Research report

Compulsive Computer use and Knowledge needs in Belgium: A multimethod approach

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Introduction and Research Aims

"Compulsive Computer Use and Knowledge Needs in Belgium: A Multi-method Approach (CLICK)" is the first large scale study in Belgium to address the topic of compulsive use of the internet (CIU) and computers (CCU) among adults and adolescents. This research has been financed by and carried out under the administration of the Belgian Science Policy Office (Belspo) in the framework of the "Federal Research Program Drugs." The set-up and results of the CLICK-project are compiled in the present report.

Why study a topic such as compulsive internet use? With the advent of the internet and the wide dissemination of information and communication technologies (ICT), innumerable advantages have been revealed to users. In the same way as previous media such as radio and television entered our domestic space and modified our patterns of time use, today many (or even most?) of us spend a lot of time interacting with screens (e.g., smartphones, video games, personal computers, multimedia tablets) on a daily basis. This offers professional as well as recreational advantages. It allows us to look up information at a glance and to send it to the other side of the world immediately, we organize online meetings with our business partners, Google Street View shows us what the garden of our holiday residence looks like, and we date online and laugh about You Tube videos. Also, playing games has many cognitive and social advantages: they can improve our reaction time, we learn how to cooperate while playing with others, and smart games help make mathematics more fun. Apart from these positive notes, unfortunately one downside of internet use is the excessive over-engagement with any given available application. Most adults and young people use the internet and its applications in a trouble-free way. Nevertheless, a not inconsiderable proportion of the population struggles with its internet use. Within this particular group, a segment even scores very highly on different scales which measure "problematic internet use".

The increasing amount of time spent online has been pointed out many times in the scientific literature as a reason for concern. Some internet users are unable to control their internet use, which can have a negative impact on their work, school, family relationships, etc. In this respect, several authors have examined the concept of "internet addiction". So far, no consensus has been reached among researchers on the terminology referring to problems related to excessive internet use. Some authors use the term "internet addiction", whereas others prefer to speak about "compulsive", "problematic" or "pathological" internet use. Some authors believe that "addiction" is not the appropriate term to refer to a phenomenon in which excessive use can also be fulfilling and rewarding. The debate about the appropriate label for this complicated issue is still open.

In the title of our study and throughout the research, we use the term "compulsive internet use", following van den Eijnden & Vermulst (2008). They posit that there is still too much dissension in the field on whether people can become addicted to gambling and internet use. To support their view, they refer to Frenk & Dar (2000, p. 20) who define compulsion as "specific kinds of bad habits, consisting of dysfunctional, purposeful and repetitive behavior

routines. […] It is usually attached to behaviors that carry short-term pleasure or relief of stress, but negative long-term consequences". The term compulsive refers thus to the involuntary part of internet use, the lack of control, longing for reduced use but being unable to reduce the amount of time spent on the internet, thinking about it in a preoccupied way when not online, the intense desire to use a specific internet application, etc. Likewise, the Addiction Research Institute in Rotterdam (IVO), center of expertise and foreign partner in the CLICK-project, uses the term compulsive internet use in their vast and large-scale research projects on the topic. Furthermore, internet addiction seems to imply an addiction to the internet itself whereas most so-called "addicts" are instead dependent on certain internet applications such as gaming, pornography or online communication, which is expressed through the compulsive use of the internet. In order to tackle these issues, Gert-Jan Meerkerk, researcher at IVO, developed and validated the Compulsive Internet Use Scale (CIUS). This validated and compact measuring instrument has been applied in the current research.

It may by now be clear that the assessment of "problematic", "pathological" or "compulsive" internet use implies more than jotting down the exact amount of time people spend online. It involves a cluster of indicators that point in the direction of problematic use. What makes someone a compulsive user in our research set-up? Rather than merely the precise number of hours people spend in front of a computer screen, it is the way people use the internet and their motivations for doing so that may reveal compulsive use. The CIUS consists of 14 items (see survey questionnaires in appendix). Each item is part of a subgroup of items measuring one aspect of problematic internet use. We asked, for instance, how often a respondent continues to use the internet despite his or her intention to stop, or how often he or she finds it difficult to quit an internet session. These items fathom lack of control over one's internet use. Not everyone believes something is wrong with his or her internet use. However, denial of the problem is also a symptom of well-known addictions. For this reason, an additional item asks how often other people such as partners or parents tell respondents they should reduce their internet use. Other aspects indicating problematic internet use include preferring to spend time online rather than spend time with others one usually likes, neglecting school or work, being short of sleep because of internet use, thinking about the internet even when not online, longing for the next internet session, and often using the internet to escape from real life when one is feeling down.

Our report aims to offer a thoughtful and balanced approach to these issues. Balanced, because we do not want to throw out the baby with the bath water: not everything about games, social networking sites, or electronic media use is bad, by any means. Balanced, too, as we offer not only numerical data, but also qualitative data collected from people who have personal experience of dealing with problematic internet use.

A mixed-methods approach was the most appropriate way to deal with the vast and multiple knowledge needs and results in mental health policy recommendations (see chapter "Recommendations"). Our aim was to broaden the understanding of compulsive computer/internet use in Belgium by incorporating and connecting both quantitative and qualitative research. Qualitative data gathered through life-story/in-depth interviews allowed

us to deepen and refine our knowledge and understanding of the life-related process in which internet use becomes problematic (e.g., social context, economic context, psychological context, the importance of family). We did so by reconstructing the life trajectories of people with a CIU problem and by singling out crucial moments in this process. Our close collaboration with a network of practitioners and their therapeutic approach provided indispensable insights. In this sense, the quantitative and qualitative methods afforded complementary useful information on compulsive computer/internet use while at the same time facilitating insight into the life-related meanings assigned to computers and the internet by our interviewees and expressed in their own words. It is important to note that these two approaches are doubly linked: the measuring instrument (CIUS, Meerkerk et al. 2009) provided quantitative data on compulsive use that could be confirmed and nuanced via life-stories, but life-stories also contributed to evaluating the epistemological and psychological assumptions of the measuring instrument. Both data collections ran concurrently.

This report is organized systematically according to the goals set by Belspo and the research team. The first chapter presents the literature review of scientific publications devoted to CCU/CIU, followed by an overview of the institutional responses to those problems in countries comparable to Belgium (chapter 2). The third chapter provides a general survey of the current prevention and specific care-delivery related to CIU/CCU by public health institutions in Belgium. The fourth and fifth chapters present the results of the quantitative research on the prevalence rates of people with CIU/CCU in Belgium and their socio-demographic characteristics (survey among adolescents and adults). The sixth chapter comprises the findings of the qualitative research based on life-story interviews with problematic internet/computer users. Finally, the last chapter summarizes the most important findings of this research and formulates some recommendations.

This research has been carried out in the Center for Information, Law, and Society (CRIDS) of the University of Namur by Annabelle Klein and Omar Rosas, the Institute for Media Studies (IMS) of the KU Leuven by Rozane De Cock and Jolien Vangeel, the Reference Center in Mental Health (CRéSaM) by Pascal Minotte, and the Addiction Research Institute of Rotterdam (IVO) by Gert-Jan Meerkerk. The research team is grateful to the experts working in the field and in services in Brussels, Flanders, and Wallonia who have helped us make this project a success. We therefore wish to express our gratitude to all the people involved in the project: l'Hôpital de jour La Clé, Centre Alpha, La Clinique du jeu pathologique Dostoïevski, VAD, CAD Limburg, Medisch Centrum KU Leuven. We are also indebted to our respondents, all the members of the steering committee of the CLICK-project, and the Belspo staff. A special word of thanks goes to Aziz Naji for his professional guidance and his important feedback throughout the project.

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The CLICK researchers

CHAPTER 1:

Literature Review-State of the Art

1 Literature Review-State of the Art

We have organized this literature review in three steps: (1) searching and selecting relevant publications in English, French, and Dutch on different databases, (2) identifying, classifying, and systematically reviewing publications according to their theoretical, empirical or clinical aims and scope, and (3) putting forward a qualitative analysis of studies addressing the prevalence of compulsive Internet and video game use.

As our first step, we established our selection criteria in order to include only full papers published in peer-review journals and chapters in scientific books devoted to the topic of this research. Therefore, studies with only an indexed abstract, posters presented at seminars and conferences, unpublished research papers available online, fact sheets, and unpublished dissertations have been excluded from the review process. Our aim here was to focus our review on publications submitted to high-quality journals and domain-specific books, the results of which have been discussed in international settings. We have thus collected and reviewed 259 publications. The complete list of papers, chapters, and books selected for this review is available in Appendix 1.

In the second step, we classified publications according to their main approach (i.e., theoretical, empirical, clinical). Theoretical studies mostly contain epistemological reflections about conceptual models and controversial aspects of multiple definitions of problematic (e.g., addictive, compulsive, pathological, excessive) internet and video game use. These studies often raise questions about the explanatory scope of nosological views that draw on the DSM-IV diagnostic criteria (including substance abuse and pathological gambling). We analyzed the different theoretical approaches to excessive internet and video game use in order to identify the relevance of conceptual models for understanding the nature of those excessive uses. In addition, empirical studies were classified and reviewed according to six categories inspired by Widyanto & Griffiths' (2006) classification, namely:

1. Studies comparing excessive internet and video game users with non-excessive users
2. Studies examining vulnerable groups of excessive internet and video game use, particularly adolescents and young adults
3. Studies examining the psychometric properties of excessive internet and video game use
4. Case studies of excessive internet and video game use
5. Correlational studies examining the relationship between excessive internet and video game use and other variables (e.g., psychiatric problems, depression, self-esteem)
6. Studies addressing the prevalence of problematic internet and video game use.[1]

1 Widyanto & Griffiths' original classification only includes the first five types of studies. According to the aims of the CLICK project, we have added the sixth type, namely studies reporting prevalence data.

Finally, clinical studies related to problematic internet and video game use were analyzed to identify types of problematic use being treated and reported, diagnostic criteria, therapeutic approaches, and reported results.

In the third step, and given that one of our goals is to more adequately assess the extent of compulsive internet and video game use in Belgium, we also reviewed studies reporting prevalence data on these issues. To do so, we set up an instrument for assessing the quality of publications reporting prevalence data (see Appendix 2). This instrument consists of an analysis grid built upon the STROBE Statement (*Strengthening the Reporting of Observational Studies in Epidemiology*)[2], which defines the essential elements that need to be reported in epidemiology research. This grid consists of 21 items to assess a study's quality by considering, for instance, methodological design, data collection, and statistical analysis. Each item obtains a maximum score of 2 points if quality criteria are fully and explicitly reported, 1 point if these criteria are partially reported, and 0 points if the criteria are not reported. The maximum score for a publication is 42 points. However, since none of the prevalence studies reviewed here obtained the maximum score, studies scoring a minimum of 20 points were selected for this analysis.

1.1 Theoretical Studies

As far as theoretical studies are concerned, the first thing to note is that the original term "internet addiction" is far from being unambiguously defined and consensually applied by most scholars. Definitions, associated contents, and diagnostic criteria for the term vary considerably among authors. We have thus a plethora of names and approaches such as "internet addiction" (Young, 1998ab), "problematic internet use" (Caplan, 2002), "pathological internet use" (Davis, 2001), and "compulsive internet use" (Meerkerk et al. 2009), in which authors address the problematic nature of excessive internet use and, at the same time, strive to be distinctive by putting forward new models and measurement scales. The same plethora is found among researchers investigating the problematic nature of excessive video game playing. The variety of names and models available in the literature reflects the epistemological choices made by researchers who, by drawing on the DSM-IV diagnostic criteria and/or on their own clinical experience, try to capture and explain why and when internet (and video game) use can become "addictive", "problematic", "pathological", "compulsive", etc. Figure 1 synthesizes these different approaches according to their place within the universe of diagnostic criteria established by the DSM-IV.

2 http://www.strobe-statement.org/

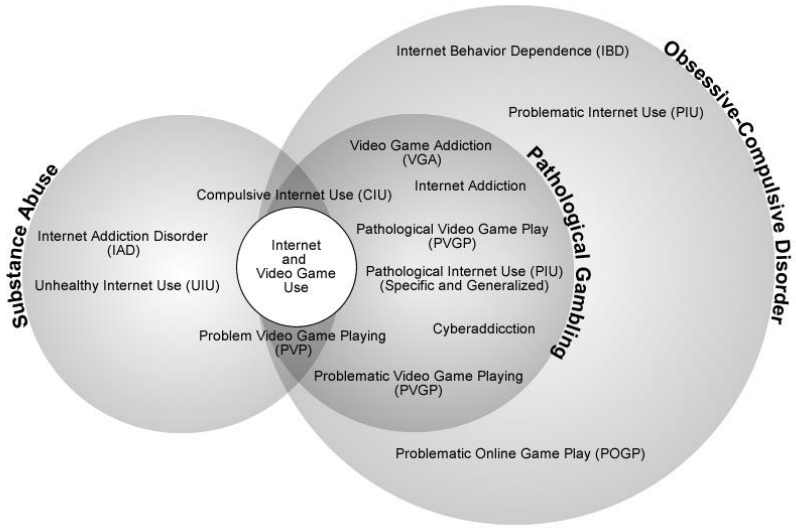

Figure 1: Approaches to internet/computer-related problems according DSM-IV

It should be noted, however, that using DSM-IV diagnostic criteria as a guide does not guarantee that researchers will reach a consensus on the problem at issue, even among those who adhere to the nosological framework of that manual. For some authors who are reluctant to quickly diagnose and label problematic uses (Tisseron, 2008, 2009, 2012; Valleur, 2006, 2007ab, 2009), the term "addiction" is not well suited to categorizing excessive behavioral patterns that may imply pursuing a rewarding passion. In addition, and as we have already noted, since the mid-1990s there has been no consensus among researchers on the conceptualization and diagnosis of computer- and internet-related problems based on the DSM-IV. Those problems were first categorized in terms of substance abuse (Young, 1996), then in terms of impulse-control disorders (such as pathological gambling) (Young, 2004), and more recently in terms of "compulsion" at the interface between substance abuse and gambling (Meerkerk, 2007, 2008). Several reviews of the literature (Beard, 2005; Chou et al., 2005; Morahan-Martin, 2005; Sim et al., 2012) and meta-syntheses (Byun et al., 2009; Douglas et al., 2008) record multiple conceptualizations and, by the same token, highlight the difficulty in comparing heterogeneous and sometimes mixed results.

In order to harmonize the different diagnostic perspectives, some authors have argued for including the term "internet addiction" in the fifth version of the DSM (Block, 2008; Tao et al., 2012; O'Brien, 2010) pointing out that there is by now enough scientific evidence to posit a *compulsive-impulsive spectrum disorder* related to problematic computer and internet use. One feature of this disorder is that it takes many forms depending on the type of application, namely video games, online games, pornographic websites, social networks, etc. However, the American Psychiatric Association (APA) has decided not to include "internet addiction" in the DSM-V, though an appendix about video games and internet addiction will be included in the forthcoming version.

However, as Widyanto & Griffiths (2006) have pointed out, it seems premature at this point to favor one name over others in order to characterize computer, internet, and video game

"addiction". We can nevertheless highlight from this review of theoretical studies that there is a tendency among some researchers to distinguish what Griffiths (1998, 1999, 2000ab) has called addiction *to the internet* from addiction t*o specific applications* available on the internet, that is, behavioral disorders associated with specific opportunities available via the internet. In this case, the medium may be more harmful for susceptible individuals. This trend could, in the short term, add other names to the repertoire of terms associated with "internet addiction".

1.2 Empirical Studies

1.2.1 Excessive versus Non-Excessive Internet Use

One feature of studies comparing excessive internet and video game users with non-excessive users is that they often aim at defining what is addictive in these uses as well as the associated negative consequences. The first empirical, scientifically-oriented research in this area dates back to the late 1990s when Young (1998a), using a questionnaire built on on the DSM-IV diagnostic criteria for pathological gambling, observed that 80% of surveyed individuals responded "Yes" to 5 of 8 criteria, and that "addict" individuals spent more time online (38.5 hours per week) than non-addict ones (4.9 hours per week). The amount of time devoted to using the internet and video games (time which is not obviously allocated to other family or social activities), became measurable data to distinguish excessive users from non-excessive ones. In addition, the "addict" individuals showed a preference for more interactive applications including chat rooms and forums. Young's conclusion was therefore obvious: the more an application on the internet is interactive, the more it is addictive. Although several methodological flaws can be pointed out in this first study (e.g., self-selected sample, lack of validation of the measurement scale), it has the merit of having opened a new field of research.

Other studies have also examined excessive internet use. Egger & Rauterberg (1996) conducted an online survey in Switzerland. Using a survey similar to Young's, they found that over 80% of people surveyed felt they were "addicted" to the internet, and indicated complaints from their families and friends because of the time spent online. As was the case in Young's study, this one too had several methodological problems, including the fact that most of the sample was composed of Swiss males. By drawing on the DSM-IV criteria for substance abuse, Brenner (1997) constructed a dichotomous scale (true/false) of 32 items to examine internet addiction (*Internet-Related Addictive Behavior Inventory-IRABI*). Brenner found that older users were more prone to develop internet-related problems than younger users, despite the fact that both groups spent the same number of hours online on average. In addition, Brenner posited that "addict" users manifested symptoms similar to those reported in substance abuse (i.e., tolerance, withdrawal, relapse). However, it is not clear whether the scale used in the study actually measured real signs of addiction. A few years later, Greenfield (1999) conducted an online survey (Virtual Addiction Survey) with a large sample (N = 17,251) using a questionnaire containing demographic items, patterns of internet use (e.g.

frequency, time spent, type of application) and items inspired by the DSM-IV diagnostic criteria for pathological gambling. Greenfield found that 6% of people surveyed met the criteria of internet addiction and showed symptoms of tolerance and withdrawal similar to those of individuals suffering from substance abuse.

More recently, Achab et al. (2011) conducted an exploratory study in France with addict and non-addict MMORPG players (i.e., World of Warcraft). With a sample of 448 adult players (M = 26.6 years, 82.7% male, 34.5% students, 59.3% workers), and by implementing a threefold measurement survey, they found different percentages of internet addiction depending on the measurement instrument: 44.2% (according to Goldberg's scale), 36.2% (according to Orman's test) and 27.5% (according to their own scale based on the DSM-IV criteria for substance abuse). Compared to non-addicts, addicts showed high levels of tolerance (more hours spent playing due to pressure put by guild members) and more social, family, marital, financial, and professional problems. In addition, addicts reported high levels of irritability, sleep disorders, mood disorders, and difficulty in regulating their emotions.

1.2.2 Vulnerable Groups of Excessive Internet Use

Many empirical studies address the risks associated with excessive use of the internet among children and adolescents, in particular students (but also unemployed individuals) (Anderson, 2001; Ferron & Dugay, 2004; Fu et al., 2010; Gupta & Derevenski, 1996; Hawi, 2012; Israelashvili & Bokobza, 2012). Insofar as this population has more flexible schedules and gets more access to ICT tools, their levels of vulnerability and risk tend to be significantly higher. Among the problematic applications usually reported in these studies are chat rooms, forums, instant messaging services, interactive online games, video games, and social networks. Scientific interest in the latter has grown exponentially since 2004 with the advent of Facebook. Despite several well-recognized benefits of these virtual networks in terms of strengthening communication and sharing multimedia content, some studies (Andreassen et al., 2012; Kuss & Griffiths, 2011ab) have recently raised questions about the addictive consequences of those applications for some individuals, particularly for adolescents and college students. Besides the fact that excessive virtual communication may have unsuitable consequences for face-to-face relationships, researchers have also pointed out the urge felt by some individuals to stay permanently connected online in order not to miss the latest updates of their "friends". This urge is often correlated with dysfunctions in the family, at school, and, in some cases, on a professional level, as well as with psychological symptoms of loneliness, depression, dissatisfaction with life, and low self-esteem. In addition, in most studies correlations point to a gender difference, according to which females tend to be more at risk of developing "addictive" behaviors related to social networks than males.

1.2.3 Psychometric Properties of Scales

Several psychometric studies aimed at introducing and/or validating measurement scales of internet, video game, online game, and social networks addiction have been identified in this review (for instance, Andreassen et al., 2012; Beard & Wolf, 2001; Caplan, 2002, 2010; Demetrovics et al., 2008; Jelenchick et al., 2012; Kelley & Gruber, 2010; Kim & Kim, 2010; Lemmens et al., 2009; Meerkerk et al., 2009). The variety of diagnostic criteria and instruments applied in pilot tests and validation studies makes it impossible to unify all those perspectives in a single categorization. What we can see from these studies is that there is a widespread tendency to build nosological models of internet addiction according to the diagnostic framework of the DSM-IV and to test them empirically. Whether authors use the terms "pathological", "problematic", "compulsive", "addictive", or "excessive" to address issues in internet and video game use, there are always references to substance abuse, pathological gambling and other impulse-control disorders. In addition, the fact that each instrument is built on a set of particular diagnostic criteria creates difficulties in interpreting results homogeneously: cut-offs are not established in the same way even among researchers using the same set of criteria, some terms are vaguely defined (e.g., "concern"), factor analyses sometimes reveal contradictory results (overestimation/underestimation of major and minor factors), correlational analyses do not allow a causal link to be established between certain comorbidities and the development of addiction, etc. Despite these methodological drawbacks, psychometric studies provide an excellent overview of the advancement of quantitative research on the negative effects of computers, the internet and video games.

