjoy removes any possibility of enjoyment” (ibid. 148). One has to enjoy to compensate for the political-economic austerity of neoliberalism, but – exactly because of this external obligation – one cannot, or if one does – it can never be enough. Thus, the very principle of neoliberal enjoyment is addictive.

When one cannot enjoy due to “internal” reasons, one is depressed, but when one cannot enjoy due to external circumstances, then one is anxious. A popular activist brochure “We are all very anxious” by the Institute for Precarious Consciousness (2014) declares anxiety to be the dominant affect of contemporary capitalism, compared to the boredom and misery of its previous welfare and industrial phases, respectively. The Institute relates the pervasiveness of anxiety to precarity:

Precarity is a type of insecurity which treats people as disposable so as to impose control. Precarity differs from misery in that the necessities of life are not simply absent. They are available, but withheld conditionally. Anxiety is reinforced by the fact that it is never clear what “the market” wants from us, that the demand for conformity is connected to a vague set of criteria which cannot be established in advance. (Institute for Precarious Consciousness 2014)

It should not be surprising that neoliberalism is a system of anxiety, because anxiety is an effect of powerlessness. It is not absence of opportunity and wealth that cause anxiety, but the way in which the latter are to be accessed, that is through submission and adaptation – either to economic elites (or just bosses), or demands of the market. In this sense, anxiety is a claustrophobic affect – its effect is more of the same. An anxious person is afraid of the unknown and at the same time overprepared for it to the extent that anything but anticipation is excluded. Being anxious means not being confident about being able to match the requirements of a situation. Even more so if the requirements are questionable but one cannot change or refuse them. When it come to the requirements of capital, states Moncrief, “keeping people in a perpetual state of anxiety and self-doubt is useful <...> Self-doubt is a state of mind that is compatible with a placid and unchallenging workforce and undermines people’s abilities to see problems and their solutions in collective terms” (Moncrief 2008: 249). Anxiety is systematically produced and reproduced as the core of neoliberal subjectivity. And while, on the one hand, anxiety makes people more vulnerable to manipulation, it also makes people more vulnerable in general. As the Socialist Patients’ Collective (1987: 13) puts it, “the individual’s need for life contradicts capital’s need for surplus value; the symptom is the immediately sensually perceptible unity of this contradiction.” Internet gaming “addiction” can be seen as exactly such a symptom, born in the contradiction of the requirement of productivity and the necessity for meaning.

Privatization of stress and responsibility

Neoliberal precarity is not only economic, but also social. The best worker is a worker without attachments. Market deregulation comes with institutional deregulation: increased divorce rate, weaker friendships due to increased mobility, privatization of public healthcare and education, increased incarceration, privatization of public spaces, etc. The fundamental economic rationale at the heart of late capitalism, states Walkerdine, “demands an autonomous subject who can cope without work, social, family and community supports” (Walkerdine 2002: 2). Psychology, by its focus on the individual, is intrinsically compatible with the logic of the autonomous subject, and provides the necessary scientific imaginary: “Psychology is constantly called upon to support the veracity of this subject and to prop up, through psychological practice,

its inevitable failures. This prohibits any other understanding of the production of subjects” (ibid.). An individual-based social ontology is implemented both materially and discursively. In this sense, as notes Elliot, privatization is something that happens not only institutionally, in a concrete way, but also culturally: “The intended or unintended consequences of deregulation of public agencies has been a thoroughgoing privatisation of life (or life-strategies) in general. In privatised, postmodern society, the individual as consumer drifts from seduction to seduction” (Elliot 2002: 12).

In a society where work and sociality are degraded, work “on oneself” becomes the dominant form of labor. One “works out”, “manages time”, “organizes a diet”, “optimizes sleep”, “plans for the future”, and “balances relationships”. It is only understandable that when the world around is in an unpredictable flux, the only constant – the individual – becomes the sole source of value and object of reasonable investment. This, according to Sloan, leads to further disintegration:

In contexts where objectifying attitudes towards the self (and self-practices as well) are rewarded with status, power and money, desymbolization rather than integration is being fostered. Success in the system follows the one who is cool, unemotional, focused on tasks, willing to suppress objections and facile in ‘appropriate’ self-presentation and impression management. (Sloan 1996: 114)

Paradoxically, the more successful one wants to become, the more one has to get detached from social environment and oneself. Presenting oneself as something else than defined by environment and experience is becoming a basic necessary skill: “Faking of emotions now demonstrates ‘good’ psychological skills –like numeracy and literacy –much needed by employers” (Roberts 2015: 26). The perfect neoliberal individual is nothing but what the changing circumstances require.