1.2.4 Case Studies

We have identified some publications reporting case studies of problematic internet and video game use (Bowen & Firestone, 2001; Griffiths, 2000b; Lee, 2011; Leon & Rotunda, 2000; Solmaz et al., 2011; Wood, 2008; Young, 1996). Although the situations described therein cannot be generalized, these studies provide relevant information to understand the life experiences of people suffering an internet addiction, experiences whose complexities often fall outside the scope of quantitative studies. Most of these studies depict cases of young adult males (with some exceptions, for instance, Young, 1996 and Bowen & Firestone, 2001), whose internet use has become addictive. Those individuals usually have a high level of education (college and university) and the internet has become the center of gravity of their lives. Problematic situations include the progressive abandonment of family and social activities because of the time spent on the internet (8-20 hours per day, 30-60 hours per week), school and work absence, recurring disruptions of the circadian rhythm, increased social isolation and introversion, and for younger individuals, conflicts with parents. An interesting case in point here is a 16-year old Turkish male (Solmaz et al. 2011) who has been diagnosed with internet addiction (20 hours per day on average) coupled with hacking activities. This teenager was a member of a hacking group that assigned him specific tasks to destroy pornographic and "enemies' websites". As he felt invested with a mission, he felt he should be constantly online on pain of not responding to an imminent order. After intensive

pharmacological and psychological treatment, he was able to regain control of the situation and use the internet again without problems. The importance of case studies lies in that they highlight the complexity of situations that can be diagnosed as addictive. While some "standard" criteria concerning individual dispositions may partly explain the process leading to internet addiction, we should consider that other factors related to family, social, and cultural environments, too complex to be identified through a standard questionnaire, play a significant role in the development and manifestation of problematic behaviors associated with internet and video game use.

1.2.5 Correlations and Comorbidity

Many studies focus on correlational factors and comorbidities associated with problematic internet and video game use (for instance, Black et al., 1999; Caplan, 2002, 2007; King et al., 2011; Armstrong et al., 2000). Among the correlational factors often reported are gender (the percentage of males who are "addicted" to video games, online role-playing games, online gambling, and pornographic websites is significantly higher than that of females, while the latter is significantly higher in the case of instant messaging services, dating websites, and social networks), the type of video game (e.g., violent/non-violent games), the type of online game (MMORPG), the type of application (MSN, Facebook, pornographic sites), users' motivations (sensation seeking, escape from real life problems, anonymity in virtual worlds), users' level of "flow" and involvement in their online activities, the amount of time spent on these activities and, in a recent study (Park et al., 2011), cognitive dysfunction and poor performance in IQ comprehension tests.

Other studies suggest that problematic internet and video game use are often associated with disorders belonging to axis I (e.g., mood disorders, anxiety, sleep disorders, substance abuse) and II (personality disorders) of the DSM-IV, but also with factors connected with psychosocial well-being (loneliness, self-esteem, perceived control, life satisfaction).

Although correlational and comorbidity studies highlight several risk factors associated with problematic internet and video game use, we should be careful when interpreting their results, as the co-presence of those factors and addictive situations does not, in itself, establish a causal link between them. While psychiatric disorders may increase the risk of internet and video game addiction in some individuals, the addiction situations can also contribute to the development of psychosocial problems, and even accentuate pre-existing problematic conditions.

1.2.6 Prevalence Studies

After collecting 41 studies on the prevalence of problematic internet and video game use, we selected 26 which scored a minimum of 20 points out of 42 according to the quality grid inspired by the STROBE Statement. Although the 26th study (Aboujade et al., 2006) obtained

a score of 18 points, we have included it here because it is one of the first investigations into internet addiction in the United States with a large sample (N = 2513). A detailed description of these studies can be found in Table 1.

In general, prevalence rates of internet addiction vary considerably between 0% in Puerto Rico (Liberatore et al., 2011), 0.7% in the USA (Aboujade et al., 2006) and 37.9% in China (Leung, 2004); prevalence rates of video game addiction also vary from 1.3% in the Netherlands (Haagsma et al., 2012) to 9.4% in Canada (Turner et al., 2012). It should be noted that the Puerto Rico study alluded to above was conducted on a non-representative sample of 71 individuals, and the U.S.A study (Aboujade et al., 2006), despite having a large sample size, has several methodological flaws, including a moderate response rate (56.3%), a low proportion of young users (Mean age = 48.5 years), and a non-validated measurement instrument extrapolating diagnostic criteria for obsessive-compulsive disorder, substance abuse, and other impulse-control disorders. These methodological flaws have very likely biased the results so that researchers may have underestimated the prevalence rate of internet addiction—a quick comparison with other studies conducted in the same country shows that reported prevalence rates of internet addiction vary from 4% to 25% (the latter being obtained with a non-representative sample of 74 university students).

In general, prevalence rates of internet addiction are higher in the United States (up to 25%, in many cases with small and unrepresentative samples) and in Asian countries such as China (37.9%) and South Korea (10.7%) where governments have already recognized the extent of internet addiction among their people. In European countries, prevalence rates of internet addiction vary between 1.5% in the Netherlands, 1.7% in Finland, 1.0-1.98% in Norway, 5.4% in Italy (on a sample of 275 college students) and 8.2% in Greece (on a large sample of 2200 adolescents). Two selected studies provided prevalence data on video game addiction in European countries: the Netherlands (1.3%) and Germany (1.7%).

Most of the prevalence studies selected here adopt and/or adapt diagnostic criteria from the DSM-IV. We have thus identified four studies designed on the basis of criteria for substance abuse, 19 others based on criteria for pathological gambling, 1 based on Davis' (2001) cognitive-behavioral model, and 2 others based on ad hoc non-validated scales. Because of the differences between conceptualizations of and diagnostic criteria for internet and video game addiction, the selection techniques of target populations, the choice of sampling techniques, and the criteria to establish cut-off points, prevalence rates should be interpreted with caution and justified within the context of the epistemological approach taken by researchers.

1.3 Clinical Studies

Clinical studies reviewed here tend to emphasize the therapeutic advantages and limitations of psychological and pharmacological treatments of internet and video game addiction. On the psychological side, most studies use different diagnostic instruments (Orman’s Test, Young’s

test) to detect cases of internet and video game addiction, and they highlight the benefits of cognitive behavioral therapy, motivational interviewing, family therapy (especially for adolescents with compulsive use of video games and MMORPGs, and living in dysfunctional families), couple therapy (especially for young adults with problematic situations related to cybersex), group therapy, the 12-steps model—often used in the treatment of alcoholism—or psychodynamic approaches such as logotherapy. However, only a small proportion of them provide empirical data to support their assessments.

As far as pharmacological treatments are concerned (Bostwick & Bucci, 2008; Han et al, 2009; Hand & Renshaw, 2012), we find several studies, mostly conducted in the United States and Asian countries (e.g., China, South Korea, Taiwan, Hong Kong), in which opioid antagonists, mood stabilizers, serotonin reuptake inhibitors, and other drugs are used as a basis for therapeutic protocols aimed at dealing with addiction to MMORPGs. These pharmacological approaches are often coupled with brain imaging techniques and seek to highlight the striking similarities between the neuronal activity of patients addicted to MMORPGs (and cybersex) and that of individuals manifesting substance abuse. Although few studies recommend a purely pharmacological treatment, they have sparked the debate over the relevance of pharmacological options in the clinical management of internet and online games addiction. However, it should be noted that pharmacology-oriented studies have several methodological flaws such as inconsistencies in the definition and diagnosis of problems related to internet and video game use, lack of justification of the sample size, lack of randomization and blind control groups, and incomplete information on long-term effects of the treatment. In addition, the rationale for applying those treatments has been largely based on observations of their results for other addictive behaviors, rather than on previous research on internet and video game addiction. In so far as there is no unified approach to treating and preventing internet and video game addiction, drawing definitive conclusions about the efficacy of strictly pharmacological treatments would be inexact.

Although strictly clinical publications are scarce, several systematic reviews of studies on treatments for internet (King, Delfabbro & Griffiths, 2012; 2012; King, Delfabbro, Griffiths & Gradisar, 2011) and game addiction (Griffiths & Meredith, 2009) provide a critical analysis of the strengths and weaknesses of those studies. Given the novelty of this clinical phenomenon, we wish to highlight a few qualitative studies addressing mental health professionals' perceptions of and attitudes towards internet and video game addiction. These studies are interesting in that they give us a glimpse of how psychologists, psychiatrists, and counselors perceive these "new addictions" and of how they adapt their therapeutic approaches accordingly.

In a qualitative study aimed at assessing the experiences of Dutch professionals as part of a treatment combining cognitive-behavioral therapy and motivational interviewing (i.e., Lifestyle Training Program) for Internet addiction, Van Rooij and colleagues (2012) found that this treatment is effective provided therapists can set reference points or markers together with their patients. Among these markers are: (1) monitoring internet use with a diary (to be kept by the patient, including a functional risk/benefit analysis of internet-related activities),

(2) establishing specific goals to be achieved during therapy (gaining control over internet use, reducing the time spent devoted to the problematic applications, learning how to fill their free time with other motivating activities—complete abstinence is not the goal, and (3) developing prevention strategies in case of relapse. In general, and depending on certain adjustments to the type of problematic application, professionals reported that combined cognitive behavioral therapy and motivational interviewing can be usefully adapted to treatments for internet addiction.

Two other qualitative studies have examined the perceptions and attitudes of psychiatrists and health professionals dealing with cases of internet and/or video game addiction. In the first study (Thorens et al. 2009), 94 Swiss psychiatrists in the three language regions (German, French and Italian) were interviewed via a questionnaire aimed at knowing their views about the concept of internet addiction, their diagnostic methods, and the types of treatment they use with their patients. The results showed three distinct groups. In the first group, 20 psychiatrists rejected the concept and its importance, did not consider internet addiction as a clinical problem and therefore did not see the need for a specific treatment. In the second group, 66 psychiatrists considered that internet addiction is a real clinical problem that is likely to increase in the coming years, but 40.9% of them did not know the exact proportion of people with internet addiction among their patients. Nevertheless, 41% of psychiatrists in this group offered a combined psychological and pharmacological treatment to their patients. The third group was composed of 8 psychiatrists who considered that internet addiction is a real health problem, but is often overestimated by the media. These eight professionals considered that treatments tailored to cases of internet addiction exist (the most frequently-cited being a psychotherapeutic treatment) and 50% of them always look for signs of internet addiction among their clients.

In the second study (Acier & Kern, 2011), four focus groups looking at the management (diagnosis and treatment) of problematic internet use were conducted with 21 consultants working in public centers for addiction rehabilitation in Quebec. According to these professionals, two types of problems are most mentioned in consultation: (1) MMORPG (e.g., World of Warcraft) and virtual worlds (Second Life), and (2) computer-mediated relationships such as instant messaging and dating websites. For these professionals, the prototype of the patient who comes in contact with them is a teenager or young adult who spends most of the day (and often late into the night), playing on the Internet (12-14 hours per day) or visiting online dating sites. In addition, these patients are often introverted, feel alone and have difficulties in expressing or talking about their feelings. For these players, their avatars become their exclusive focus, not only within the virtual world, but also in their real lives. Professionals in this study use several criteria to distinguish problematic from non-problematic uses such as: (i) the imbalance between different life spheres: the over-investment of playing time at the expense of social (family, friends), academic, and professional life, (ii) feelings of loneliness, emptiness, family and marital conflict, neglecting basic needs such as washing, eating, and sleeping, (iii) the loss of control (iv) personal suffering or distress. These problems are often accompanied by anxiety and attention disorders as well as the use of substances such as cannabis and cocaine.

Overall, the treatment for internet and video game addiction is a small but apparently growing part of the clinical research on addictions. However, although there are many centers and clinics that provide care for these issues, the details of their treatment programs are rarely published in the scientific literature. In addition, further research is needed to determine whether individuals having problems with a particular computer application require different types of treatment (for example, if people “addicted” to online games require a different treatment from the one needed for people "addicted" to social networks).

Conceptual Model	Reference	STROBE Score (Max= 42)	N	Age	Sampling Frame	Recruitment + Sample type	Scale	Criteria for addiction/compulsive use	Scale previously validated	Type of test	Prevalence Rate	Country
Substance Abuse (DSM)	Scherer (1997)	29	531	M= 24.64	University of Texas-Austin	E-mail random sample	Internet Addiction Scale (Scherer)	"Yes" answers to ≥ 3 out of 10 items	No	Paper-pencil	13 %	USA
	Anderson (2001)	25	1078	--	7 American colleges and 1 Irish college	Students recruited by teachers of each college	Anderson's Internet Addiction Scale (based on substance abuse DSM-IV)	"Yes" answers to ≥ 3 out of 7 items	Partially	Paper-pencil	7 %	USA
	Lavin et al (2004)	22	218	≥ 18	Small private university from West New York	E-mail sent to the campus	Internet addiction scale created by authors	score ≥ 4 points on ≥ 3 out of 7 items	No	Online	15-20%	USA
	Forston et al (2007)	30	411	R= 18-56 M= 20.4 SD= 3.2	South-Western large University	Introductory course to psychology	Internet Addiction Scale created by authors on the basis of DSM-IV-TR (pathological gambling + substance abuse)	9 items, on two 5 and 3 point scales. *Liberal criteria* : *Cut-offs* from the middle of each scale *Conservative criteria* : only higher scores have been considered	No	Paper-pencil & online	Liberal : 26.3 % Conservative : 1.2 %	USA
Pathological Gambling (DSM)	Johansson & Götestam (2004)	39	3237	R= 12-18	Recruitment by a specialized organization	Community sample	*Young Diagnostic Questionnaire* (YDQ)	≥ 5 out of 8 symptoms	Yes	Telephone Paper-pencil	1.98 %	Norway
	Kaltiala-Heino et al (2004)	34	7292	R= 12-18 M= 12.6 14.6 16.6 18.6	Data from national health survey	Sample from specific dates during June, July and August	*Young's Internet Addiction Test (modified)*	≥ 7 out of 9 symptoms	Yes	Paper-pencil	1.7% boys 1.4% girls	Finland
	Leung (2004)	29	699	R= 16-24 M= -- SD= --	Telephone survey with individuals from the Net Generation (born 1977-1997)	Probabilistic sample from phone databases	*Young's Internet Addiction Scale*	≥ 5 out of 8 symptoms	Yes	Telephone	37.9 %	China

Conceptual Model	Reference	STROBE Score (Max= 42)	N	Age	Sampling Frame	Recruitment + Sample type	Scale	Criteria for addiction/compulsive use	Scale previously validated	Type of test	Prevalence Rate	Country
Pathological Gambling (DSM)	Pallanti et al. (2006)	27	275	R= M= 16.67 SD= 1.85	College students	--	*Young's Internet Addiction Scale*	≥ 5 out of 8 symptoms	Yes	Paper-pencil	5.4%	Italy
	Ghassemzadeh et al (2008)	25	1968	R= 14-16 M= -- SD= --	Secondary schools in Tehran	Random sampling (clustering)	*Young's Internet Addiction Test*	≥ 80 out of 120 points	Yes	--	3.8%	Iran
	Jang et al (2008)	26	851	R= -- M= 13.9 SD= --	Students from 4 colleges in Seoul	Self-selected sample	*Young's Internet-related Addiction Scale*	≥ 70 out of 100 points	Yes	Paper-pencil	4.3%	South Korea
	Park et al (2008)	23	903	--	Secondary school and college students	Random representative sample	*Young's Internet Addiction Test*	≥ 70 out of 120 points	Yes	Paper-pencil	10.7%	South Korea
	Siomos et al. (2008)	20	2200	R= 12-18 M= 15.34 SD= --	120 classes in 85 schools in Thessaly, Greece.	Random stratified sample	*Young Internet Addiction Test*	≥ 5 out of 8 questions	Yes	--	8.2%	Greece
	Bakken et al. (2009)	39	3399	R= 16-74	Part of a national survey	Representative sample on the basis of a national database	*Young Diagnostic Questionnaire* (YDQ)	≥ 5 out of 8 symptoms	Yes	Paper-pencil & online	1.0%	Norway
	Iacovelli & Valenti (2009)	22	74 students	R= 16-30 M= -- SD= --	Hofstra University	Recruitment organized on the university campus	*Internet Addiction Test* Widyanto & McMurran (2004)	Score of ≥ 40 out of 100	Yes	Paper-pencil	25%	USA
	Desai et al (2010)	24	4028	R= 14-18	Cross-sectional national survey of adolescents in public schools	Representative sample of adolescents from the State of Connecticut	Diagnostic criteria from DSM-IV (impulse-control disorders) and the *Minnesota Impulse Disorder Inventory (MIDI)*	3/3 items of *MIDI*	No	Paper-pencil	4.9%	USA

Conceptual Model	Reference	STROBE Score (Max= 42)	N	Age	Sampling Frame	Recruitment + Sample type	Scale	Criteria for addiction/compulsive use	Scale previously validated	Type of test	Prevalence Rate	Country
Pathological Gambling (DSM)	Fu et al (2010)	34	208	R= 15-21	Data from survey on suicidality among adolescents	Two-wave panel : T_1= June-August 2004 T_2= June-August 2005 Representative random sample of adolescents	*Young Diagnostic Questionnaire* (YDQ)	≥ 5 out of 8 symptoms	Yes	Paper-pencil	6.7 %	Hong Kong
	Thomas & Martin (2010)	32	E_1= 1326 (990 school + 335 college) E_2= 705	R_1= 12-17 15-19 M_1= 13.83m 17.01 m 14.41f 17.02f SD_1= 1.21m 0.75 m 1.22f 0.74f R_2= 17-54 M_2= 21.01m 21.69f SD_2= 5.32m 7.0f	E_1 : Secondary school and college students E_2 : University students	E1 : random sample E_2 : self-selected sample (First year students in psychology and engineering)	*Video-arcade game addiction* (Fisher, 1994); *Young's Diagnostic Questionnaire* (1998) for Computer game and internet addiction	Fisher= 9 out of 10 criteria Young= ≥ 5 out of 8 symptoms	Yes	Paper-pencil	5 % (video games) 4.6 % (internet)	Australia
	Van Rooij et al. (2010)	36	T_1= 4559 T_2= 3740	R= 13-16 M_{t1}= 14.35 SD_{t1}= 1.18 M_{t2}= 14.34 SD_{t2}= 1.04	Longitudinal research on secondary schools (2008 and 2009)	Stratified sample (region, urban settings and education level),	*Compulsive Internet Use Scale*+ amount of playing hours per day and per week	*Cut-offs* not defined	Yes	Paper-pencil	T_1= 1.6 % T_2= 1.5 %	Netherlands
	Christakis et al. (2011)	31	224	R= 18-20 M= 18.78 SD= --	Students of two American universities	Representative sample of undergraduate population	*Young's Internet Addiction Test*	≥ 80 out of120 points	Yes	Online	4 %	USA
	Liberatore et al (2011)	26	71	R= 13-17	Adolescents in a daycare clinic	Non representative clinical sample	*Young's Internet Addiction Test*	≥ 80 out of120 points	Yes	--	Addiction= 0 % Moderate internet problems = 7%	Puerto Rico

Conceptual Model	Reference	STROBE Score (Max= 42)	N	Age	Sampling Frame	Recruitment + Sample type	Scale	Criteria for addiction/compulsive use	Scale previously validated	Type of test	Prevalence Rate	Country
Pathological Gambling (DSM)	Haagsma et al (2012)	32	902	R= 14-81	Recruitment organized by a for-profit company	National panel	*Problematic Gaming Behavior Scale* created by authors + *Game Addiction Scale* (Leemens)	Score of ≥ 4 on a 5-point scale + 5-point Likert scale cut-off > 3	---	Online	1.3 %	Netherlands
	Hawi, N. (2012)	28	817	R= 10-22 M= 15 SD= 2.12	Secondary school students	Random sampling	*Young's Internet Addiction Test*	≥ 80 out of 120 points	Yes	Online	4.2 %	Lebanon
	Turner et al. (2012)	34	2832	R= 12-19	Regional survey on secondary schools	Stratified sampling (school, class)	*Problem Videogame Playing Scale* Tejeiro Salguero & Bersabé Morán, 2002)	≥ 5 out of 8 symptoms	Partially	Paper-pencil	9.4 %	Canada
Davis' cognitive-behavioral model	Niemz et al (2005)	32	371	M= 21.5 SD= 5 R= --	Nottingham Trent University	Self-selected sample Students in natural and social sciences	*Pathological Internet Use Scale* (Morahan-Martin & Schumacher, 2000)	Score of ≥ 4 out of 13 symptoms	Yes	Online	18.3 %	UK
Other diagnostic models	Aboujade et al (2006)	18	2513	R= -- M= 48.5 SD= --	National epidemiologic survey	random–digit-dial telephone calls	Extrapolation of diagnostic criteria for problematic internet use, substance abuse, OCD and other impulse-control disorders	"Yes" answers to ≥ 4 out of 8 questions	Non	Telephone	0.7 %	USA
	Rehbein et al (2010)	38	15168	R= -- M= 15.3 SD= 0.69	Survey conducted by the Institute for Criminology Research of Lower Saxony	Random representative sample of German adolescents	New *Video Game Dependency Scale* set up by authors on the basis of the *Internet Addiction Scale* (Hahn & Jerusalem, 2001)	(14 items, 4 points scale) ≥ 42 of 56 points	First validation study	Paper-pencil	1.7 % general (3% boys 0.3% girls)	Germany

Table 1: Synthesis of prevalence studies on internet and video game addiction selected for quality analysis

CHAPTER 2:

Institutional responses to CCU/CIU in some countries

2 Institutional responses to CCU/CIU in some countries

Over the last decade, most European countries have considered the excessive use of the internet and video games as an important health issue on their political and social agendas. National and international media often channel pundits' worries about the negative psychological and social consequences for people who spent huge amounts of time playing video games and surfing the internet, and scientific research has provided findings showing that some of those situations can be chronic. However, despite the increasing attention being paid to these topics, it should be noted that so far there is no unified institutional framework for political directives concerned with the awareness, prevention, and management of these problematic uses in the European Region. To bridge this institutional gap, the European Commission launched the *Safer Internet Programme 2009-2013*[3] which is intended not only to strengthen the measures to protect European children and adolescents from dangerous contents and contacts online, but also to promote policies on healthy computer and internet use within the Union. As part of this program, the Commission also launched the *EU NET ADB Project: Research on the prevalence and intensity of Internet Addictive Behavior Risk among Minors in Europe*[4], the aims of which are, first, to draw up an inventory of the prevalence of internet addiction in different European countries, and second, to formulate and implement the appropriate mental health policies in the concerned countries as well as in the European Region at large. This project was carried out by research centers in seven countries, namely Germany, Spain, Greece, Iceland, the Netherlands, Poland, and Romania, and some of the initial findings have been disseminated through a series of reports and presentations in 2012 and 2013.