Despite the apparent ubiquity of the process of privatization of responsibility and stress, it should not be mistaken for a natural or unavoidable phenomenon. The “scientific” depoliticization of issues, such as class anger or resentment, that previously were causes of social struggle, is a historical and political process (Dean 2005: 56). Neoliberal policies since their inception have had concrete agents and beneficiaries, and the social order that they create is one of concrete hierarchies and power relations where the minority determines the conditions (Harvey

2005) and the majority can either obey, be co-opted, or be neutralized through coercion, incarceration, or pathologization (Ferraro 2016: 18-20). Despite a liberalized economy, neoliberal social policies are authoritarian in their treatment of poverty as personal failure and aim to keep the (wealth of the) rich safe from the discontent of the rest (Moncrieff 2008: 250). Because power in this discourse is understood as something inherent in the character or merit of the individual, rather than granted by social circumstances, the way to emancipation is not through contesting authorities but through seeking power for oneself. As Elliot remarks, the economic and cultural “politics of privatization is premised upon pseudo-rational fantasies of omnipotence – fantasies that serve to deny the globalized risk we face today as individuals and collectivities” (Elliot 2002: 12). The promise of such fantasy is that if one can fully control oneself and things around, then even global changes will not be able to take that away.

However, neoliberal promises are rarely fulfilled and much more often only exacerbate the already mentioned anxiety, self-doubt, and depression caused by socioeconomic conditions. In this case of powerlessness, people are left with seeking comfort and therapy rather than empowerment (McDonald et al. 2008). Even in most “advanced” democracies, election turnouts of 50% are nowadays considered good, accepting that half people do not believe that different people in power can make any difference. Many can feel that the effects of global neoliberalism are beyond their control and deal with it in an individual, consumption-based manner:

Work, it was argued, has become degraded through the volatility of labour market relations, increased speed and intensification, the corporatisation of public organizations, the growing influence of professional management ideologies and guidelines, hyper competitiveness, a desire for upward mobility and the atomisation of individual workers. Leisure on the other hand has become alienated as it functions to provide a defence against the rapid disruption of working life, so that stress, frustration and anxiety are converted into pleasure and healing through the consumption of goods and services. (McDonald et al. 2008: 501)

Closing up from the environment and treating oneself from exposure to capitalism in a private manner is both an effort to escape neoliberalism and a condition of its continuation. Addiction is the inverse side of such privatization.

When social problems are reflected only on an individual level, the discourse of mental illness becomes the core paradigm of explaining suffering. Rather than someone who is dealing with economic challenges and stressful work conditions, a neoliberal subject is described as having (and actually develops) mental problems (Swenson 2011; Schmitt 2017). In terms of neoliberal logic, you can be poor because you do not have a correct (competitive, positive, ambitious, compromising) attitude, but not because expecting any control over your work conditions will make you undesirable in the job market. And while the system keeps functioning, individuals and communities are paying the price in health (including mental health) problems, broken relationships, and loss of collective meaning (Sloan 1996: 114-115). According to Fisher, treating personal problems as arising primarily because of biological reasons is a way to neutralize possible discontent and an opportunity to profit from the crisis that neoliberal capitalism itself creates: “The chemico-biologization of mental illness <...> reinforces Capital’s drive towards atomistic individualization <...> [and] provides an enormous lucrative market in which multinational pharmaceutical companies can peddle their pharmaceuticals” (Fisher 2009: 37). If people cannot be “responsible” enough to be profitable on their own, they are made profitable by pathologization and coercion of their vulnerability.

The logic of gaming

Absence of social-political reflection in the research on IGD, and diagnostic psychiatry more broadly, is one part of the issue. The other half is absence of a theory and understanding of video-gaming, fetishizing technology as an object of its own rather than something immersed in politics (Dean 2005). I already mentioned how video games are actions and how the production side of games makes use of and reproduces material inequalities, and how game content can have ideological purposes. This knowledge, however, does little to explain what makes games so attractive for people in neoliberal societies and how the internal logic of video games plays into or against neoliberal demands and desires.