The political and social relevance of these programs and research projects lies in their ability to promote, on the basis of reliable statistical data, the development of public health policies adapted to situations concerned with compulsive uses of computers, video games, and the internet among European citizens. It is worth noting here that a few European countries do have centers exclusively devoted to information on, and prevention and treatment of problems associated with problematic uses of the internet. However, most of those countries are far from having the complex network of specialized centers that one may find in other nations such as the United States. This may be explained by the fact that prevalence rates of problematic internet use or internet addiction are often significantly higher in the US than in Europe, and reflected in the American government's urge to create and/or support more specialized centers. Among these, one can find, for instance, the *Center for Internet Addiction*[5] created by Kimberly Young, the *reSTART Internet Addiction Recovery Program*[6], the *Center for Internet and Technology Addiction*[7] and the *C.A.R.E. Florida*[8] which aim at

3 http://ec.europa.eu/information_society/activities/sip/index_en.htm
4 http://www.eunetadb.eu/en/
5 www.netaddiction.com
6 www.netaddictionrecovery.com
7 www.virtual-addiction.com/
8 www.careflorida.com

providing appropriate counseling and treatment options for adolescents and adults suffering from problematic use of the internet.

Although most European governments have so far made attempts to identify the extent of compulsive use of Information and Communication Technologies (ICTs) in order to provide appropriate institutional responses, much of the prevention and treatment of these issues is managed by private national organizations (e.g. NGOs). Within the framework of our project, we wanted to examine how problematic uses of computers, video games and the internet are dealt with in some countries that share cultural and linguistic similarities with Belgium, namely France, Luxembourg, The Netherlands, Switzerland, and Canada.

2.1 France

For compulsive internet and video game use in France, prevention and care are provided under official and private initiatives, the latter being more numerous than the former. One of the most representative institutions in this field is the *Centre de reference sur le jeu excessif*[9], which originated in the addiction and psychiatry unit of the Centre hospitalier universitaire de Nantes. Although the initial aim of this center was to provide counseling and support for gamblers, it also meets increasing demand concerning the abuse of video games and internet addiction. The center is now part of the new infrastructure of the *Institut fédératif des addictions comportementales (IFAC)*[10] the mission of which is to develop research, training, prevention, and information about different kinds of behavioral addictions, including those associated with internet and video game use. Another institution that has implemented similar prevention and care programs related to such issues is the Hôpital Marmottan. This hospital, well-known for the treatment of drug addicts, has also developed in recent years, under the supervision of Marc Valleur, several therapeutic treatments for cases of compulsive use of video games and the internet.

Most of the prevention and awareness is essentially the work of private initiatives (NGOs and news sites). Such initiatives often come from associations of parents, teachers, professionals and former players concerned with the negative consequences of compulsive use of computers and the internet. One example is the *Association pour la prévention et les soins aux addictions*[11], which through an infrastructure of four centers in the department of Haut-Rhin, provides educational and therapeutic solutions in situations of internet addiction. Other examples are the NGO *SOS Joueurs*[12] whose primary purpose is to provide psychological, legal and social support for compulsive gamblers, but also for people suffering from video game addiction, and the NGO *Action Innocence*[13] (an organization with networks in Switzerland, Belgium and Monaco) aiming to protect children and teenagers using the

9 http://www.crje.fr/
10 http://www.ifac-addictions.fr/
11 http://www.le-cap.org/
12 http://www.sos-joueurs.eu/
13 http://www.actioninnocence.org/

internet, but also providing awareness-raising programs about excessive use of video games. Finally, the website *PédaGoJeux*[14] provides online information and educational resources concerning the healthy use of video games. This website is a result of a joint pedagogical program involving several actors, including public authorities (e.g., Ministère des Affaires sociales et de la Santé) and some video game companies (e.g., Microsoft).

2.2 Luxembourg

With partial funding from the European Commission, the Grand Duchy of Luxembourg has started the BEE SECURE[15] program as a joint initiative of the Ministry of the Economy and Foreign Trade, the Ministry of the Family and Integration, and the Ministry of Education and Vocational Training. This program aims at raising children's and adolescents' awareness about safer uses of Information and Communication Technologies. In addition, it provides legal assistance in cases of infringement. This institutional framework provides protection policies for children and adolescents regarding social applications and websites (chat rooms, forums, social networks). However, this program does not include any policy on compulsive uses of the internet and video games.

Data on institutional responses to compulsive internet and video game use in Luxembourg are scarce, but two centers dealing with these issues can be identified. First, the *Centre de santé mentale,*[16] commissioned by the Ministry of Health, provides a general social psychiatry service. Although the center is not specialized in cases of technology dependency, it has the infrastructure (day clinic, therapeutic apartments) and clinical programs necessary to deal with situations of compulsive internet use. Second, the NGO *Anonym Glécksspiller*[17] helps people with problems related to compulsive use of the internet. Although its first aim is to provide help and support for individuals with gambling problems, the organization also provides help to people with problems related to internet use and offers them individualized treatment (e.g., outpatient therapy) or guides them towards inpatient options when needed.

2.3 The Netherlands

In 2006, the first European private clinic for internet addiction (Smith & Johns Addiction Consultants) was opened in Amsterdam. Following the 12-step model used in the treatment of alcoholism and drug abuse, this clinic had a very short life-span, partly because of complaints by some patients about "unorthodox" methods used by the director (e.g., use of pornographic material, attempted rape).

14 http://www.pedagojeux.fr/
15 https://www.bee-secure.lu/
16 http://www.llhm.lu/main.html
17 http://www.anonym-gleckssspiller.net/

Despite this rather obscure episode in the history of the management of Internet addiction, the Netherlands have several information, prevention, and care organisations devoted to dealing with situations of compulsive use of internet and video games. Besides the *IVO Center*[18], which functions as a reference center for research and expertise on various problematic uses of ICT, there are many private institutions such as the Novadic-Kentron Centre,[19] which provides prevention and treatment programs and expertise initially aimed at gamblers and internet addicts, but also helps people with video game problems, the private clinic CrisisCare[20] and the Brijder[21] Center both of which have specific therapeutic programs for situations of compulsive use of video games, and finally the organization *GGZ (Geestelijke gezondheidszorg)*[22] which also deals with situations of compulsive internet use.

2.4 Switzerland

In Switzerland, the prevention of compulsive internet and video game use is organized by the federal government and falls within the jurisdiction of the Federal Social Insurance Office (protecting youngsters from the media, fostering media literacy) and the Federal Office of Public Health (prevention of and assistance for addiction). Some specialized programs for behavioral addictions have been developed in some cantons. For example, the *Zentrum für Spielsucht und andere Verhaltenssüchte*[23] in Zurich provides both outpatient treatment for people suffering from gambling and counseling for their families. The *Klinik für Psychiatrie und Psychotherapie UniversitätsSpitals* of Zürich[24], offers special care programs for behavioral addictions in adults, including those involving video games, internet, and cybersex. The *Zentrum für Verhaltenssüchte* at the Universitäre Psychiatrische Kliniken Basel[25] has also developed a range of counseling and treatment services for people with problems such as pathological gambling, excessive use of the computer and internet, compulsive shopping, and cybersex). Finally, the organization *Santé bernoise*[26] has set up the "CyberSmart" project aimed at providing counseling and treatment for people who have problems related to the excessive use of new media.

Switzerland also has a reference center for the treatment of pathological gamblers, namely the *Centre du jeu excessif,*[27] attached to the department of Psychiatry of the *Centre Hospitalier Universitaire Vaudois*. This center mainly deals with people suffering from "offline" gambling, but also with individuals who have online gambling problems.

18 http://www.ivo.nl/
19 http://www.novadic-kentron.nl/
20 http://www.crisiscare.nl
21 http://www.brijder.nl/
22 http://www.ggznederland.nl
23 http://www.radix.ch/index.cfm/75B312E1-E3E4-5B24-F5860C5FC7941131/
24 http://www.psychiatrie.usz.ch/Seiten/default.aspx
25 http://www.upkbs.ch/patienten/ambulantes-angebot/erwachsene/spiel-internet-sexsucht/Seiten/default.aspx
26http://www.santebernoise.ch/fr/themes/nouveaux-medias.42/consultation-et-therapie.120/cybersmart-consultation.1322.html
27 www.jeu-excessif.ch

On the private initiative side, the organization *Addiction Suisse*[28] pursues a public aim: to prevent alcohol and drug addiction, but also problematic internet use. This organization has implemented prevention and support programs for parents of teenagers and young adults experiencing problems with online games, chats, and online pornography.

For its part, the NGO *Rien ne va plus*[29], funded by the Canton of Geneva, focuses on prevention and counseling for excessive players of video games and online games (MMORPGs).

Finally, there is an association for video game enthusiasts called *Swiss Gamers Network*[30], which provides, among other things, support for research on and prevention of excessive video game playing. This association represents a relevant and interesting interface between the world of the players and the mental health system.

2.5 Canada

The prevention and treatment of problems related to internet addiction in Canada comes from a number of initiatives sponsored by the government. For example, the *Centre de réadaptation en dépendance de l'Estrie*[31], supported by the Ministry of Health and Social Services of Quebec, treats people with gambling problems, but also people with compulsive use of video games. For its part, the *Centre for Addiction and Mental Health*[32] in Toronto provides, via their "Child, Youth & Family Program", therapeutic help for people experiencing compulsive use of the Internet.

In the private sector, the provision of care is mostly managed by clinics. Examples include the *Fondation Dollard-Cormier*[33], specialized for many years in the treatment of addictive behaviors in children and adolescents; the *TechAddiction*[34] clinic specialized in the treatment of compulsive use of video games and the internet; the *Clinique de psychologie Villeray Petite-Patrie*[35] in Montreal, which has specialized treatment programs for cases of internet addiction; and the *Clinique psychologique Laval*[36] which also offers a special program for addiction to games and internet.

28 http://www.addictionsuisse.ch/
29 www.riennevaplus.org
30 http://www.swissgamers.net/index.php?MenuID=39
31 www.crdsm.santeestrie.qc.ca
32 http://www.camh.ca
33 www.fondationdc.com
34 http://www.techaddiction.ca
35 http://www.clinique-psychologues-montreal.ca
36 http://www.cliniquelaval.com

CHAPTER 3:

Inventory of initiatives aimed at the prevention and treatment of problems related to compulsive computer and internet use in Belgium

3 Inventory of initiatives aimed at the prevention and treatment of problems related to compulsive computer and internet use in Belgium

3.1 Introduction

Traditionally, care provision in mental health breaks down into three lines of intervention[37]. The first line is made up of the services and professionals offering 'primary mental health care'. These are accessible to the entire population and are provided close to where people live. Although they are sometimes given little recognition in their mental health mission, that mission is nonetheless essential. This category may include GPs, medical homes, PMS (Psycho-Medico-Social) centres, etc. The second line is made up of the services which handle 'complex' but common mental health problems. The cases they see are often referred by the first-line services. Like the first-line services, the second-line services need to be close to where people live. They are therefore spread across the entire country. Many services span the first and second lines, with the border between them often being more theoretical than empirical. In this second line, we include the approved mental health services, hospitals' outpatient consultation services and certain specialist drug addiction services, as well as psychiatrists and psychologists in private practice. The third line comprises specialist services in a limited number of locations and accessible only after referral by a professional. We are thinking here, for instance, about psychiatric hospitals and the psychiatric services of general hospitals.

Given the large number of players concerned, we sent the questionnaire only to institutions which are easy to identify and whose principal mission is to provide psychotherapy services: mental health services, services specialising in addictions, hospital-based psychiatry services and psychiatric hospitals. An online questionnaire was sent by e-mail to these types of organisations in Flanders (N=126) and Wallonia (N=192) and was therefore drafted in both Dutch and French (cfr. Appendix 3 and 4). The response rates were 41% and 24% respectively. Compulsive computer and internet use was divided into six main categories: gaming, chatting and social networking sites, online gambling, online shopping, online pornography and online stock market use. Three main questions guided our approach: the organizations were asked to indicate for each category (1) if they often encounter situations of this type of CIU/CCU, (2) if they develop initiatives aimed at the prevention of this specific form of CIU/CCU and (3) if they consider themselves to be capable of dealing with the issues.

Before looking at the answers to these questions, we must not lose sight of the fact that the expression 'problem use' or 'compulsive use' of Information and Communication Technologies (ICT) forms a heterogeneous whole from the clinical point of view. While the point these uses have in common is that they all involve an ICT (computer, internet, gaming console), they are nonetheless problems for which different types of care may be provided.

37 There is sometimes some discussion regarding the distribution of the services within the different lines of intervention. For example, some second-line services are also present in the first line …

For example, 'compulsive gambling', 'sex addiction' and 'sex offender problems' ('AICS'[38], to use the French abbreviation) are often treated by different services. A second difficulty lies in our ignorance of the phenomena in question and the lack of consensus about them, either on what to call them, or on their very 'existence'[39]. When answering the questionnaire we sent them, some services pointed out that: *'The way the question is framed indicates that there might be a specific pathology. Current experience is that it is more of a comorbidity problem (+ personality disorder, anxiety, addictions, etc.)*[40] *'.*

In this chapter, the results of the online questionnaire will be discussed. Since in Belgium mental health is a regional responsibility, the results will be presented separately for Wallonia and Flanders.

3.2 Results for Wallonia

3.2.1 The first line

The parties intervening in the first line are concerned with these problems (CIU/CCU) and play an important role in terms of prevention, treatment and orientation. The players in question are so numerous that it would not have been possible to contact all of them. But we did succeed in carrying out some surveys with PMS centres, for example. The services we contacted reported that they were essentially encountering difficulties with excessive use of video games and social networks. According to these services, the other problems (gambling, compulsive spending, etc.) were less of a concern for them. We also contacted the Réseau Alto (Alternative Drug Addiction) of the Société Scientifique de Médecine Générale (SSMG)[41], who confirmed to us that they were seeing the problems described in the questionnaire and that they felt that they could handle them as part of a first-line intervention. *'With our activity initially being a general medicine activity, we are seeing all these problems, without having a specific or structural answer. We refer depending on the applicant's region, although few specific services exist in the Walloon Region'*[42].

3.2.2 The second line

We contacted the 64 approved mental health services (MHS) in Wallonia and the 24 approved MHS in the Brussels-Capital Region (Cocof). 23 % of the services replied..

38 AICS: Auteurs d'Infractions à Caractère Sexuel.

39 Or rather the relevance of identifying them as a separate problem ...

40 Comment associated with the questionnaire by a psychiatrist responsible for service.

41 http://www.ssmg.be/

42 Comment added by Alto-SSMG to its questionnaire.

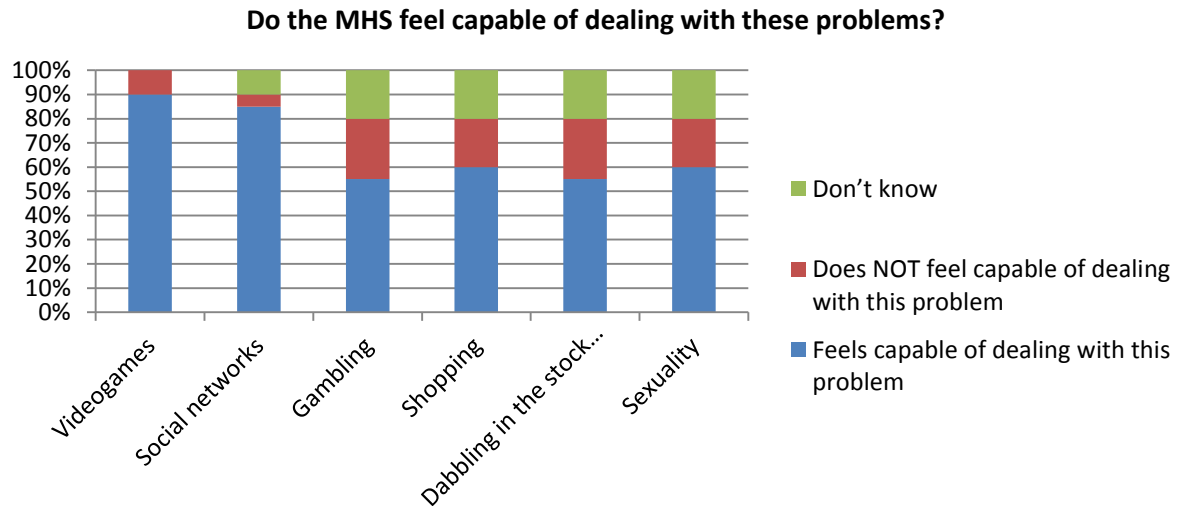

Figure 2: Do the MHS feel able to handle the different problems associated with compulsive use of the internet, computers and video games? (N = 20).

According to Figure 2, the MHS feel broadly able to cope with situations linked with problematic use of video games (90 %) and social networks (85 %). The situation is less clear-cut with regard to the other problems. There are probably two reasons for this. The problems relating to gambling ('compulsive gambling') and those to do with sexuality have benefited for several years from clearly identified specialist services dedicated to them. To put it another way, whether or not they are expressed via the internet, these situations are regularly directed towards specialist services. Finally, with regard to compulsive spending or 'dabbling in the stock market', very few services report meeting these problems (Figure 3); this probably explains the results of Figure 2 on this subject.

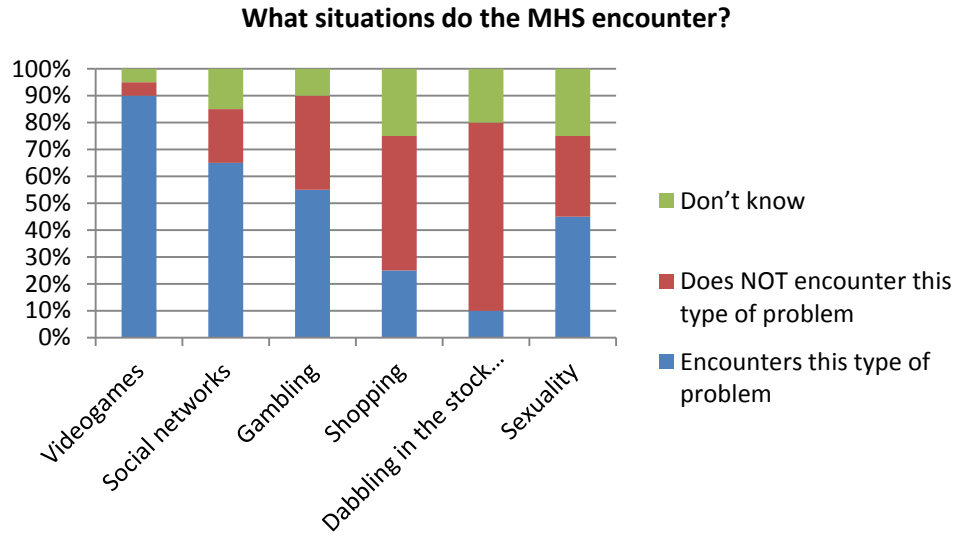

Figure 3: Situations encountered by the French-speaking MHS (N = 20).

In addition, 65 % of the MHS reported being interested in documentation and/or training on the question of compulsive ICT use. With regard to the general provision of psychotherapy

services, we can likewise cite the family planning centres. While their missions are in theory focused on prevention, reception and accompaniment of questions linked to sexual and affective life, practice on the ground shows us that some of these centres are equally active in terms of the provision of general psychotherapeutic care. Our survey of some services backs up this interpretation. Some family planning centres are handling situations in which the use of ICT is posing a problem.

Some mental health services have a remit to develop specific services (addicts, sex offenders, the elderly). Among these, we find the treatment of sex offenders. We contacted them to see whether they were seeing among their service users people grappling with compulsive use of on-line pornography. Of the 10 services we asked, 5 replied. They all reported that they regularly saw situations of compulsive use of child pornography. However, some stressed that it was not always straightforward to decide whether or not such behaviour should be classed as compulsive, and above all, their remit is not to address situations not liable to be subject to legal proceedings. To put it another way, in the framework of their sex offenders mission, they do not deal with situations involving the compulsive use of 'legal' pornographic material on line. As to the latter, aside from the general services, sexology consultations are another way of tackling such cases, an example being those provided at the 'Clinique de la Sexualité et du Couple' at the Van Gogh clinic in Marchienne-au-Pont.

It is worth adding that, one of the therapists we contacted reports that there are few consultations, if any, with regard to compulsive consumption of 'conventional' pornographic material where cases do not go to court. His view was that people in these situations (who are not obliged by any legal constraint) are too ashamed to consult anyone. So this is a public which engages in very little consultation. It is the legal injunction, linked to the illegal nature of the material consulted, that will push these people to see a therapist.

3.2.3 Specialist addiction services

The services which have developed a specialization in CIU/CCU often have their roots in the 'drug addiction' sector. Compulsive use of ICT is classified by certain professionals as a behavioral addiction. Specialist addiction services have therefore been quite naturally taking an interest in the question. We sent out a questionnaire to the 59 services affiliated to the Walloon or Brussels FEDITO (federations of institutions for drug addicts). The response rate was 27 %. With regard to these services, a qualification is in order; some of them specialise in dealing with serious situations (so-called hard drugs, multiple substance dependency) and have developed a low-demand threshold approach. These services have a specific practice and they are not necessarily in the business of accepting less serious situations, such as compulsive use of video games, for example. Nevertheless, some services do offer wider provision in terms of dependencies. For information, Figure 4 shows us the extent to which the specialist addiction services feel able to handle demands relating to compulsive use of ICT. The shading in the responses is probably explained by the qualification introduced above.

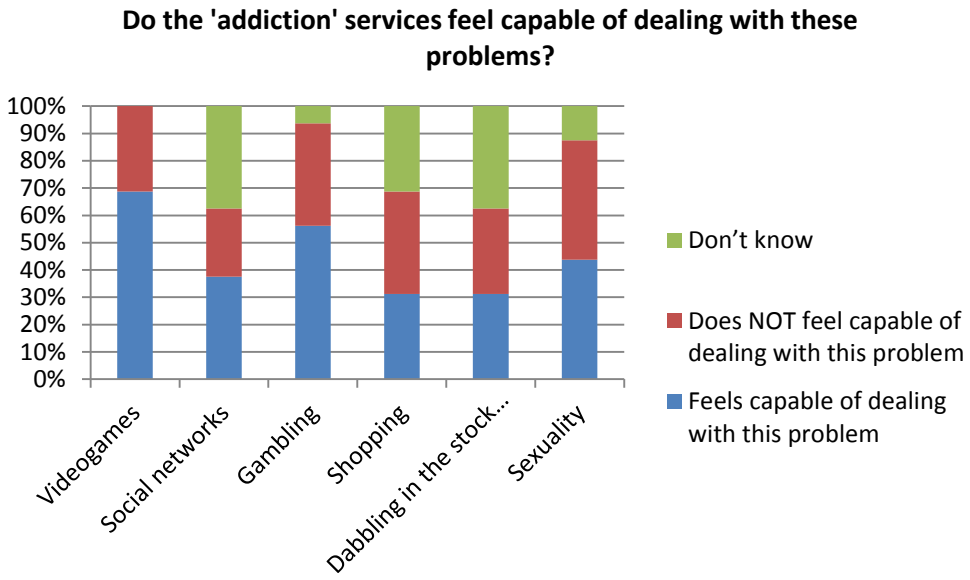

Figure 4: Do the specialist addiction services feel able to handle the different problems associated with compulsive use of the internet, computers and video games? (N = 16).

3.2.4 Psychiatric hospitals

Although problems of this type are usually treated on an outpatient basis, the hospitals are also faced with them, specifically in the case of hospitalisations linked to associated comorbidity or via their outpatient consultations. This is why we sent the questionnaire, on the basis of the listing of the Belgian association of hospitals[43], to 24 psychiatric hospitals and 21 psychiatry services in general hospitals in Wallonia and Brussels. The response rate was 24 %. It seems that they do occasionally come across the problems we are interested in. Figure 5 shows us the situations already encountered by the services which responded to the questionnaire. Some respondents stressed the fact that such situations were rare.

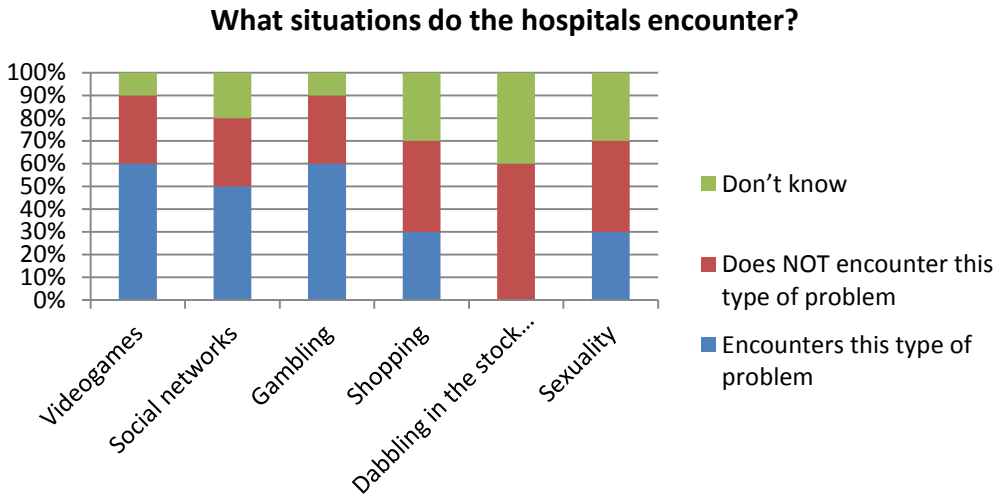

Figure 5: Situations encountered by the French-language hospitals (N = 10).

43 http://www.hospitals.be/francais/hopitaux.html

Finally, Figure 6 shows us that unlike the MHS, the hospitals do not necessarily address these situations. This is probably not a question of competence, but more one of frameworks for intervention and priorities.

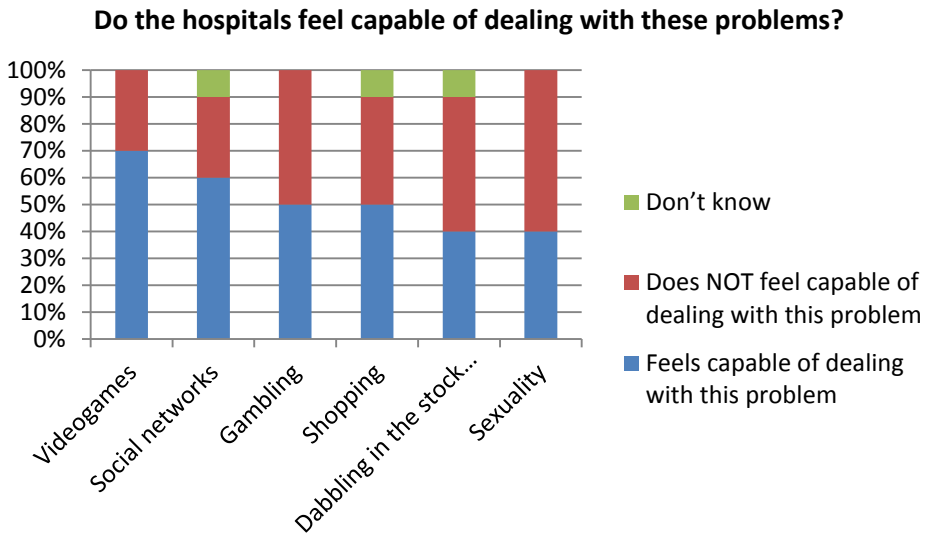

Figure 6: Do the hospitals feel able to handle the different problems associated with compulsive use of the internet, computers and video games? (N = 10).

3.2.5 Certain services are developing a specific project

As a rule, compulsive use of ITC is related to specific content (video games, gambling, etc.). The services dealing with compulsive use of such content before the arrival of the internet and ICT naturally treated requests with regard to such compulsive use expressed on line as they began to emerge. This is the case, for instance, with the services specialising in 'compulsive gambling'. In the French-speaking part of the country, 4 services are clearly identified for the treatment they provide for problem use of the internet, computers and video games. More specifically, they treat situations of abusive use of video games and gambling. They have also created the 'addiction to gambling and help for gamblers' working group. These services are the Clinique du Jeu Pathologique Dostoïevski[44] (CHU Brugmann – Brussels – which is also open to requests in Dutch), the ASBL Le Pélican[45] (Brussels), the day hospital La Clé[46] (Liège) and the Centre ALFA[47] (MHS – Liège). In addition to these services, we can also cite the ASBL Nadja[48], which, in collaboration with CRéSaM[49], offers training for professionals in the use and problem use of ICT based on research commissioned by Wallonia in 2009. This system, based on a two-day module, has already been used to train over 300 professionals from the mental health, education and youth work sectors on questions relating to problematic

44 http://www.cliniquedujeu.be/
45 http://www.lepelican-asbl.be/
46 http://www.hjulacle.be/
47 http://www.centrealfa.be/
48 http://www.nadja-asbl.be/
49 Approved Walloon Mental Health Services Reference Centre: http://www.cresam.be/

use of the internet and video games. The various services referred to above are the French-language 'beacons of expertise' currently identified with regard to these questions. All these services mainly offer **outpatient care.** Day-time or night-time hospitalisation is generally envisaged where the problem is associated with a major psychopathology, such as a depressive episode or a product addiction, for example. These services boast various therapeutic approaches: cognitive-behavioral, systemic, psychoanalytical, NLP. In addition, although this is not necessarily family therapy in the strict sense, the parents are often involved in the treatment where the patient lives under their roof. By way of an example, the therapists may work on the signing of a contract between the gambler and his/her parent/s, or perhaps use a time sheet to raise the former's awareness and work on motivating him/her to stop, etc. That said, as with all other problems, the approaches vary and form part of the rich tapestry of options available in the territory. These services also offer **information via brochures50 and on their internet sites.** This information targets both the users and those around them, as well as the professionals. Sometimes, they offer visitors the chance to take a test to see whether or not they are suffering from abusive use. The Clinique du Jeu Pathologique Dostoïevski also offers a freephone number and a free help programme accessible on the internet (http://stopjeu.cliniquedujeu.be/) available to players seeking to stop or reduce their gambling. Finally, we must mention the **support groups and parental support** set up by these institutions. Parental support can be individualised or in groups. Its aim is to help parents deal with their children's risky behaviour. There are also patients' groups, some of them led by professionals, others not. Self-help groups modelled on Alcoholics Anonymous exist, for instance, to help 'compulsive gamblers'. These include Gamblers Anonymous in Liège, Brussels and Marche-en-Famenne.

3.3 Results for Flanders

3.3.1 The first line

Among the most important parties in the first line service for mental health in Flanders are the Centres for General Welfare (CAW). In Flanders and Brussels there are 25 CAW's which were all asked to fill in our questionnaire. The response rate was 52%. The main goal of the CAWs is to identify a problem and to offer assistance where possible. If necessary these organizations will refer to second line support. The threshold for seeking help at a CAW is very low: there are no waiting lists and the first contact is always free of charge. Figure 7 shows that more than half of the centres encounter the compulsive use of games (54,5%), chat and social networking sites (54,5%), gambling (58,3%), online shopping (50%) and online pornography (75%). Problems linked to the compulsive use of dabbling in the stock market online are encountered by 25% of the CAWs. A majority of the CAWs feels that they are able to deal with problems of CIU and CCU, despite the fact that they usually do not have a specific initiative aimed at these types of compulsive behavior.

50 For example, the brochure **Les jeux sont faits, rien ne va plus** associated with a support booklet designed for first-line professionals.

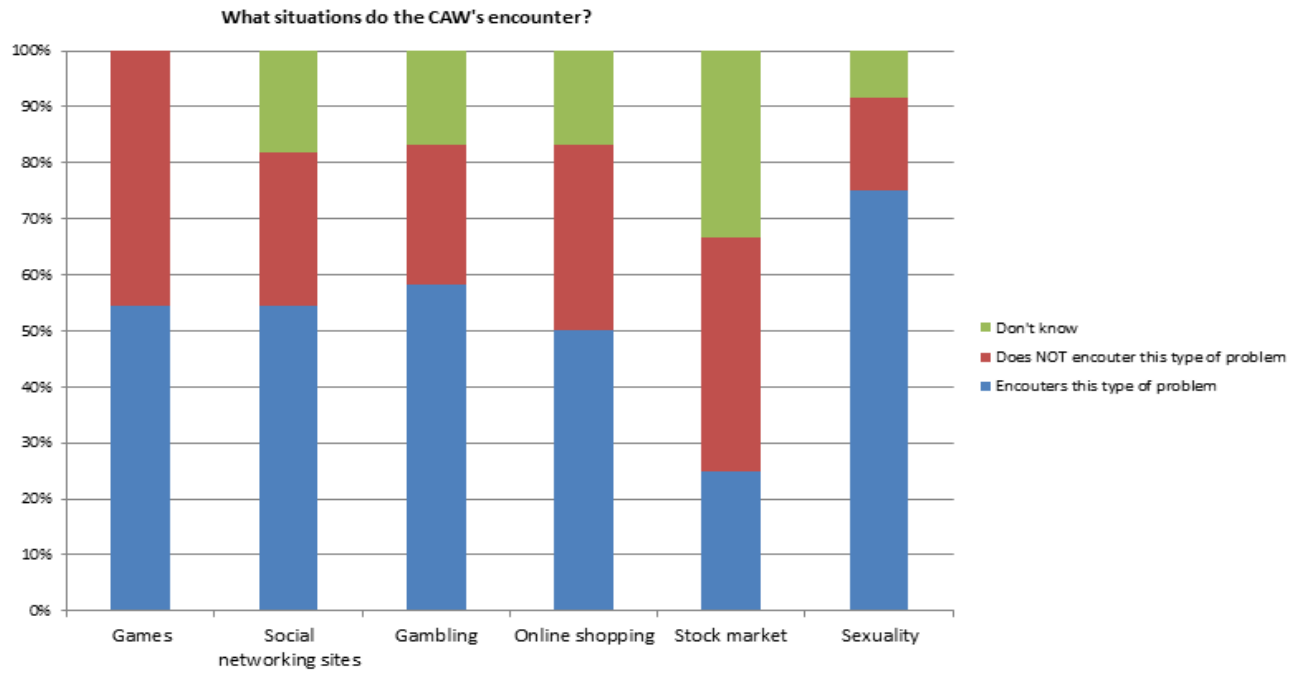

Figure 7: Situations encountered by the CAW's (N = 13)

The Centres for General Welfare have subdivisions catering specifically for youngsters and young adults aged 12 to 25 (JAC). There are 29 JACs in Flanders and Brussels. Help may be sought anonymously at a JAC and is free of charge, and there are no waiting lists. Problems related to the compulsive use of games (60%), chatting and social networking sites (54,5%), online gambling (70%) and online pornography (60%) are encountered by a majority of the JACs. The compulsive use of online shopping (16,7%) and dabbling in the stock market online (9,1%) are encountered a lot less (Figure 8).

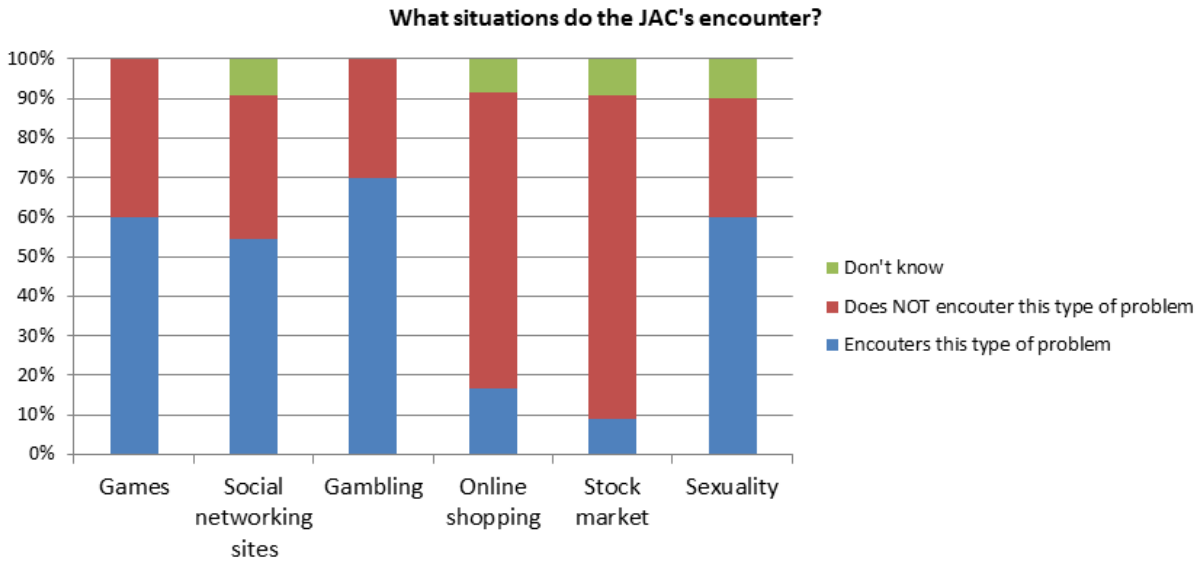

Figure 8: Situations encountered by the JAC's (N = 13)

A majority of the JAC's which filled in our questionnaire indicate that they are capable of dealing with each of the types of compulsive behavior we are addressing. However, compared to the CAWs, the number of youth subsections answering this question in the affirmative appeared to be lower. Almost none of the JAC's provides a specific initiative with regard to any of these issues.

3.3.2 The second line

In Flanders there are 20 Centres for Mental Health (CGG), which were all contacted. The response rate was 55%. Usually someone is referred to a CGG by another service (e.g. GP, CAW, JAC,). Problems related to addiction are an important focus of the CGG's. A CGG can offer both medical-psychiatric and psychotherapeutic assistance. This assistance is not completely free of charge, but the contribution expected from the patients is limited[51]. In 2011, the waiting time for an appointment concerning an addiction problem was on average 36 days. The second appointment (usually also the first treatment session) will on average be 32 days later[52].

Figure 9 shows that the CGGs, compared to the CAWs and JACs, encounter to a greater extent situations where there is compulsive use of games (72.7%), social networking sites and chatting (90.9%), and online gambling (63.6%). Problems related to online shopping (27.3%), dabbling in the online stock market (27.3%) and online pornography (45.5%) are also encountered, but to a lesser extent.

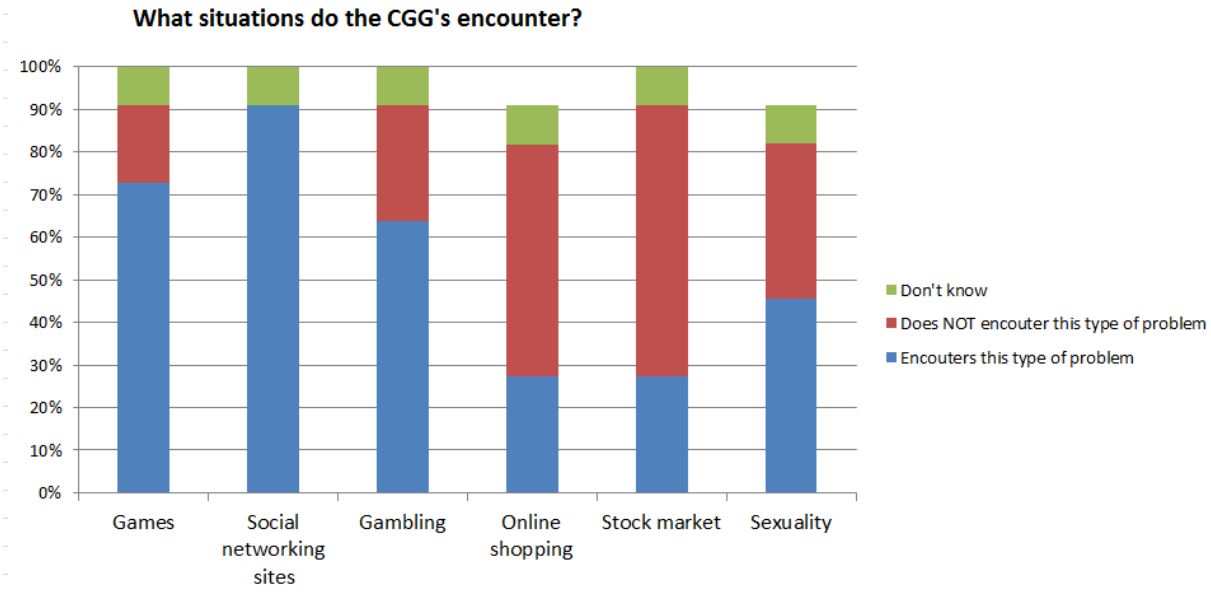

Figure 9: Situations encountered by the CGG's (N = 11)

51http://www.zorg-en-gezondheid.be/Cijfers/Zorgaanbod-en-verlening/Geestelijke-gezondheidszorg/Hoe-lang-moet-een-cli%C3%ABnt-wachten-op-een-behandeling-bij-een-CGG-/

52http://www.zorg-en-gezondheid.be/Zorgaanbod/Geestelijke-gezondheidszorg/Centra-voor-geestelijke-gezondheidszorg/

Figure 10 shows that all CGG's which filled in our questionnaire feel able to deal with problems related to the compulsive use of games, social networking sites and chatting, and gambling. In addition, compulsive behavior relating to online shopping, online use of the stock market and online pornography can be treated by a large majority of CGG's. Many CGG's also offer a specific initiative aimed at the prevention or treatment of one or more forms of CCU or CIU. These initiatives are discussed more extensively at the end of this chapter.

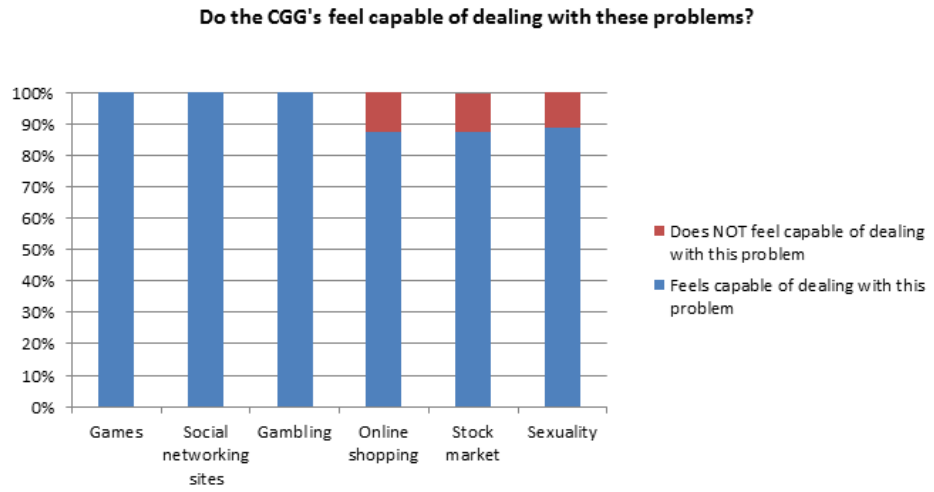

Figure 10: Do the CGG's feel able to handle the different problems associated with CIU/CCU? (N = 11)

3.3.3 Third line

Just as in Wallonia, problems related to CCU/CIU are in most cases treated on an outpatient basis. In cases of comorbidity, psychiatric hospitals too may face these types of compulsive behavior. Therefore our questionnaire was sent to 36 psychiatric hospitals in Flanders based on the list of the Flemish Agency for Care and Health[53]. The response rate was 28%. The results show that psychiatric hospitals encounter CCU and CIU less often compared to first and second line services (Figure 11). A couple of psychiatric hospitals which did not fill in the questionnaire indicated by e-mail that they almost never encounter problems related to CCU/CIU. All the psychiatric hospitals which completed the questionnaire, indicated that they are capable of dealing with these types of compulsive behavior.