On the one hand, video games can be seen as a medium which fully serves and reproduces neoliberal values. Same as neoliberalism, video games require control and management of constantly changing circumstances. According to Galloway, “[a]cts of configuration in video

games express processes in culture that are large, unknown, dangerous, and painful, but they do not express them directly. <...> to live today is to know how to use menus” (Galloway 2006: 16-17). Both winning a game and achieving success in neoliberal work and culture require deep synchronization of one’s actions with algorithms, rules and equations that make the system function. In a game it might mean learning what combination of skills and items is the most efficient in defeating a certain boss or finding out the perfect way of allocating an empire’s resources so that it reaches new levels of strength before enemies do. In neoliberal society it might mean consciously making social contacts to increase one’s job opportunities or closely following global news to determine where the most profitable investments could be made. “[N]ondiegetic operator acts [acts which are not internal to the narrative of the game, such as managing settings or typing in cheat-codes – B.G.] in video games,” explains Galloway, “are an allegory for the algorithmic structure of today’s informatic culture” (ibid. 17). In a social system where profit is the leading principle, everything has to be quantified, turned into variables and accounted for in order to achieve maximum efficiency (and maximum growth of profit). Digital environments become privileged sites of such reification of the social world into code (Berry 2014: 121). Video games express and teach this in virtual environments purified of real-life unpredictability and structural openness or gaps. As Galloway notes, playing video games is not simply moving through different scenarios: “The gamer is instead learning, internalizing, and becoming intimate with a massive, multipart, global algorithm. To play the game means to play the code of the game. To win means to know the system” (Galloway 2006: 91). *Video games are a medium which allows one to come perhaps closest to achieving the neoliberal fantasy of full control and personal responsibility while still “just having fun”, which makes them so enticing and so problematic at the same time.*

On the other hand, video games also serve as means of escape from requirements of everyday survival under capitalism and a source of feeling of achievement, which is very rare in the context of neoliberal expectations of bodily, psychological and social perfection (or struggling against them). As Galloway remarks, play “creates order, is order. Into an imperfect world and into the confusion of life it brings a temporary, a limited perfection” (Galloway 2006: 29). Video games are utopian spaces where rules and rewards are the same for everyone (as far as code is concerned), which is relieving in a social context where, despite opposite claims, a privileged

minority decides the rules and reaps the rewards. In a rare qualitative study of gamers by Kuss, one respondent describes her gaming as, exactly, a way of answering (or hiding from) social demands of exceptionality which are not otherwise achievable:

Those [in-game – B.G.] achievements (...) provide an incentive to repeat stuff and change a little thing and just do it (...) [There's] this heroism. That's something peculiar, something that everybody wants to be like, a unique individual who has achieved something, who's liked by everybody or something, where many people aren't liked like that and who hide in the game then.
(in Kuss 2015: 87)

In addition, video games sometimes also become spaces of contesting the logic of neoliberalism. Dyer-Witheford and de Peuter name six types of politically progressive practices of video game culture: counterplay (contesting ideologies of games from within), dissonant development (of mainstream games with critical content), tactical games (created as means of activism), (educational) polity simulators, self-organized worlds, and software commons (challenging private ownership of code) (Dyer-Witheford et. de Peuter 2009: 191). While such practices are relatively rare, they illustrate how games can not only fulfill power or provide escape from it, but also be used to generate counterpower.

Whether we treat video games as an extension of the logic of neoliberalism or a gap in it, there are deep structural connections between the two. Neoliberal desires are directly addressed and mirrored by gamic logic, either in opportunities of virtual enactment of (the fantasy of) subjective control or in opportunities of substituting unjust and unmeetable demands of the social world with achievable in-game aims.

Summary of critique

There are many reasons why pathologization of video gaming is dubious despite plenty of confirmatory research. Counterarguments are found both within psychiatric debates on addiction and outside of them – in fields of social critique and video game theory.

The discourse supporting IGD is based largely on observations of behavioral and biological change in the potentially disordered subjects. However, change as such is not something negative and abnormal – different personalities or brains are not necessarily disordered. To declare something a disorder, some theory of causation is necessary, because normal or expected change cannot be considered pathological. Getting a headache, for example, from listening to loud noises for a long time is not pathological, while repeating headaches because of a brain tumor signal a serious health problem. While research on IGD suggests various possible causes, none are definite or discrete, leaving the potential disorder more of a theoretical construct than a concrete pathological entity. If one would explain video gaming in broader terms than those of individual craving and impulsivity and see it as a form of adaptation to specific circumstances, then one could hardly call such adaptation a disorder. And there are sufficient arguments that (sometimes excessive) video gaming is, indeed, an adequate, desirable, or sometimes even necessary practice in the neoliberal social context that it develops in.