53 http://www.zorg-en-gezondheid.be/Zorgaanbod/Ziekenhuizen/Psychiatrische-ziekenhuizen/

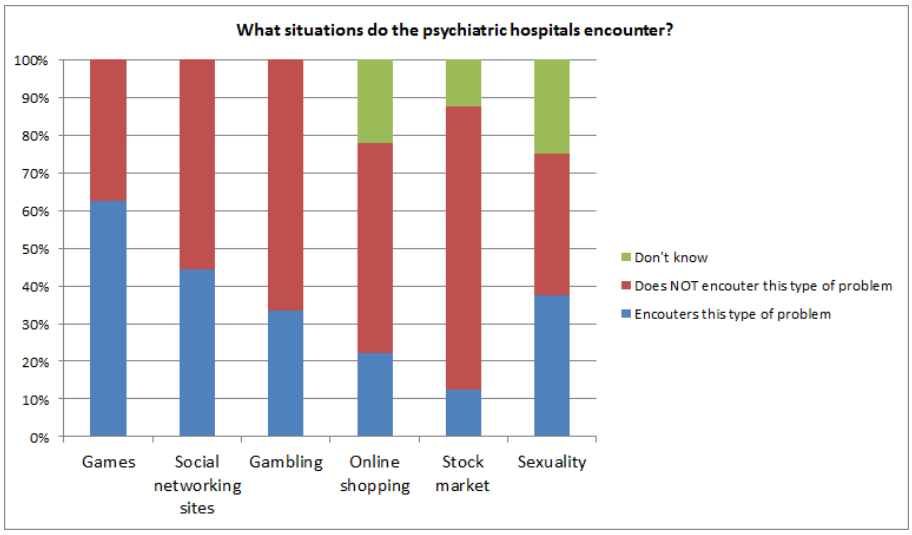

Figure 11: Situations encountered by the psychiatric hospitals (N = 10)

3.3.4 Certain services are developing a specific project

In the Dutch-speaking part of Belgium, several services have a specific program aimed at CCU and CIU. The non-profit association for alcohol and other drug problems (VAD) is the coordinator of most organizations in Flanders whose core business is dealing with problems related to, for example, alcohol, drugs and gambling.[54] The VAD also offers a wide range of activities on the topic of CCU/CIU, mostly in cooperation with other organizations in the field. Training sessions about the internet and gaming are organized on a regular basis for prevention workers. The goal of those sessions is to provide information about the problem and to explain what can and can not be done to prevent it. The different forms of therapy are also discussed. In addition, the VAD has developed a script "Op zoek naar een kick?" for parent-teacher meetings about gaming, alcohol and other drugs. Regarding gaming specifically, the goal is to help parents to educate their children so that gaming remains something that is fun and does not evolve into problematic behaviour.[55] On the website **www.druglijn.be**, the VAD offers a series of self-tests for gaming, internet and gambling behavior where people of 18 years and older can test whether their use of those activities is problematic or not. After completing the test, feedback is given on the extent to which the behavior is problematic. The annual report of 2012 shows that the internet test has been completed 1,392 times, the test for gambling 679 times and the gaming test 1,034 times. The Druglijn can also be contacted by phone, e-mail, Skype or chat. In 2012, the Druglijn answered 6,561 different types of questions related to drugs. 1% of those questions was about internet or gaming and 2% about gambling.[56] Furthermore, the VAD also coordinated the testing of a treatment protocol for compulsive gaming developed by the Netherlands organisation Novadic Kentron. Other organizations involved in the project are CGG Vagga,

54 http://www.vad.be

55 http://www.vad.be/materiaal/draaiboekenrichtlijnen/op-zoek-naar-een--kick-draaiboek-voor-een-ouderavond-over-alochol--en-ander-druggebruik-bij-jongeren.aspx

56 http://www.vad.be/media/17359/jaarverslag_dl_2012.pdf

CAD Limburg, CGG Eclips, CGG Waas and Dender, CGG Vlaams-Brabant Oost and CGG Noord-West Vlaanderen.

CAD Limburg is a pioneer in the development of a program aimed specifically at the compulsive use of the internet and gaming. The organization offers outpatient consultations to help people who suffer from CCU or CCU. In 2011, CAD Limburg treated 20 people for this type of problem[57]. The organization also works on prevention by organizing information sessions for parents, teachers and many other interested target groups.

CGG Waas and Dender organizes training sessions about gaming and gambling for teachers and parents. The organization also has a specific program to help both youngsters and adults suffering from a gaming or gambling addiction. For youngsters and young adults specifically, early intervention is offered , which forms a bridge between prevention and treatment. In five to seven sessions the clients are motivated towards self-reflection and a change of behavior. Thee CGG also offers treatment by means of individual sessions.
CGG Eclips also offers training sessions for parents, teachers and counselors on the topic of gaming. In addition, the organization has a specific program for young people suffering from compulsive game use. In five individual sessions, youngsters are motivated to deal with games in a responsible way. If necessary the CGG offers follow-up sessions.

The Alexian Brothers' Psychiatric Hospitalin Tienen started in October 2012 with a specific outpatient approach aimed at young people who suffer from compulsive gaming behavior. Together with the client, the compulsive use is analyzed and alternatives are sought and identified to replace the time spent on gaming.

3.4 General conclusions

First of all we would like to point out that in both Wallonia and Flanders, above and beyond the curative aspects, major preventive work is being done by many services. This preventive work generally applies not only to compulsive use, but more broadly to all problem uses of ICT. For example, it will include the issues of cyber bullying and privacy. In recent years, some players in the health, education and youth work sectors have been particularly active on this subject. These include the open support services (‘AMO’, youth aid sector), school mediators (education sector), media education services and Child Focus.

Most second-line services in Flanders and Wallonia are encountering problems associated with compulsive use of ICT. Compulsive use of video games and social networks are the points flagged up most often by the CGG and MHS. Moreover, the latter feel capable of coping with these situations. These services encounter fewer cases of compulsive use associated with gambling and sexuality, and far fewer cases associated with online shopping and dabbling in the stock market. With regard to these problems, there seems to be a

57 http://www.cadlimburg.be/website%20cad/AmbulanteHulp2011.pdf

difference between Flanders and Wallonia: services in the south of the country feel less able to handle these issues, perhaps because they encounter them very rarely and there are specialist services to which some of them can be referred. Hospitals encounter these problems to a lesser extent. When it does happen, it is generally as part of their outpatient consultations or hospitalisation linked to a psychiatric comorbidity. In addition, some services have developed a specific initiative with regard to compulsive use of video games and gambling. In Wallonia, these form beacons of expertise to which certain general services direct their cases. Flanders has some specific initiatives, developed as part of the CGG. The latter collaborate with the CAD and the VAD which are also very actively working on the compulsive use of ICT. Finally, let us note that the vast majority of the services contacted indicated their interest in documentation and/or training on these issues.

CHAPTER 4:

Compulsive computer and internet use in Belgium among adolescents

4 Compulsive computer and internet use in Belgium among adolescents

4.1 Methodology

In order to assess the extent of CIU among adolescents in Belgium and in search of their characteristics, a standardized written questionnaire was developed based on pre-tests and therefore tailor-made and comprehensible for the age group of 12 to 17 years old. A paper-and-pencil survey was distributed to children in the first, third and fifth years of secondary school. Based on lists of all secondary schools on the sites of the Flemish and Walloon Ministries of Education, 50 schools in each region were selected at random. The principals of the schools were contacted by letter or e-mail and received a telephone call a few weeks later. Eighteen secondary schools agreed to participate in our study (May and September-October 2012), which led to a representative sample of 1002 respondents. The surveys were drafted in French and Dutch by native speakers (see appendix 5 and 6): 591 respondents filled in the Dutch version of the survey and 411 completed the French version. All questionnaires were completed in the classroom during a class (= 50 minutes) in the presence of one of the researchers and a teacher or supervisor of the school. The children were allowed to ask questions if a certain item or question was unclear.

The sample contains 59% Flemish and 41% Walloon secondary school children. The average age is 15.21 years. The sample consists of 50.6% girls. Schools of the four different types of schooling in Belgium (general education, technical training, vocational training and art education) are included in the sample. 39.6% of the secondary school children in the sample is in general education and 8.9% in art education. 26.8% of the children is in technical and 24.7% in vocational education. The exact wording and order of the questions can be found at the end of this report.

4.2 Results

4.2.1 General internet use

Almost all adolescents have internet access at home (99.1%) and the majority has their own computer (80.9%). Furthermore, 60% reports possessing a smartphone. For 62.4% of the youngsters, internet is available both in a common room (e.g.. kitchen, living room) and in their bedroom. 26.2% can only go online in a common room and 11.4% only has internet access in their own room. The average time spent online per week is 12 hours and 9 minutes, which corresponds to 1 hour and 44 minutes per day.

- Online activities

Table 2 gives an overview of the extent to which specific online activities are being used by the youngsters in our sample. The results indicate that adolescents use the internet for three

main purposes: communication, information and entertainment. Streaming movies and music appears to be a popular activity among secondary school children. 29.6% does this multiple times a day and 21.9% (almost) every day. Chatting is also engaged in to a great extent by the respondents: 19.7% chats online multiples times a day and 22.8% (almost) every day. Furthermore, the internet appears to be used on a regular basis to send e-mails and to look for information. The majority uses the internet to download (75.1%), to varying degrees. Visiting erotic websites and online shopping are less popular compared to other online activities, but are nevertheless engaged in by a substantial part of the young internet users: 28.7% and 20% respectively.

	Movies and music	Chatting	E-mail	Information	Downloading	Erotical websites	Online shopping
Never	1,7%	9,9%	17,7%	3,6%	24,9%	71,3%	80,0%
1 day per week or less	8,9%	14,1%	27,6%	22,0%	31,0%	11,5%	17,2%
2 - 3 days per week	18,3%	20,2%	23,9%	35,0%	20,1%	8,8%	1,9%
4 - 5 days per week	19,6%	13,3%	12,3%	16,1%	8,8%	2,9%	0,3%
(Almost) every day	29,6%	22,8%	13,4%	18,1%	8,3%	3,0%	0,4%
Multiples times per day	21,9%	19,7%	5,1%	5,1%	6,8%	2,6%	0,2%

Table 2: Online activities

- Games

66% of respondents indicates playing games. Within this group of gamers, 57.6% plays both offline and online games, 13.9% only plays online and 28.5% only offline. The amount of time spent on offline gaming is 1 hour and 7 minutes on a school day and 2 hours and 16 minutes on a non-school day (e.g. holiday, weekend). Online gaming takes up 1 hour and 8 minutes on a school day and 2 hours and 41 minutes on a non-school day. 39.9% of all gaming adolescents tries one new game every month. 20.4% tries out two and 7.1% three new games on a monthly basis. 10.3% of the gamers in our sample even plays 4 or more new games every month. The remaining 22.3% indicate that they don't play a new game each month. When looking at the types of games that are played the results show that adventure games (59%), action/FPS games (50%), fighting games (48%) and race- and sport (55%) games are very popular among the group of gamers. Digital versions of traditional games and puzzle games appear to be played to a lesser extent.

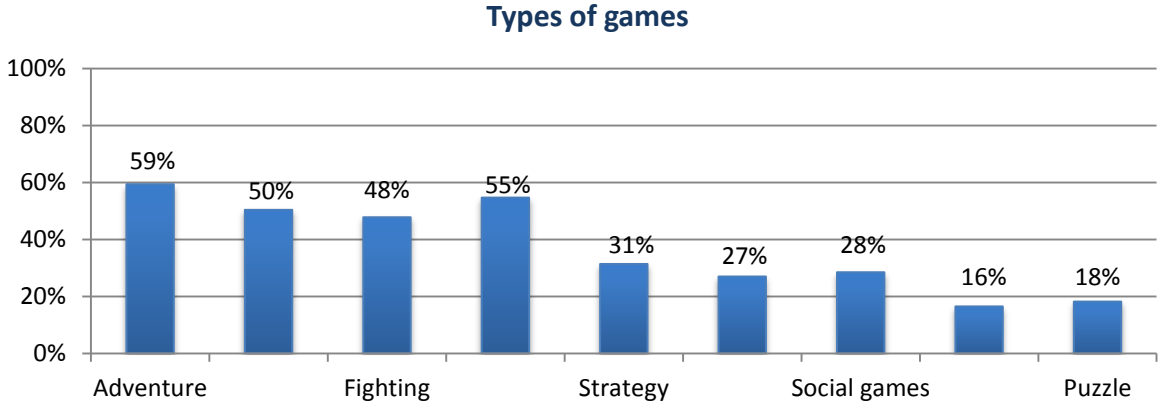

Figure 12: Types of games played by adolescents

- Social networking sites (SNS)

88.2% of the secondary school children has a profile on at least one SNS. Facebook is by far the most popular with 95.4% of the SNS users having a profile. Twitter and Netlog are less popular. Respectively 20.4% and 20.2% of the adolescents with a profile uses these sites. MySpace attracts little interest among young people in Belgium and is used by only 1.8% of respondents. Furthermore, 33.1% indicates using other SNS than those included in the study. Examples mentioned are Google+ (1.2%) and Tumblr (3.7%). Skype (7.1%) and MSN (14.7%) are also seen as SNS by the youngsters in our sample, although that is an arguable point. On an average school day, secondary school children spent 1 hour and 15 minutes on SNS. On a weekend day or a holiday the time spent on SNS increases by an hour: 2 hours and 16 minutes.

4.2.2 Compulsive internet use

- Prevalence

Compulsive internet use was measured using the Compulsive Internet Use Scale (CIUS) which consists of 14 items rated on a scale ranging from never (= 0) to very often (= 4) (Meerkerk, 2006). When applying a cut-off point of on average 2 and more corresponding to the response category 'sometimes', a prevalence of 9.5% compulsive internet users was found in the adolescent sample. The average score is significantly higher in the compulsive group (M = 2.4) compared to the non-compulsive group (M = 0.86) ($t(130.986) = -32.407$, $p < .01$).

To gain more insight into the seriousness of the compulsive use, three groups were distinguished based on the average CIUS score. Table 3 gives an overview of the prevalences for each group. The highest prevalence (6.4%) is found in group 1 with average CIUS scores ranging from 2 to 2.49. 1.9% of the respondents in the sample can be found in group 2 with an average CIUS score between 2.5 and 2.99. In the highest group with scores ranging from 3 to 4, a prevalence of 1.2% was established.

Group 1 (2 – 2.49)	6.4%
Group 2: (2.5 – 2.99)	1.9%
Group 3: (3 – 4)	1.2%

Table 3: Different groups of compulsive internet users

- Time spent online

When examining the amount of time spent online by both groups the results indicate that the compulsive users spent significantly more time online on a weekly basis compared to the non-compulsive users: 22 hours and 31 minutes versus 11 hours and 3 minutes ($t(99,661) = -7.952$, $p < .05$). This corresponds to an average of 3 hours and 13 minutes per day in the

compulsive users group and 1 hour and 34 minutes per day in the non-compulsive users group.

- Socio-demographic profile

The compulsive users group consists of 54.3% boys and 45.7% girls. Compulsive internet users are on average 15 years old. Looking at education level, the results show that 40.4% of the compulsive users is in technical education compared to 26% of the non-compulsive users. Compulsive internet users are found less in general education (27.7%) compared to their non-compulsive counterparts (41.3%). Furthermore the results indicate that 28.7% of the compulsive group is in vocational education compared to 22.9% of the non- compulsive users. To conclude, 3.2% of the compulsive users is in art education. For the non-compulsive group this is 9.9%. A Pearson chi-square test indicates the association between education level and whether or not an adolescent suffers from compulsive internet use is significant: $\chi^2 = 15{,}593$, $p < .01$, $df = 3$. Respondents were also asked about their family situation. The results show that parents of compulsive users are less often married (44.7%) compared to parents of non-compulsive internet users (60.6%) and more often divorced: 31.9% versus 24.9%. Furthermore compulsive users are more often living with a single parent (6.4%) compared to non-compulsive users (2.5%). 11.7% of the compulsive internet users indicated that their parents are living together but are not married versus 9.3% of the non-compulsive users. This association between marital status of the parents and compulsive internet use appears to be significant: $\chi^2 = 12{,}15$, $p < .05$, $df = 4$. No differences were found regarding the number of brothers and sisters and the order of birth within the family. Nor was any difference found between the compulsive and non-compulsive users groups regarding the indication adolescents gave about their parents' financial situation.

- Parental control

Adolescents were asked to answer several questions dealing with the extent to which their parents impose rules about their internet behavior. The scale contains items measuring rules about the content of the internet use on the one hand and rules about the time spent online on the other hand. The results indicate the existence of a negative correlation (-.152) between rules about the content and the average CIUS score. This means that the more strict parents are about what their children do online, the lower the score on the scale measuring compulsive internet use. This negative correlation also implies the opposite: the fewer the rules about content, the higher the score on the CIUS scale. When looking at rules about the time spent online, the correlation appears to be positive (.165) indicating that the more rules parents set about the time spent online, the higher the average score on the CIUS scale. A possible explanation for this result is that parents who notice that their children spend a lot of time on the internet start to impose more rules concerning time.

- Attitude towards school, personality and psychosocial wellbeing

Respondents were asked to indicate on a scale from 1 (= not at all) to 10 (= very much) how much they liked going to school. The average score of the non-compulsive users is higher (M = 6.06) than that of the compulsive users (M = 5.17). Independent sample t-testing shows that this difference is significant: $t(919) = 3.517$, $p < .05$. Furthermore, the secondary school youngsters indicated on the same scale how they are doing at school on the basis of their grades. Again, the average score is significantly lower in the compulsive group: M = 6.47 versus M = 7.06 ($t(106.383) = 2.828$, $p < .05$).

The groups are compared regarding the five personality dimensions measured by the Quick Big Five (see methodology section): extraversion, conscientiousness, emotional stability, resourcefulness and agreeableness. No difference is found between the groups when looking at the personality dimension extraversion ($t(102,907) = 1.865$, $p > .05$). The results do indicate that compulsive internet users have lower scores on the trait conscientiousness: M = 17.17 versus M = 19.36 ($t(884) = 4,290$, $p < .05$). The compulsive users (M = 19.38) score lower on the personality dimension resourcefulness compared to the non-compulsive users (M = 20.91) ($t(104,594) = 2.994$ $p < .05$). Furthermore, emotional stability appears to be lower in the compulsive users group: 16.42 versus 18.49 ($t(877) = 4.770$, $p < .05$). On the final dimension, compulsive users (M = 22.72) score lower on agreeableness compared to non-compulsive users (M = 23.70) ($t(895) = 3.087$ $p < .05$).

In the present study, psychosocial well-being is established by looking at four indicators: depressive feelings, self-esteem, perceived control over your life and loneliness. Differences are found for all these indicators when comparing compulsive to non-compulsive users of the internet. Compulsive users experience more feelings of loneliness compared to their non-compulsive counterparts: M = 28.66 versus M = 24.66 ($t(879) = -5.413$, $p < .05$). A lower score is also found in the compulsive group (M = 31.77) when looking at self-esteem ($t(868) = 6.759$, $p < .05$) compared to the non-compulsive group (M = 36.27). Furthermore, compulsive users have less perceived control than non-compulsive users: M = 21.62 versus M = 24.47 ($t(880) = 6.431$, $p < .05$). Finally, the results show more depressive feelings among respondents in the compulsive users group (M = 13.7) compared to respondents in the non-compulsive users group (M = 8.78) ($t(892) = -10.278$, $p < .05$). (for correlation overview see Table 12, p. 63)

- Predictors of compulsive internet use

Hierarchical regression was used to established predictors of compulsive internet use. The average score on the CIUS scale was used as the dependent variable. Gender and age were entered in the first block, betas and significance levels are reported as Step 1 in Table 4. This first block of age and gender explains 0.7% of the variance, $F(2, 683) = 3.26$, $p < .05$. Personality traits of the Quick Big Five were entered in Step 2 and explain an extra 11.5% of the variance in average CIUS score, $F(7, 678) = 14.557$, $p < .05$. Another 11.4% is explained when entering psychosocial well-being variables in the third step (Step 3), $F(11, 674) = 20.19$,

p < .05. Entering attitude towards school in step 4 adds an extra 0.6% to the predictive model. In sum, the block of age and gender together with personality traits, variables related to psychosocial well-being and attitude towards school explain 24.2% of the variance in average CIUS score (F(12, 673) = 19.241, p < .05).

	Beta	*p*	ΔR^2
STEP 1			
Gender	-.170	.001	0.7%
Age	-.008	.505	
Adjusted R^2		**0.7%**	
STEP2			
Extraversion	-.003	.586	11.5%
Agreeableness	-.008	.452	
Conscientiousness	.-008	.168	
Emotional stability	-.005	.526	
Resourcefulness	-.007	.294	
Adjusted R^2		**12.2%**	
STEP 3			
Loneliness	-.002	.622	11.4%
Perceived control	-.002	.149	
Self-esteem	-.006	.312	
Depressive feelings	.056	.000	
Adjusted R^2		**23.6%**	
STEP 4			
Attitude towards school	-.030	.009	0.6%
Adjusted R^2		**24.2%**	

Table 4: Predictive regression model 1 for average CIUS score

Furthermore, a second more compact regression model (Table 5) was tested and explains in total 30.1% of the variance in average CIUS score. Gender was entered in step 1 and explains 0.4%, F(1, 796) = 4.362, p < .05. Attitude towards school was entered in the second block and explains an extra 3.2%, F(1, 795) = 15.905, p < .01. Another 3% is explained when entering rules that parents impose about both time and content in the third step, F(3, 794) = 19.724, p < .01. Another important variable is the time spent lazing around. This can be seen as unstructured time, time in which adolescents are not conducting a specific activity. Entering this variable into step 5, 5.9% is added to the model, F(5, 792) = 23.693, p < .01. Depressive feelings and resourcefulness are entered in the last step and explain the largest amount of variance in average CIUS score by adding 17.6%, F(7, 790) = 49.976, p < .01.

	Beta	*p*	ΔR^2
STEP 1			
Gender	-.045	.145	0.4%
***Adjusted* R^2**		**0.4%**	
STEP2			
Attitude towards school	-.086	.006	3.2%
***Adjusted* R^2**		**3.6%**	
STEP 3			
Rules about content	-.130	.000	3%
Rules about time	.213	.000	
***Adjusted* R^2**		**6.6%**	
STEP 4			
Time spent lazing around	.235	.000	5.9%
***Adjusted* R^2**		**12.5%**	
STEP 5			
Depressive feelings	.409	.000	17.6%
Resourcefulness	-.100	.001	
***Adjusted* R^2**		**30.1%**	

Table 5: Predictive regression model 2 for average CIUS score

4.2.3 Compulsive gaming

- Prevalence

The Videogame Addiction Test (VAT) (see Methodology section) was used to ascertain the prevalence of compulsive game use among the sample of secondary school children in Belgium. By analogy with the Compulsive Internet Use Scale (CIUS), a cut-off point of on average 2 and more (= sometimes) is used as an indicator of compulsive use. The results indicate a prevalence of 11% compulsive gamers in the total sample after applying this cut-off. There is a significant difference between the average VAT score when comparing the group of compulsive gamers (M = 2.5) to the group of non-compulsive gamers (M = 0.8) ($t(208.697) = -33.798$, $p < .01$).

Looking at the numbers of compulsive gamers for each of the three categories (Table 6), the results show that the highest prevalence (6.3%) can be found in group 1 with VAT scores from 2 to 2.49. A prevalence of 3.3% was established in group 2 with VAT scores between 2.5 and 2.99. Finally, 1.4% of the adolescents in the sample can be found in the highest category of compulsive gamers with average VAT scores ranging from 3 to 4.

Group 1 (2 – 2.49)	6.3%
Group 2: (2.5 – 2.99)	3.3%
Group 3: (3 – 4)	1.4%

Table 6: Different groups of compulsive gamers

- Types of games

The compulsive and non-compulsive gamers differ in the types of games they prefer. 68% of the compulsive gamers plays adventure games which is significantly more than the 58% of non-compulsive gamers ($\chi 2 = 5.612$, $p < .05$, $df = 1$). Action/FPS games are also more popular among compulsive gamers: 74% versus 45% ($\chi 2 = 27.813$, $p < .05$, $df = 1$). Fighting games are played by 63% of the compulsive gamers, which is again more than the 44% of non-compulsive gamers ($\chi 2 = 15.725$, $p < .05$, $df = 1$). Finally,, there is also a difference in the use of MMORPG[58] in both groups. These games are played by 42% of the compulsive gamers, but only 24% of the gamers in the non-compulsive group appears to have an interest in MMORPG's ($\chi 2 = 12.075$, $p < .05$, $df = 1$). No significant differences were found regarding the other game types (Figure 13).

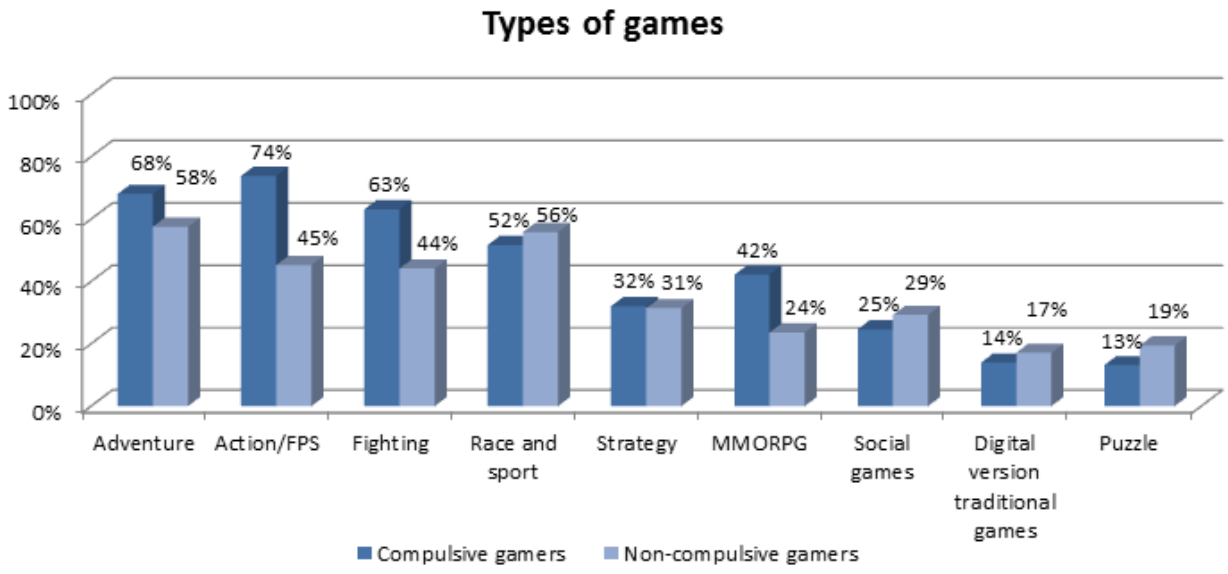

Figure 13: Types of games played by compulsive and non-compulsive gamers

- Time spent on online and offline gaming

On a school day compulsive gamers spent 1 hour and 58 minutes on offline gaming. This is significantly more than the non-compulsive gamers who spent 56 minutes on gaming offline ($t(108.277) = -3.175$, $p < .05$). On a non-school day too the amount of time spent is higher

[58] Massively Multiplayer Online Role-Playing Games

among the compulsive group: 3 hours and 23 minutes versus 2 hours and 2 minutes ($t(123.271) = -4.092$, $p < .05$). The same differences are found when looking at online gaming. On a school day, compulsive gamers play 2 hours and 26 minutes online compared to 50 minutes in the non-compulsive group ($t(96.975) = -6.922$, $p < .05$). The time spent on online gaming is higher in both groups, but the differential is much higher among compulsive gamers: 5 hours and 45 minutes versus 2 hours and 4 minutes ($t(94.926) = -6.916$, $p < .05$).

- Socio-demographic profile

The compulsive group consists mainly of boys (85.7%). Girls are clearly under-represented in this group and appear to suffer less from compulsive game use. The average age of the compulsive gamers is 15. Differences are found regarding education level as well. The results indicate that 38.5% is in technical education, whereas only 24.4% of the non-compulsive users can be found in this education level. Furthermore, 33% of the compulsive gamers is in vocational education which is again less compared to the 20.7% of the non-compulsive gamers. Compulsive gamers are found less in general education (24.8%) compared to their non-compulsive counterparts who are clearly more represented at this education level (47.5%). To conclude, 3.7% of the compulsive gamers is in art education compared to 7.4% of the non-compulsive gamers. A Pearson chi-square test shows that the association between education level and whether or not an adolescent suffers from compulsive gaming is significant: $\chi^2 = 25{,}033$, $p < .01$, $df = 3$. Contrary to the comparison between compulsive and non-compulsive internet users, no difference could be found between the two groups of gamers regarding family situation when examining marital status of the parents, number of brothers and sisters and the birth order of the respondent. A negative correlation with VAT score was found for the indication the respondents gave about their parents' financial situation (-.110).

- Parental control

As with the results for compulsive internet use, significant correlations are found between the average VAT score on the one hand and rules about the time spent on the internet and rules about the content of that internet use on the other hand. Again, a negative correlation was found with rules about the content (-.147). For rules about the time spent on the internet, a positive correlation with the average score on the VAT (.124) was found.

- Attitude towards school, personality and psychosocial wellbeing

The average score on the scale measuring the adolescents' attitude towards school is significantly lower in the compulsive group: $M = 5.05$ compared to $M = 5.95$, $t(147.97) = 3.59$, $p < .01$). Also the indication respondents gave about their grades is lower among compulsive gamers ($M = 6.55$) compared to non-compulsive gamers ($M = 7.04$), $t(146.104 = 2.484$, $p < .01$).

The groups of compulsive and non-compulsive gamers were compared by looking at the five personality dimensions integrated in our survey. Similar to the results of the comparison between compulsive and non-compulsive internet users, no difference was found between the groups of gamers regarding the personality trait extraversion. Differences were found when looking at the four other dimensions. Lower scores were found for the personality dimension agreeableness: M = 22.59 versus M = 23.75 ($t(582) = 3.778$, $p < .05$). Compulsive gamers (M = 19.82) also score lower on resourcefulness compared to their non-compulsive counterparts (M = 20.97), $t(582) = 2.774$, $p < .05$. Moreover, they are less emotionally stable (M = 17.55) compared to non-compulsive gamers (M = 18.75), , $t(571) = 2.7$, $p < .05$. Finally, differences occur when looking at the personality dimension conscientiousness. Again, lower scores are found in the compulsive group of gamers: M = 17.59 versus M = 19.04 ($t(570) = 2.936$, $p < .05$).

Compulsive and non-compulsive gamers show differences when examining the indicators of psycho-social wellbeing. First of all, compulsive gamers experience more feelings of loneliness (M = 27.85) compared to the non-compulsive gamers (M = 24.96) ($t(573) = -39.70$, $p < .05$). Also, a higher level of depressive feelings is found in the compulsive group: M = 12.05 versus M = 9.08 ($t(585) = -6.350$, $p < .05$). Lower scores on the other hand are found among compulsive gamers (M = 22.62) when looking at perceived control over their own life compared to non-compulsive gamers (M = 24.44), , $t(574) = 4.279$, $p < .05$. Finally, compulsive gamers score lower on self-esteem: M = 34.08 versus M = 35.89, $t(566) = 2.609$, $p < .05$. (for correlation overview see Table 12, p. 63)

- Predictors of compulsive gaming

Regression analysis was used to distinguish predictors of the average score on the Videogame Addiction Test (VAT). In the first model (Table 7), gender and age were entered in the first block and already explain 13% of the variance in average VAT score ($F(2, 437) = 33.73$, $p < .01$). Gender is a very strong predictor of the average VAT score ($\beta = -.389$, $p < .01$) indicating that boys are more likely to score higher on the scale. Attitude towards school is entered in the second step and explains an extra 2.1% ($F(3, 436) = 27.08$, $p < .01$). The five personality dimensions of the Quick Big Five are integrated in the third block and explain 8.4% above the first two steps ($F(8, 431) = 10.21$, $p < .01$). Agreeableness is the only significant predictor ($\beta = -.157$, $p < .01$) in this block. Variables indicating psychosocial wellbeing are entered in the fourth and last block explaining an extra 4.9% ($F(12, 427) = 8.31$, $p < .01$). Perceived control ($\beta = -.120$, $p < .01$) and depressive feelings ($\beta = .216$, $p < .01$) are significant predictors in this step. The block of gender and age, followed by attitude towards school, personality and psycho-social wellbeing in the next steps explain 28.4% of the variance in average VAT score.

	Beta	*p*	ΔR^2
STEP 1			
Gender	-,389	.000	13%
Age	.031	.474	
***Adjusted* R^2**		**13%**	
STEP2			
Attitude towards school	-.034	.452	2.1%
***Adjusted* R^2**		**15.1%**	
STEP 3			
Extraversion	.050	.274	8.4%
Agreeableness	-.157	.001	
Conscientiousness	-.073	.117	
Emotional stability	-.040	.439	
Resourcefulness	-.076	.098	
***Adjusted* R^2**		**23.5%**	
STEP 4			
Loneliness	.001	.982	4.9%
Perceived control	-.120	.031	
Self-esteem	.002	.968	
Depressive feelings	.216	.000	
***Adjusted* R^2**		**28.4%**	

Table 7: Predictive regression model 1 for average VAT score

A second regression model was composed with only the strongest predictors of the average VAT score in order to arrive at a more compound predictive model. Gender was entered in step 1 and explains 10.9% of the variance in average VAT score ($F(1, 518) = 64.73$, $p < .01$). Beyond that the model shows that gender is the strongest predictor of the average score on the VAT ($\beta = -.358$, $p < .01$). The time spent on sports was entered in the second block and explains an extra 4.9% ($F(2, 517) = 46.65$, $p < .01$). Rules about time and rules about content regarding internet use are entered in block 3 and explain a further 4.6% to add to steps 1 and 2 ($F(4, 515) = 323.546$, $p < .01$). Agreeableness, resourcefulness and depressive feelings were entered in the final step explaining an extra 14.9% of the variance ($F(7, 512) = 19.257$, $p < .01$). Depressive feelings ($\beta = .216$, $p < .01$) are the second strongest predictor of average VAT score together with gender ($\beta = -.300$, $p < .01$). In sum, the block of age and gender together with personality traits, variables related to psychosocial well-being and attitude towards school explain 34.5% of the variance in average CIUS score.

	Beta	*p*	ΔR^2
STEP 1			
Gender	-.358	.000	10.9%
Adjusted R^2		**10.9%**	
STEP2			
Time spent on sports	-.159	.000	4.9%
Adjusted R^2		**15%**	
STEP 3			
Rules about time	.205	.000	4.6%
Rules about content	-.149	.000	
Adjusted R^2		**19.6%**	
STEP 4			
Agreeableness	-.172	.000	14.9%
Resourcefulness	-.096	.013	
Depressive feelings	.300	.000	
Adjusted R^2		**34.5%**	

Table 8: Predictive regression model 2 for average VAT score

4.2.4 Compulsive SNS use

- Prevalence

The Compulsive Social Networking Site Scale (CSS) was integrated in the survey to establish the number of compulsive SNS users in our adolescent sample. Again, a cut-off score of on average 2 and more (= sometimes) was used to divide the sample into compulsive and non-compulsive users. A prevalence of 7.1% compulsive SNS users was found among the secondary school children. The compulsive users have an average CSS score (M = 2.3) which is significantly higher than that of the non-compulsive SNS users (M = 0.66), (t(92.067) = -30,908, $p < .01$.

In addition, a closer look was taken at the seriousness of the compulsive SNS use by applying alternative cut-off points in order to arrive at three groups of compulsive SNS users (Table 9). A prevalence of 5.9% is found in group 1 with CSS scores ranging from 2 to 2.49. A prevalence of 0.6% is found in group 2 with average scores between 2.5 and 2.99. Finally, a prevalence of 0.6% can be found in the highest category with average CSS scores ranging from 3 to 4.

Group 1 (2 – 2.49)	5.9%
Group 2: (2.5 – 2.99)	0.6%
Group 3: (3 – 4)	0.6%

Table 9: Different groups of compulsive SNS users

- Time spent on SNS

Youngsters in the compulsive category spent on average 2 hours and 38 minutes per day on SNS on a school day. In the non-compulsive group this is significantly less: 1 hour and 7 minutes ($t(69.824) = -3.714$, $p < .01$). The time spent on SNS rises for both groups on a weekend day or during the holidays, but is still higher among compulsive SNS users: 4 hours and 35 minutes vs. 2 hours and 1 minute ($t(70.751) = -4.447$, $p < .01$).

- Socio-demographic profile

No difference is found regarding gender in the group of compulsive users of SNS. The compulsive group consists of 51.4% girls and 48.6% boys. The average age in the group is 14.84. The groups do, however, differ by education level. 31.4% of the compulsive users is in vocational education compared to only 21.9% of the non-compulsive users. Furthermore, 38.6% of the compulsive SNS users follow technical education which is less than the 25.9% of the non-compulsive users. No difference was found regarding art education: 8.6% in the compulsive group versus 10.1% in the non-compulsive group. Finally, compulsive SNS users are found less in general education (21.4)% compared to their non-compulsive counterparts (42.2%). A Pearson chi-square test shows that the association between education level and whether or not an adolescent suffers from compulsive SNS use is significant: ($\chi^2 = 13{,}26$, $p < .01$, $df = 3$). The results did not show differences regarding marital status of the parents, number of brothers and sisters and the birth order of the respondent. A small negative correlation was found between average CSS score and the indication adolescents gave about their family's financial situation (-.104).

- Parental control

Although significant correlations were found between average CIUS and VAT scores and rules about internet use (content and time) imposed by parents, the results show that this is not the case for the average score on the CSS measuring compulsive SNS use.

- Attitude towards school, personality and psychosocial wellbeing

Adolescents in the group of compulsive SNS users have a more negative attitude towards school ($M = 5.31$) in comparison to the group of non-compulsive users ($M = 6.04$), $t(80.218) = 2.218$, $p < .05$. No difference was found regarding the indication youngsters gave about their grades.

No differences are found between the compulsive and non-compulsive groups regarding the personality dimensions conscientiousness ($t(746) = 1.036$, $p > .05$) and resourcefulness ($t(77.704) = 0.817$, $p > .05$). The compulsive SNS users did show lower scores ($M = 20.08$) on the personality trait extraversion compared to non-compulsive users ($M = 21.26$), $t(739)=2.132$, $p < .05$. Also, the average score on the dimension emotional stability is lower in

the compulsive group: M = 17.23 versus M = 18.321 (t(745)=2.26, p < .05). To conclude, lower scores were found among compulsive SNS users when looking at agreeableness: M = 22.67 versus M = 23.65 (t(76.965) = 2.222, p < .05).

The groups appear to differ when comparing the average scores on the four variables measuring psycho-social wellbeing. Compulsive SNS users experience more feelings of loneliness (M = 29.36) compared to their non-compulsive counterparts (M = 24.63), t(746)= -5.741, p < .01. This is also the case for depressive feelings which are stronger in the compulsive group: M = 12.53 versus M = 8.99, t(90.294) = -7.569, p < .01). Perceived control on the other hand is lower among compulsive SNS users (M = 22.26) compared to the non-compulsive users (M = 24.46), t(741) = 4.454, p < .01. Self-esteem is also lower in the compulsive group: M = 32.55 versus M = 36.21, t(734) = 4.885, p < .01. (for correlation overview see Table 12, p. 63)

- Predictors of compulsive SNS use

Predictors of compulsive SNS use were established by using hierarchical regression modeling. Gender and age are entered in the first step and explain 2.5% of the variance in average CSS score (F(2, 592) = 8.608, p < .01). The five personality traits in the second block explain an extra 6% (F(7, 587) = 8.902, p < .01). Variables indicating psychosocial wellbeing are entered in the last block and explain 7.3% in addition to steps 1 and 2 (F(11, 583) = 11.046, p < .01). The total block with age and gender, personality and psychosocial wellbeing explain 15.8% of the variance in CSS score.

	Beta	*p*	ΔR^2
STEP 1			
Gender	-.121	.003	2.5%
Age	-.084	.031	
***Adjusted* R^2**		**2.5%**	
STEP2			
Extraversion	.056	.174	6%
Agreeableness	-.124	.005	
Conscientiousness	.016	.706	
Emotionalstability	-.067	.149	
Resourcefulness	.029	.487	
***Adjusted* R^2**		**8.5%**	
STEP 3			
Loneliness	.113	.024	7.3%
Perceived control	-.155	.003	
Self-esteem	-.113	.046	
Depressive feelings	.219	.000	
***Adjusted* R^2**		**15.8%**	

Table 10: Predictive regression model 1 for average CSS score

4.3 Link between compulsive use and other online activities

Correlation analysis was conducted to look for links between types of internet applications and scores on the CIUS, VAT and CSS. The results indicate a positive correlation between the extent to which e-mail is used and average scores on the CIUS (.133), VAT (.115) and CSS (.149). Chatting is positively correlated to the average score on the CIUS (.402) and the CSS (.274), but no correlation was found with VAT score. This last result is not surprising since chatting is not one of the main functions of games. The extent to which youngsters use the internet for watching videos and listening to music appears to be positively correlated to average CIUS (.307), VAT (.140) and CSS (.124) scores. A positive correlation is also found between visiting erotic websites and average CIUS (.144) and VAT scores (.265). Furthermore our results indicate a positive correlation between downloading and average scores on the three scales measuring compulsive use: CIUS (.306), VAT (.217) and CSS (.194). Online shopping is correlated in a positive way to CIUS (.156) and VAT (.139).