In a neoliberal society, individual entertainment and pleasure seeking such as video gaming is systemically encouraged and functions as a compensation for stressful economic conditions and deterioration of the public sphere and social relations. Social atomization, feelings of powerlessness in face of globalized social processes, and the necessity of objectifying oneself to be competitive in the labor market are all compatible with and provide incentives for playing video games. The algorithmic form of video games mirrors the neoliberal logic of “fun” managerial control and allows the fulfillment of the capitalist fantasy of personal omnipotence at least on a virtual level, at the same time addressing and assuaging anxieties and self-doubt arising from the structure of contemporary economy. In this sense, video gaming is a paradigmatic neoliberal activity and way of subjectification, providing pleasure and healing from environmental stressors based on individual consumption. Addiction, then, can be understood as a norm of contemporary life, rather than a deviation from it – a source of otherwise hard to find comfort.

Given the latter, the pathologization of “problematic” gaming lacks a broader perspective. Blaming problematic behavior on the subject (with bad brain or history) or on the object (immersive, controlling video games) misses environmental (even if internalized) incentives that mediate the relationship. When a behavior is systematically encouraged, its harmful effects are firstly an issue of public health. Instead of focusing on harm reduction and support, the

pathologizing psychiatric approach stigmatizes both the player and the game, framing the person as incapable of decision making without professional intervention. This approach also risks pathologizing “normal” gaming and extending the scope of the notion of “behavioral addiction” because of loose criteria and lack of strong theory. In a bigger political context, pathologization of addiction can be seen as pathologization of non-productive enjoyment in a system which requires productivity above all, thus illustrating the paradox of neoliberal socialization, when subjects are pressured both to be productive for the good of the system, and to enjoy themselves individually. Where the stress of this fulfilling paradox becomes personally harmful, pathologization serves as a way of integrating and neutralizing such subjects while also profiting off suffering through commodified therapy and medication.

Finally, rejecting pathologization of problematic video gaming does not have to mean denying or contesting the social issue and personal suffering related to this phenomenon. It means contesting the claim that it is gaming itself that causes problems and that the discourse of addiction as disease is the most suitable or effective way to approach the issue. The public discourse of addiction and the experience of addiction are not the same. Alternative, politically informed and socially aware descriptions of problematic gaming could and should ground more appropriate methods of dealing with the issues related both to video gaming and to supposedly addictive behaviors more broadly. These methods would require challenging the logic of neoliberalism and promoting institutional change (not only of the health but also of the work system) as well as sensitivity to personal narratives and motivations besides homogenizing symptomatic criteria.

CONCLUSIONS AND RECOMMENDATIONS

Of 202 analyzed article abstracts on IGD, most support its validity. Brain research and quantitative confirmatory studies are the dominant forms of evidence. Most of critique for IGD is concerned with improvable methodological issues rather than questions about the very existence of the diagnosis. Research on IGD omits or lacks qualitative studies; considerations of class and the influence of economic processes and structure on problematic behaviors; and an explicit theory

of causality/etiology. Subjects with IGD are described as being impulsive, obsessing over games, and having social and psychological problems. The same features are seen as both predicting IGD and following it in an exacerbated form. The scientific discourse on IGD constructs binary portraits of healthy and unhealthy subjects, the first being always in control, extraverted, positive despite anything, non-confrontational, interested in everything, and fit and the second – impulsive, asocial, of bad mood, potentially hostile, too focused on one thing, and of poor health. These portraits and the form of the scientific discourse on IGD express neoliberal values and expectations towards individuals.

The model of addiction as disease, on which IGS is based, is questionable. It does not empower subjects more than concept of addiction as personal weakness, does not differentiate between adaptation/change and pathology (in brain), has problems with causality (not objects cause addictions), works as a selective disciplining tool for socially unacceptable behavior, and avoids social consideration of causes of problematic behavior and the variety of forms of self-indulgence. Alternative discourses on addiction include the addiction-as-choice paradigm, social-causation paradigm, and sensitivity to personal narratives of negotiating pleasure with health and life commitments. Approaching problematic video gaming from the perspectives of these paradigms could provide new and perhaps more effective angles of seeing the issue.

Gaming is a uniquely neoliberal practice in that it is individual consumption-based enjoyment as healing (escape) and reproduces neoliberalism's formal logic of managerial control. This makes gaming, including problematic gaming, considerable as a social-political phenomenon, not only a thing of individual preference and choice. Neoliberal demands of productivity and deterioration of economic and social structures to support these demands are complimented with a cultural imperative to individually enjoy as a compensation of social suffering. At the same time, non-productive enjoyment is pathologized. Economic stress and cultural imperative to enjoy serve to increase anxiety and self-doubt, which ensure submission to oppression and escapist pleasure seeking. In this sense, gaming is a way to deal with powerlessness, and loss of control in addiction mirrors political lack of control in a system governed by elites. Gaming is a form of adaptation to neoliberal reality, which makes declaring it pathological coping doubtful. Pathologization is a way of controlling and profiting of non-productive subjects, and neutralization of the social-political roots of their problems.

If IGD is to become an official diagnosis, which it probably will, even modest 3-5% rates of pathological gamers would mean 66-110 million new potential people in need of treatment. This would have significant consequences – from stigmatization to profit. Also, such pathologization, based on the model of substance addiction, could open the way for further pathologization of everyday behaviors. *The diagnosis of IGD should be rejected on philosophical, scientific, and political grounds, and alternative approaches to problematic gaming should be sought. Such approaches would include a critique of neoliberalism, an aim to improve economic and social security and wellbeing, include critical theories of gaming, be more sensitive to personal narratives of suffering people, and focus on harm reduction rather than pathologization and symptomatic treatment.*

If further research were to be done on this topic, it could address several limitations of the current study. First, I only analyzed the discourse which was aimed specifically at IGD, and not at other formulations of problematic video gaming. The discourse analysis could be both broadened and deepened by including more key terms and analyzing not only abstract content but also nuances of article content, thus perhaps lessening the hegemony of the confirmatory IGD approach and providing more material for building alternatives. Also, the current study would benefit from supplementing it with quantitative data on class and mental illness, and qualitative data from interviews with “problematic” gamers, focusing on their socio-economic context and motivations. Qualitative approaches are especially lacking in understanding the relations of neoliberalism and mental health, and could provide not only counterhegemonic narratives but also a more grounded theory of neoliberal subjectivity.

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APPENDIX

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Internet Gaming Disorder Scale–Short-Form (IGDS9-SF) (Pontes & Griffiths, 2015)

Instructions: These questions will ask you about your gaming activity during the past year (i.e., last 12 months). By gaming activity we understand any gaming-related activity that has been played either from a computer/laptop or from a gaming console or any other kind of device (e.g., mobile phone, tablet, etc.) both online and/or offline.

| | Never | Rarely | Sometimes | Often | Very Often |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. Do you feel preoccupied with your gaming behavior? (Some examples: Do you think about previous gaming activity or anticipate the next gaming session? Do you think gaming has become the dominant activity in your daily life?) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. Do you feel more irritability, anxiety or even sadness when you try to either reduce or stop your gaming activity? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. Do you feel the need to spend increasing amount of time engaged gaming in order to achieve satisfaction or pleasure? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. Do you systematically fail when trying to control or cease your gaming activity? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5. Have you lost interests in previous hobbies and other entertainment activities as a result of your engagement with the game? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6. Have you continued your gaming activity despite knowing it was causing problems between you and other people? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7. Have you deceived any of your family members, therapists or others | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | Never | Rarely | Sometimes | Often | Very Often |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| because the amount of your gaming activity? | | | | | |
| 8. Do you play in order to temporarily escape or relieve a negative mood (e.g., helplessness, guilt, anxiety)? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9. Have you jeopardized or lost an important relationship, job or an educational or career opportunity because of your gaming activity? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Scoring information:

Total scores can be obtained by summing up all responses given to all nine items of the IGDS9-SF and can range from a minimum of 9 to a maximum of 45 points, with higher scores being indicative of a higher degree of Internet Gaming Disorder. In order to differentiate disordered gamers from non-disordered gamers, researchers should check if participants have endorsed at least five criteria out of the nine by taking into account answers as ‘5: Very Often’, which translates as endorsement of the criterion.