	1	2	3	4	5	6	7	8	9	10
1. CIUS	-									
2. VAT	,533**	-								
3. CSS	,490**	,351**	-							
4. E-mail	,133**	,115**	,149**	-						
5. Looking for information	,001	-,039	-,095**	,299**	-					
6. Chatting	,402**	,030	,274**	,187**	,081*	-				
7. Erotic websites	,144**	,265**	-,001	,016	,042	,061	-			
8. Downloading	,306**	,217**	,194**	,118**	,042	,311**	,270**	-		
9. Video's and music	,307**	,140**	,124**	,157**	,214**	,427**	,173**	,430**	-	
10. Online shopping	,156**	,139**	,070	,123**	,057	,100**	,162**	,223**	,120**	-
N	925	604	775	989	992	989	977	986	995	993
Mean	1,02	1,10	0,81	1,91	2,39	2,84	0,62	1,65	0,25	3,32
SD	0,70	0,86	0,69	1,45	1,25	1,63	1,21	1,49	0,57	1,33

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 11: Correlation analysis online activities

The present study focuses on the compulsive use of the internet in general and on two specific activities, e.g. games and social networking sites. The main reason for that choice is that the concept of compulsive internet use is rather heterogeneous and that a person rarely shows problems with the internet in general, but rather with a specific activity. It is nevertheless possible that other online activities may also become compulsive. As was described in the results section on the adolescents' general internet use, other online activities are engaged in to a great extent as well. Selecting only the categories ***(almost) every day*** or ***multiples time a day*** for each online activity, results show that 42.5% of the youngsters can be found in those categories where the activity is chatting. For erotic websites this is 5.6%. Among our sample of secondary school children 0.6% can be found in the categories (almost) every day and multiple times a day for online shopping. For watching videos and listening to music online the result is 51.5% of the total sample. E-mail is used to a great extent by 18.5% of the adolescents. 23.2% of the youngsters looks up information online at least (almost) every day. Finally, 15.1% downloads very regularly. Future research should look more extensively at the

role of these other online activities in order to come to a better understanding of the concept of compulsive internet use.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 CIUS score	-													
2 VAT score	,533**	-												
3 CSS score	,490**	,351**	-											
4 Attitude school	-,184**	-,216**	-,057	-										
5 Grades	-,175**	-,187**	-,107**	,317**	-									
6 Loneliness	,242**	,193**	,247**	-,188**	-,161**	-								
7 Perceived control	-,272**	-,196**	-,256**	,113**	,132**	-,559**	-							
8 Self-esteem	-,299**	-,154**	-,230**	,173**	,204**	-,492**	,591**	-						
9 Depressive feelings	,429**	,280**	,326**	-,133**	-,166**	,380**	-,500**	-,561**	-					
10 Extraversion	-,120**	-,059	-,060	,067*	,063	-,336**	,311**	,294**	-,203**	-				
11 Conscientiousness	-,173**	-,211**	-,055	,293**	,368**	-,134**	,145**	,240**	-,169**	-,029	-			
12 Agreeableness	-,139**	-,236**	-,120**	,306**	,225**	-,320**	,211**	,290**	-,078*	,187**	,379**	-		
13 Emotional Stability	-,227**	-,089*	-,186**	-,052	,131**	-,236**	,381**	,381**	-,475**	,234**	,028	-,032	-	
14 Resourcefulness	-,139**	-,171**	-,061	,184**	,167**	-,150**	,157**	,310**	-,115**	,149**	,222**	,379**	-,071*	-
N	925	604	775	996	982	941	945	933	957	942	943	964	946	959
Mean	1,02	1,1	0,80	5,98	7,01	25,2	24,19	35,7	9,34	20,95	19,2	23,59	18,3	20,72
SD	0,70	0,86	0,69	2,38	1,62	6,81	4,04	6,19	4,55	4,35	4,58	2,94	3,99	3,90

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 12: Correlation analysis attitude towards school, personality and psychosocial wellbeing

CHAPTER 5:

Compulsive computer and internet use in Belgium among adults

5 Compulsive computer and internet use in Belgium among adults

5.1 Methodology

In order to determine the prevalence of CIU in Belgium - including both the Flemish- and French-speaking communities - and to specify the socio-demographic characteristics of the group affected by CIU, an online survey was designed for a representative sample of the Belgian population of 18 years and older. In July 2012 our online survey was administered to a panel of 1000 respondents of 18 years and older in cooperation with a Belgian research agency. The sample was stratified on gender, age, region and level of education in order to obtain a sample that is representative of the Belgian adult population based on the data of the Directorate-general Statistics and Economic information and the Centre for Information about Media (CIM). Two reminders were sent in the two weeks following the first e-mail. An incentive raffle was organised in order to encourage people to participate in the online survey. 577 respondents filled out the Dutch version of the survey and 423 completed the French version. In order to reach a large enough subsample of people dealing with online problems, we selected respondents who spent more than 16 hours online per week. This allows us to answer our research question regarding the profile of compulsive internet users. When reporting the prevalence of compulsive internet use in the general population, we recalculated the proportion of this subgroup by extrapolating our results to the general public, knowing the exact portion of Belgian people who spend more than 16 hours online per week (= 45,2 %). Genders are equally represented in our sample and the average age is 43. 56,6% of the respondents is Flemish, 33,7% is Walloon and 9,7% of our sample are inhabitants of the Brussels region.

The questionnaire (see appendix 7 and 8) for the French and Flemish version) consisted of seven different parts. In the first part, we asked respondents about their web access at home, the possession of a computer of their own and a smartphone, we focused on the amount of time spent surfing the internet on an average weekday (measured on an average Monday, Tuesday etc.) and we refined the question by asking what time was spent on the internet solely for work or school. We also asked respondents to indicate what kind of internet activities they engage in (mailing, chatting, online shopping, …) and how often they do so (6 point scale, going from ‘never’ to ‘multiple times a day’).

In a second part of the questionnaire, we combined questions on other leisure activities such as being a member of a club or association and we asked respondents to fill out how much time approximately they spent per week on domestic work, using a computer offline, watching television or other video material, sport, meeting with friends and doing nothing at all/being lazy. A third part of our survey was dedicated to specific scales measuring compulsive media behaviour such as the CIUS-scale developed by Meerkerk in order to measure compulsive internet use in general, the VAT-scale (for measuring compulsive gaming) and our adapted version of the BFAS-scale (for measuring SNS compulsive use: Compulsive Social Networking. All these scales consisted of different items which were measured on a ‘never’ to ‘very often’ scale.

The fourth part concentrated on the respondents' attitude towards work or school, depending on their current situation. Respondents could indicate on a 10 point scale "how much they liked going to work" or "how much they liked going to school" where 1 stood for "not at all" and 10 for "very much". The selected psychological scales form a fifth important part of the questionnaire (Loneliness Scale, Rosenberg Self Esteem Scale, Mastery Scale, Depressive Mood List, and Quick Big Five). In the sixth part of the survey, we asked respondents to indicate whether they had a SNS profile, on which SNS they had a profile, how much time they spent on SNS on an average working or school day and how much time they spent on SNS on non-school or non-working days.

In the final socio-demographic part we asked for respondents' gender, age, nationality, their birth order, professional status, their highest obtained level of education and an indicator of their financial situation.

Several correlation analyses and hierarchical stepwise multiple regressions were conducted with scores on CIUS/VAT and CSS as the dependent variable. Following Meerkerk and van Rooij, Schoenmakers, van den Eijnden, Vermulst & van de Mheen who used an average score of 2 or above (on a scale ranging from 0 to 4) as the cut-off point for compulsive use of the internet and games respectively, we also used this point in order to discriminate between compulsive and non-compulsive users of the internet or internet/computer applications.
In the regression models, age and gender of the respondents were entered in the first block, psychological scales in the second block, and additional possibly relevant variables such as private use of the internet during working hours and attitude towards work or school were entered in following steps. In order to compare compulsive users to non-compulsive users, several t-tests were calculated.

5.2 Results

5.2.1 General internet use

99.6% of all adults in the sample have internet access at home and 99.5% indicates owning a computer. Furthermore, 42.7% uses a smartphone. Respondents spent on average 29 hours and 41 minutes on the internet on a weekly basis. This corresponds with an average of 4 hours and 14 minutes per day. It is worth pointing out that only adult respondents who spent more than 16 hours online per week were selected for this part of the study.

- Online activities

Table 13 shows the extent to which different online activities are used by Belgian adults. Information seeking is a very popular activity among respondents in the sample. 39.5% looks for information online multiple times a day and 33.9% does this (almost) every day. Only 0.2% never uses the internet for looking up information. In addition, e-mail is used to a great extent by Belgian adults. 57.6% uses e-mail multiple times per day and 25% (almost) every day. None of the respondents was found in the answer category 'never'. Adults also use the

internet for entertainment purposes, for example by streaming videos or music. 84% indicates using the internet to watch videos, to varying degrees, and listening to music is an activity engaged in by 51.7% of the respondents in the sample. Besides streaming, 47.9% of the adults also uses the internet to download content from the web. 60% of the adults in the sample use the internet to chat. 11.5% does this (almost) every day and 9.8% even multiple times a day. 27.8% of the Belgian adults who spent more than 16 hours online per week visit erotic websites to varying extents. Some adults visit erotic websites on a very regular basis. 2.7% indicates visiting such sites (almost) every day and 1% even more than once per day. Online gambling and online stock market use are less popular activities among the respondents in the sample. Respectively 90.2% and 95.1% never engages in these online activities.

The internet is used by adults not only for communication, entertainment or information purposes. On average 3 out of 4 adults in the sample also use the internet for shopping. Furthermore, 11.9% uses the internet to find a partner by using online dating sites. To conclude, the results show that the internet may not always be used with a certain goal in mind. 16.2% of the adults indicates surfing without a specific goal multiple times a day and 17.2% does this (almost) every day.

	Videos	Music	Chatting	E-mail	Infor-mation	Down-loading	Surfing without goal	Erotic websites	Online gambling	Online stock market	Online shopping	Online dating
Never	16,0%	48,3%	40,0%	0,0%	0,2%	52,1%	18,1%	72,2%	90,2%	95,1%	27,8%	88,1%
1 day per week or less	36,2%	24,9%	2,3%	4,7%	4,5%	30,9%	22,4%	15,0%	5,8%	3,1%	63,5%	5,9%
2 - 3 days per week	23,7%	11,6%	11,6%	7,9%	12,2%	7,6%	18,7%	6,9%	2,0%	0,7%	6,2%	2,5%
4 - 5 days per week	9,8%	5,7%	5,8%	4,8%	9,7%	3,3%	7,4%	2,2%	0,8%	0,2%	1,2%	1,1%
(Almost) every day	8,7%	5,7%	11,5%	25,0%	33,9%	3,2%	17,2%	2,7%	0,6%	0,6%	0,8%	1,3%
Multiples times per day	5,6%	3,8%	9,8%	57,6%	39,5%	2,9%	16,2%	1,0%	0,6%	0,3%	0,5%	1,1%

Table 13: Online activities among Belgian adults

- Games

The results indicate that 46.1% of the adults plays games. Within that group of gamers most play both offline and online games (53.6%). 24.6% only plays online and the remaining 22.8% only games offline. On a weekday offline gaming takes up on average 1 hour and 36 minutes. On a day during the weekend or the holidays this rises to 2 hours and 23 minutes. The average time spent on online gaming on a weekday is 1 hour and 48 minutes. Again, on a weekend day or holiday this rises to an average of 2 hours and 29 minutes. 38.5% of the gamers tries a new game every month. 14.3% tries two new games and 2.9% three new games on a monthly basis. 6% even tries out four or more games each month. The remaining 38.5% indicates not trying a new game every month.

Strategy games are played by 42% of the adult gamers, which makes them the most popular game type. Adventure games are also played to a great extent by the gamers in the sample (38%). Social games (32%) and puzzle games (32%) are also very popular. 1 out of 4 adult gamers plays action/FPS games and 22% plays racing and sport games. Digital versions of

traditional games (19%), MMORPG's (16%) and fighting games (12%) appear to be less popular.

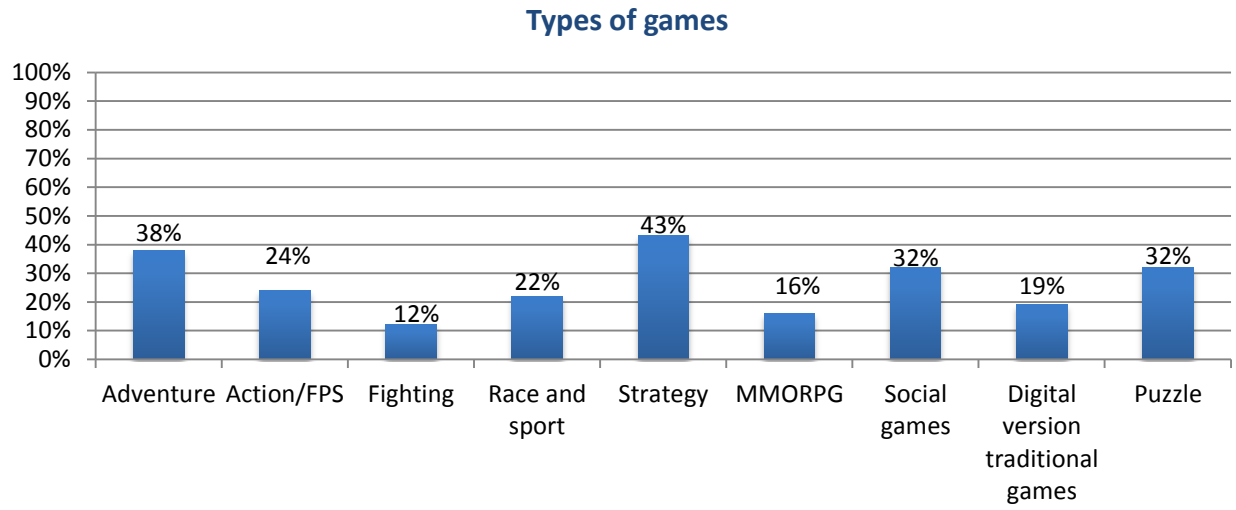

Figure 14: Types of games played by adults

- Social networking sites (SNS)

79.2% of the adults has a profile on at least one social networking site. Among this group of SNS users, Facebook is the most popular (98.1%). Twitter follows in second place with 21.6% of all SNS users having a profile. LinkedIn, a professional networking site, is used by 18.4% of the SNS users in the sample, and 14.3% has a profile on Netlog. MySpace is a lot less popular among adult SNS users with only 4% having a profile on this networking site. In addition, 4.2% indicates using other SNS than the examples included in the survey. The most frequently recurring other SNS is Google+ with 1.1% of all SNS users having a profile. Looking at the time spent on SNS, the results show that adult SNS users spent on average 1 hour and 37 minutes on SNS during a weekday. On a day during the weekend or the holidays this rises to 1 hour and 58 minutes.

5.2.2 Compulsive internet use

- Prevalence

Based on the average score on the Compulsive Internet Use Scale (CIUS) (Meerkerk, 2006) a prevalence of 12.2% can be established in the sample of adults who spend more than 16 hours online per week. Knowing the exact portion of Belgian adults who spend more than 16 hours online per week (= 45,2%), this prevalence can be extrapolated to the entire population resulting in a prevalence of 5.52%. The average score on the CIUS is significantly higher in the compulsive users group (M = 2.3) compared to the non-compulsive users group (M = 0.8) ($t(184.868) = -37.527$, $p < .01$).

Three groups of compulsive users have been distinguished based on the average CIUS score. Table 14 shows both the prevalence in the sample (left column) and the prevalence extrapolated to the entire Belgian online population (right column). The highest prevalence (sample= 9%, population: 4.07%) is found in the first compulsive group with CIUS scores between 2 and 2.49. A prevalence of 2.2% (population: 1%) can be established in group 2 with average CIUS scores ranging from 2.5 to 2.99. In group 3, the highest group, with scores ranging from 3 to 4, a prevalence of 1% (population: 0.45%) was established.

	Sample	**Population**
Group 1 (2 – 2.49)	9.0%	4.07%
Group 2: (2.5 – 2.99)	2.2%	1%
Group 3: (3 – 4)	1%	0.45%

Table 14: Different groups of compulsive internet users

- Time spent online

When comparing the groups of compulsive and non-compulsive users by looking at the average amount of time spent on the web, the results show that compulsive users spent significantly more time online both on weekdays and on days during the weekend or holidays. Compulsive users spent on average 34 hours and 26 minutes online on a weekly basis compared to 29 hours and 2 minutes in the group of non-compulsive users. On a daily basis this corresponds to 4 hours and 55 minutes in the compulsive group and 4 hours and 10 minutes in the non-compulsive group. An independent sample t-test shows that these differences are significant ($t(997) = -3.630$, $p < .05$). The average time spent online in the non-compulsive group seems rather high, but that can be explained by the inclusion criterion of spending more than 16 hours online per week.

- Socio-demographic profile

The compulsive group consists of 59% women and 41% men. Compulsive internet users are on average 37 years old. Looking at adults in the sample who are no longer students, no difference is found regarding education level between compulsive and non-compulsive internet users ($\chi^2 = 10{,}68$, $p > .05$, $df = 6$). A smaller portion of the respondents ($N = 143$) indicates that they are still studying. When comparing the education level of the compulsive to the non-compulsive group in that subsample, significant differences were found. The results show that 18.5% of the compulsive users is in technical education compared to 5.2% of the non-compulsive users. Furthermore, 14.8% of the compulsive users are in vocational education compared to 1.7% of the non-compulsive ones. Fewer compulsive internet users are found in higher professional education (25.9%) compared to their non-compulsive counterparts (50.9%). This is also the case for studying at a university: 25.9% versus 31%. A Pearson chi-square test indicates that the association between education level and whether or not adults who still study suffer from compulsive internet use is significant: $\chi^2 = 17{,}979$, $p < .01$, $df = 6$.

Respondents were also asked about their marital status. The results indicate that compulsive internet users are more often single (33.6%) compared to non-compulsive users (23.1%). When they are in a relationship, they are more often not living together: 18.9% versus 10.7%. Being in a relationship and living together is less prevalent among the compulsive users group: 13.9% versus 41%. Also, compulsive users are less often married (28.7%) compared to the non-compulsive (41%). Again, Pearson chi-square testing shows that these differences are significant: $\chi^2 = 17{,}979$, $p < .01$, $df = 6$.

- Problematic internet use at work

Working respondents were asked to indicate on a 5-point Likert scale (totally disagree – totally agree) to which extent the following statements are applicable to them: 1) ***I spent too much time on the internet during work hours for private purposes*** and 2) ***I have been reprimanded by my boss because I was using the internet for personal reasons***. Results show significant positive correlations between the average CIUS score and both spending time on the internet for private reasons during work (.244) and being reprimanded by your boss for that use (.263).

- Attitude towards work and school

Respondents who indicated they were in work were asked to answer on a scale from 1 (= not good at all) to 10 (= very good) how much they liked going to work. Respondents still in education were asked how much they liked going to school. The results indicate that respondents scored significantly lower on attitude towards work in the compulsive group ($M = 6.26$) compared to the non-compulsive group ($M = 7.39$), $t(70.311) = 3.644$, $p < .01$. A comparable result was found within the group of adults who go to school, where a lower score on attitude towards school was found in the compulsive group: 5.78 versus 7.41 ($t(32.124) = 3.211$, $p < .01$).

- Personality and psychosocial wellbeing

When comparing the group of compulsive to the group of non-compulsive users, no differences are found regarding the personality trait resourcefulness ($t(998) = 1.151$, $p > .05$). The groups differ however when looking at emotional stability. Compulsive users have a significantly lower score on this dimension ($M = 15.75$) compared to non-compulsive users ($M = 18.42$) ($t(998) = 6.314$, $p < .01$). The compulsive users ($M = 17.15$) also score lower on the personality dimension extraversion compared to the non-compulsive users ($M = 19.08$) ($t(998) = 3.978$ $p < .01$). In addition, conscientiousness appears to be lower in the compulsive users group: 19.96 versus 21.29 ($t(998) = 3.319$, $p < .01$). Finally, respondents in the compulsive group have lower scores on the personality dimension agreeableness ($M = 22.78$) compared to respondents in the non-compulsive group ($M = 23.91$) ($t(142{,}085) = 3.291$, $p < .01$).

The results indicate that compulsive and non-compulsive internet users differ when looking at all four indicators of psychosocial wellbeing integrated in this study. Compulsive users have a higher average score (M = 34) on the loneliness scale compared to non-compulsive users (M = 28.6), t(165.636) = -6.897, p < .01. Compulsive users appear to have less perceived control than non-compulsive users: M = 21.4 versus M = 24.66 (t(169.027) = 7.858, p < .01). A lower score is also found in the compulsive group (M = 32.08) when looking at self-esteem (t(892)=-10.278, p < .01) compared to the non-compulsive group (M = 37.6). Finally, respondents in the compulsive group experience more depressive feelings (M = 13.75) compared to respondents in the non-compulsive group (M = 9.58), t(998) = -9.449, p < .01. (for correlation overview see Table 21, p. 80)

- Predictors of CIUS score

Regression analysis shows that a first block of gender and age explains 2.7% of the variance in average CIUS score, F(2, 997) = 15.07, p < .01. A second block with the five personality dimensions measured by the Quick Big Five explains a further 11.4%, F(7, 992) = 24.517, p < .01. A third block containing indicators of psychosocial wellbeing was also indicated in the model and explains 7.1% in addition to the first two steps F(11, 988) = 25.592, p < .01. In total, the model explains 21.3% of the variance in average CIUS score. Within this model the depressive feelings indicator (β = .301, p < .01) is the strongest predictor of average CIUS score.

	Beta	*p*	ΔR^2
STEP 1			
Gender	-,027	,375	2.7%
Age	-,114	,000	
Adjusted R^2	**2.7%**		
STEP2			
Extraversion	-,014	,673	11.4%
Agreeableness	-,041	,202	
Conscientiousness	-,062	,042	
Emotional stability	-,085	,021	
Resourcefulness	,019	,533	
Adjusted R^2	**14.1%**		
STEP 3			
Loneliness	,070	,058	7.1%
Perceived control	-,041	,348	
Self-esteem	,007	,881	
Depressive feelings	,301	,000	
Adjusted R^2	**21.3%**		

Table 15: Predictive regression model 1 for average CIUS score among adults

5.2.3 Compulsive gaming

- Prevalence

The Videogame Addiction Test was integrated in the survey to establish the prevalence of compulsive gaming in our adult sample. Again, a cut-off point of 2 was used as an indication of compulsive use. Applying this cut-off score results in a prevalence of 5.8% in the sample of adults who spent more than 16 hours online on a weekly basis. After extrapolating this number to the entire Belgian adult population a prevalence of 2.62% can be established. The average VAT score is significantly higher in the group of compulsive users (M = 2.35) compared to the average score in the non-compulsive group (M = 0.68) ($t(76.789) = -23.499$, $p < .01$).

Table 16 shows the prevalences for compulsive gaming for each of the three categories of compulsive use that are distinguished based on the average VAT score. The highest prevalence (sample = 4.2%, population: 1.9%) is found in the first compulsive group with VAT scores between 2 and 2.49. A prevalence of 2.5% (population: 1.1%) can be established in the second group and a prevalence of 0.5% (0.22%) was found in the group 3 with the highest VAT scores.

	Sample	**Population**
Group 1 (2 – 2.49)	4.2%	1.9%
Group 2: (2.5 – 2.99)	2.5%	1.1%
Group 3: (3 – 4)	0.5%	0.22%

Table 16: Different groups of compulsive gamers

- Time spent online

Compulsive gamers spend on average 2 hours and 35 minutes on offline gaming on a work or school day. This is significantly higher than the average of 1 hour and 27 minutes that was found in the non-compulsive group ($t(54.722) = -3.844$, $p < .05$). On a day during the weekend or the holidays more time is spent on offline gaming by both groups, but compulsive users still spent significantly more time on offline gaming (3 hours and 56 minutes) compared to the non-compulsive users (2 hours and 8 minutes),$t(54.715) = 4.038$, $p < .05$. Compulsive gamers spent on average 2 hours and 47 minutes on online gaming on a school or work day. The average for non-compulsive gaming is 1 hour and 38 minutes which is significantly lower compared to the compulsive group ($t(50.346) = -2.174$, $p < .05$). As was the case for offline gaming, for both groups the time spent on online gaming is higher on a day during the weekend or the holidays. Compulsive gamers spent on average 3 hours and 30 minutes on online gaming on a non-work or non-school day. For non-compulsive gamers the figure is 2 hours and 19 minutes ($t(58.298) = - 3.062$, $p < .05$).

- Types of games

Differences can be found between the compulsive and non-compulsive gamers regarding the types of games they prefer playing (Figure 15). 40% of the compulsive gamers plays action/FPS games which is significantly more than the 22% of non-compulsive gamers ($\chi 2$ = 8.223, p < .05, df = 1). Fighting games are played by 22% of the compulsive gamers, which is again more than the 11% of non-compulsive gamers ($\chi 2$ = 6.553, p < .05, df = 1). Finally, a difference is also found in the use of MMORPG's in the two groups. These games are played by 35% of the compulsive gamers, but only 15% of the gamers in the non-compulsive group appears to have an interest in MMORPG's ($\chi 2$ = 14.058, p < .05, df = 1). No significant differences were found regarding the other game types.

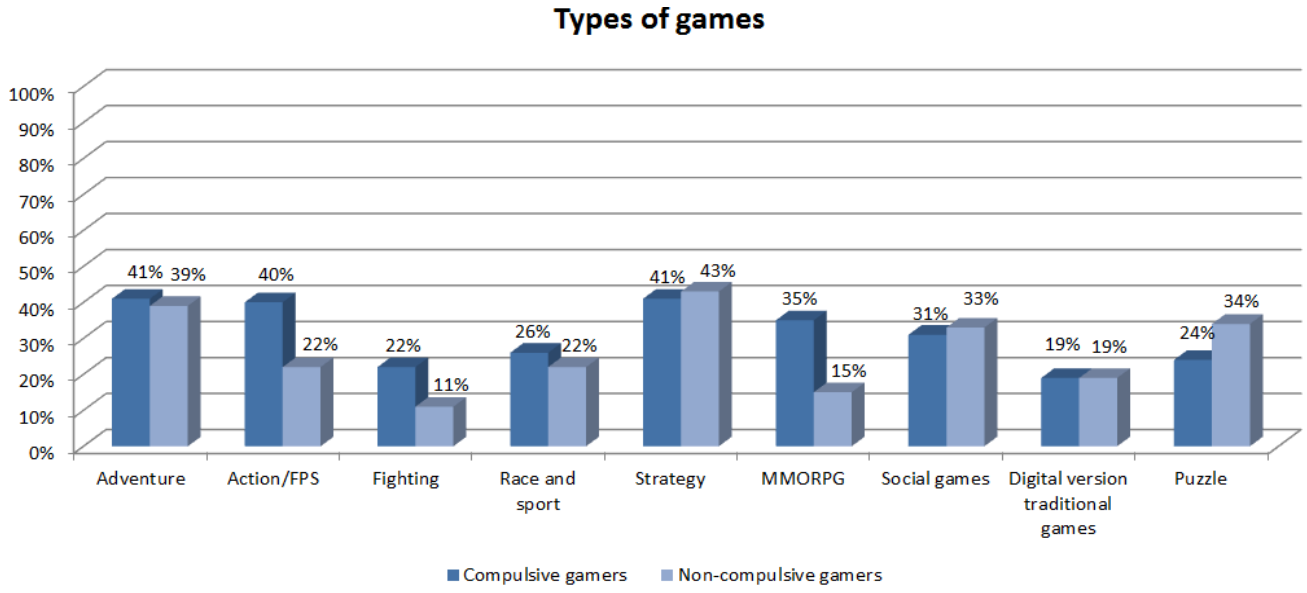

Figure 15: Types of game played by compulsive and non-compulsive gamers

- Socio-demographic profile

Compulsive gamers have an average age of 34. The compulsive group consists of 60.3% men and 39.7% women. The results showed no difference between the compulsive and non-compulsive gamers no longer in education in terms of the diploma they have obtained (χ^2 = 4,374, p > .05, df = 6).Within the subsample of studying adults, no differences were found between the groups regarding education level (χ^2 = 7,918, p > .05, df = 6). Nor do the compulsive gamers differ from the non-compulsive gamers when taking marital status into account (χ^2 = 2,411, p > .05, df = 5). Correlation analysis did, however, show a significant negative correlation between average VAT score and financial situation (-.162, p < .01).

- Problematic internet use at work

Results of the present study show that there is a significant positive correlation between average VAT score and using the internet too much for personal reasons during work hours (.164, $p < .01$). Furthermore, a positive correlation was also found between average VAT score and being reprimanded by your boss for personal use of the internet during work time (.309, $p < .01$).

- Attitude towards work and school

No difference was found regarding attitude towards work ($t(275) = -.299$, $p > .05$) and school ($t(73) = 1.506$, $p > .05$) when comparing compulsive to non-compulsive gamers. Nor did correlation analysis show a negative correlation between attitude towards work and school on the one hand and VAT score on the other hand.

- Personality and psychosocial wellbeing

No differences are found between the two groups of gamers when looking at the average scores on the personality dimensions extraversion ($t(479) = 1.024$, $p < .05$), emotional stability ($t(479) = 1.894$, $p < .05$), and resourcefulness ($t(479) = -.331$, $p < .05$). The compulsive group does, however, differ from the non-compulsive group regarding agreeableness. A lower average score is found for this trait among compulsive gamers: $M = 22.55$ versus $M = 24.11$, $t(68.930) = 3.296$, $p < .05$. The results also show that compulsive gamers ($M = 19.26$) are less conscientious than non-compulsive gamers ($M = 21.08$), $t(479) = 3.006$, $p < .05$.

When comparing compulsive to non-compulsive gamers, the results indicate that there is no difference between the groups regarding the extent to which they experience feelings of loneliness ($t(82.369) = -1.598$, $p < .05$). Compulsive gamers do have lower perceived control over their lives ($M = 21.95$) compared to non-compulsive gamers ($M = 24.17$), $t(479) = 3.171$, $p < .01$. The compulsive users also have lower self-esteem: $M = 32.87$ versus $M = 36.81$, $t(74.112) = 4.266$, $p < .05$. Finally, the compulsive gamers experience more depressive feelings ($M = 12.41$) than their non-compulsive counterparts ($M = 10.44$), ($t(479) = -3.005$, $p < .05$). (for correlation overview see Table 21, p. 80)

- Predictors of VAT score

A regression model was established to distinguish predictors of the score on the Videogame Addiction Test (VAT). Gender and age were entered in the first step and explain 1.8% of the variance in average VAT score, $F(2, 478) = 5.325$, $p < .01$. The second block with personality dimensions add an extra 8% ($F(7, 473 = 8.423$, $p < .01$). Finally, variables indicating psychosocial wellbeing integrated in the third block explain 8.1% of the variance in average VAT score above block 1 and 2, $F(11, 469) = 10.449$, $p < .01$. Depressive feelings ($\beta = .294$, $p < .01$), self-esteem ($\beta = -.211$, $p < .01$) and gender ($\beta = -.118$, $p < .01$) are the

strongest predictors within this model. As a whole, the model explains 17.9% of the total variance in the average VAT score.

	Beta	*p*	ΔR^2
STEP 1			
Gender	-,117	,008	1.8%
Age	-,085	,051	
Adjusted R^2		**1.8%**	
STEP2			
Extraversion	,076	,126	8%
Agreeableness	-,071	,127	
Conscientiousness	-,065	,148	
Emotional stability	-,016	,766	
Resourcefulness	,045	,331	
Adjusted R^2		**9.8%**	
STEP 3			
Loneliness	,004	,937	8.1%
Perceived control	,035	,582	
Self-esteem	-,198	,003	
Depressive feelings	,286	,000	
Adjusted R^2		**17.9%**	

Table 17 Predictive regression model 1 for average VAT score among adults

5.2.4 Compulsive SNS use

- Prevalence

Compulsive SNS use was measured using the Compulsive Social Networking Site Scale. A cut-off score of 2 and more was established to determine compulsive use of SNS. This results in a prevalence of 6,5% among the 1,000 respondents in our sample who spent more than 16 hours online per week. Assuming that compulsive use is not prevalent among non-heavy users of the internet we can extrapolate this to the general Belgian population aged 18 years and older. This results in a prevalence of 2,9% compulsive SNS users among Belgian adults. The average score on the CSS score is significantly higher in the compulsive users group (M = 2.4) compared to the non-compulsive users group (M = 0.46) t(790) = -31,039, p < .01.

As with the compulsive internet users and compulsive gamers, three groups of compulsive SNS users have been distinguished based on their average score on the scale measuring compulsive use. Table 18 shows the prevalence in the sample (column on left) and the prevalence extrapolated to the entire Belgian online population (column on right). Again, the highest prevalence can be found in group 1 (sample= 4.49%, population: 2%). In group 2 a prevalence of 1.2% is established in the sample, which corresponds to an extrapolated prevalence of 0.54% in the entire Belgian population. Finally, a prevalence of 0.9% (population: 0.41%) was established in the highest group of compulsive users.

	Sample	Population
Group 1 (2 – 2.49)	4.4%	2.0%
Group 2: (2.5 – 2.99)	1.2%	0.54%
Group 3: (3 – 4)	0.9%	0.41%

Table 18: Different groups of compulsive internet users

- Time spent online

Compulsive users spent on average 2 hours and 40 minutes on SNS on a school or working day. In line with expectations, this is significantly higher than the amount of time spent on SNS by the non-compulsive users group: 1 hour and 32 minutes ($t(70.204) = -3.645$, $p < .05$). On a day during the weekend or holidays, this rises to 3 hours and 7 minutes on average for compulsive SNS users and 1 hour and 51 minutes for non-compulsive respondents ($t(70.224) = -3.514$, $p < .05$).

- Socio-demographic profile

Compulsive users of SNS are on average 35 years old. The compulsive group consists of 61.5% women and 38.5% men. No difference was found between compulsive and non-compulsive users regarding the educational achievement of adults who are no longer studying ($\chi^2 = 12{,}140$, $p = .059$, $df = 6$). Within the subsample of adults still studying, a difference was found when looking at education levels ($\chi^2 = 17{,}497$, $p < .01$, $df = 6$). The results indicate that 23.1% of the compulsive users is in technical education compared to 6.6% of the non-compulsive users. Above that 23.1% of the compulsive users is in vocational education compared to 2.5% of the non-compulsive users. Fewer compulsive SNS users were at university (23.1%) compared to their non-compulsive counterparts (31.4%). A difference is also found for professional higher education. 21.1% of the compulsive SNS users is in this type of education, compared to 48.8% of the non-compulsive users.

Respondents were also asked about their marital status, but no difference between the groups of SNS users ($\chi^2 = 1{,}464$, $p > .05$, $df = 5$) was found. Correlation analysis did show a significant negative correlation between the indication respondents gave about their financial situation and their average CSS score (-.130).

- Problematic internet use at work

Respondents in the sample who are in employment were asked about their internet use at work for personal purposes. The results indicate that there is a significant positive correlation between average CSS score and spending too much time on the internet for non-work related purposes (.201). A positive correlation was also found in the employed group between average CSS score and being reprimanded by your boss for using the internet for personal purposes (.293).

- Attitude towards work and school

No difference was found between the compulsive and non-compulsive users groups regarding attitude towards work. Nevertheless, correlation analysis showed a significant negative correlation between attitude towards work and CSS score. When comparing the groups within the subsample of school-going respondents, differences were found when examining attitude towards school. The average score on a scale from 1 to 10 within the compulsive users group is 5.08 compared to 7.29 in the non-compulsive users group ($t(13.165), 2.866, p < .05$).

- Personality and psychosocial wellbeing

When we look at personality dimensions, the groups do not differ regarding extraversion ($t(81.124) = 1.008, p > .05$) and resourcefulness ($t(790) = .504, p > .05$). Compulsive SNS users do, however, score significantly lower on emotional stability ($M= 15.32$) compared to non-compulsive users ($M= 18.23$) ($t(790) = 5.080, p < .05$). Similarly, a lower score recurs when considering agreeableness ($M= 22.45$ versus $M= 24.01$, ($t(71.002) = 3.379, p < .05$) and conscientiousness ($M = 19.05$ versus $M= 21.05$, $t(790) = 3.695, p < .05$).

As was the case for compulsive internet users, the compulsive SNS users group differs from the non-compulsive users group on all variables indicating psychosocial wellbeing. On feelings of loneliness ($M= 33.74$ versus $M=29.03$, ($t(79.032) = 4.370, p < .05$) and depressive feelings ($M= 14.17$ versus $M= 9.90$, ($t(790) = -7.031, p < .05$) the results show that compulsive SNS users score higher than SNS users in the non-compulsive group. Lower scores were found in the compulsive user group for perceived control ($M= 20.82$ versus $M= 24.57$, $t(83.05) = 7.198, p < .01$) and self-esteem ($M= 31.26$ versus $M= 36$, ($t(790) = 6.805, p < .05$). (for correlation overview see Table 21, p. 80)

- Predictors of CSS score

A hierarchical regression model revealed that age and gender explain 5.5% of the variance, $F(2, 789) = 23.995, p < .01$. Personality traits explain a further 7.7% of the variance in average CSS score, $F(7, 784) = 18.163, p < .01$. Another 6.7% is explained when indicators of psychosocial wellbeing are added in the third step, $F(11, 780) = 17.79, p < .01$. In sum, the block of age and gender together with personality and psychosocial wellbeing explains 18.9% of the variance in average CSS score. In this model depressive feelings ($\beta = .237, p < .01$) is the strongest predictor of average CSS score.

	Beta	*p*	ΔR^2
STEP 1			
Gender	.051	.139	5.5%
Age	-168	.000	
***Adjusted* R^2**		**5.5%**	
STEP2			
Extraversion	.132	.001	7.7%
Agreeableness	-.062	.091	
Conscientiousness	-.036	.297	
Emotional stability	-.090	.033	
Resourcefulness	.054	.126	
***Adjusted* R^2**		**13.2%**	
STEP 3			
Loneliness	.060	.159	6.7%
Perceived control	-.076	.130	
Self-esteem	-.061	.251	
Depressive feelings	.205	.000	
***Adjusted* R^2**		**18.9%**	

Table 19: Predictive regression model 1 for average CSS score among adults

5.3 Other types of compulsive use

In the present study the main focus is on the compulsive use of the internet in general and two specific activities: gaming and social networking sites. It is nevertheless possible that compulsive use of the internet is manifested by other internet activities as well. Therefore five adapted scales of the Compulsive Internet Use Scale (CIUS) were integrated in the survey to measure the compulsive use of (1) **online gambling**, (2) **online shopping**, (3) **online stock market use** (4) **online dating** and (5) **online pornography**. These scales were presented only to those respondents who indicated engaging in these online activities at least 4 days per week.

The results show that compulsive online gambling is prevalent among 0.4% of the adults who spent more than 16 hours online per week. Extrapolated to the entire Belgian adult population this comes down to 0.18%. Both the compulsive use of online pornography and online shopping are prevalent among 0.7% of the adults in the sample or, when extrapolated, among 0.3% of Belgian adults. The results also show that 0.3% of the respondents uses online dating sites in a compulsive manner (= 0.14% of the entire Belgian adult population). To conclude, compulsive internet use is also manifested to a limited extent by online stock market use. 0.2% of the respondents engage in this activity in a compulsive way, which corresponds with an extrapolated prevalence of 0.09% in the entire Belgian population.

5.4 Link between compulsive use and other online activities

Correlation analysis was used to search for possible links between specific types of online activities and the average scores on the CIUS, VAT and CSS. The results show for example a positive correlation between the extent people chat online and average scores on the CIUS

(.265), VAT (.137) and CSS (.320). Watching online videos, for example on YouTube, is also positively correlated to the average scores on the CIUS (.169), VAT (.138) and CSS (.165). The extent to which adults go online without a specific goal again appears to be positively correlated to average CIUS (.248), VAT (.109) and CSS (.177) score. A positive correlation is also found between visiting erotic websites and VAT score (.120). Our results indicate a further positive correlation between downloading and average scores on the three scales measuring compulsive use: CIUS (.165), VAT (.181) and CSS (.136). Table 20 gives a complete overview of the correlations between each of the online activities with the scores on the three compulsive scales.

	1 CIUS	**2 VAT**	**3 CSS**
1. CIUS score	-		
2. VAT score	,667**	-	
3. CSS score	,611**	,553**	-
4. E-mail	-,058	-,131**	-,017
5. Searching for information	,025	-,051	,015
6. Chatting	,265**	,137**	,320**
7. Online gambling	,085**	,060	,092**
8. Online pornography	,083**	,120**	,009
9. Downloading	,165**	,181**	,136**
10. Watching video's	,169**	,138**	,165**
11. Listeneing to music	,128**	,065	,167**
12. Online shopping	,079*	,099*	,069
13. Online gaming	,188**	,289**	,056
14. Online stock market	,116**	,088	,172**
15. Online dating sites	,112**	,018	,137**
16. Social networking sites	,212**	,083	,288**
17. Surfing without specific goal	,248**	,109*	,177**
N	1000	481	792
Mean	0,99	0,89	0,62
SD	0,71	0,76	0,72

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 20: Correlation analysis online activities

	1	2	3	4	5	6	7	8	9	10	11	12
1. CIUS score	-											
2. VAT score	,667**	-										
3. CSS score	,611**	,553**	-									
4. Extraversion	-,177**	-,121**	-,029	-								
5. Agreeableness	-,096**	-,143**	-,085*	,225**	-							
6. Conscientiousness	-,153**	-,190**	-,126**	,063*	,287**	-						
7. Emotional Stability	-,315**	-,222**	-,280**	,268**	,032	,059	-					
8. Resourcefulness	-,034	-,040	,009	,224**	,321**	,152**	-,004	-				
9. Loneliness	,287**	,215**	,222**	-,386**	-,163**	-,104**	-,346**	-,144**	-			
10. Self-esteem	-,316**	-,342**	-,287**	,431**	,320**	,237**	,416**	,296**	-,550**	-		
11. Perceived control	-,313**	-,266**	-,271**	,386**	,196**	,181**	,456**	,201**	-,562**	,684**	-	
12. Depressive feelings	,438**	,362**	,376**	-,294**	-,087**	-,152**	-,610**	-,041	,518**	-,596**	-,607**	-
N	1000	481	792	1000	1000	1000	1000	1000	1000	1000	1000	1000
Mean	0,99	0,89	0,62	18,84	23,78	21,13	18,10	20,28	29,27	36,72	24,26	10,09
SD	0,71	0,76	0,72	5,06	2,98	4,17	4,46	3,74	8,95	6,53	4,89	4,77

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 21: Correlation analysis personality and psychosocial wellbeing

CHAPTER 6:

Qualitative research

6 Qualitative research

6.1 Methodology

6.1.1 Research Aims, Research Questions and Approach

The qualitative part of the CLICK research was aimed at exploring the experiences of adolescents and adults who are over-engaged with computer-based applications such as the internet and video games, and whose over-engagement leads to problematic issues in their lives. Our aim was to reveal the conditions under which compulsive uses of these technological applications unfold and evolve, and the individual and social consequences experienced. In order to map the associated psychological and social processes, we articulated our research via the following questions: How does internet and video game use evolve and when does it start becoming compulsive? What is it that distinguishes "compulsive" from "non-compulsive" internet and video game use? How important are these compulsive uses for individuals' lives and how they function? How do adolescents and adults narratively account for their own problematic experiences with the internet and video games? And finally, how do they appraise their current situation, the benefits from therapeutic experiences, and future perspectives in their own lives?

Nevertheless, consistent with the ever-evolving nature of qualitative research, the initial terminology of "compulsive uses" was revised and fine-tuned. Indeed, after collecting the first series of data, we realized that adolescents' and adults' narrations were not typically centered on the issue of "compulsiveness" of computer, internet and video game use, and, in addition, such compulsive uses were more of an epiphenomenon suggesting deeper affective and social situations. Consequently, in an effort to capture a broader picture of participants' experiences, we adjusted our interpretations of compulsive uses in order to make room for different degrees of problematic use of the internet and video games.

In order to reveal the psychological and social processes associated with problematic use of the internet and video games, the life story interview was deemed a good fit for this qualitative, exploratory study. According to Atkinson (1998, p. 8), *"A life story is the story a person chooses to tell about the life he or she has lived, told as completely and honestly as possible, what is remembered of it, and what the teller wants others to know of it, usually as a result of a guided interview by another"*. The life story interview is a methodological approach to understanding not only people's general biography but also domain-specific experiences in their lives (Lawthom, Clough & Moore, 2004). Accordingly, our aim was to explore, via life narratives, the extent to which technological applications such as the internet and video games impinge upon people's lives, more specifically upon the lives of individuals who are over-engaged with such applications. Since the adoption or "domestication" of new technologies usually implies users' modifications of motivational and behavioral patterns (Berker, Hartman, Punie & Ward, 2006; Silverstone & Hirsch, 2005), we wanted to

investigate the consequences of over-engaging motivational and behavioral patterns related to internet and video game use for people's psychological and social lives (Morris, 2006).

6.1.2 Recruitment of Participants

Inclusion criteria for this study required adolescents and adults with problematic uses of the internet and/or video games. In order to get access to such individuals, we established a close partnership with help and care institutions in Wallonia (Hôpital de jour La Clé, Centre ALFA), Brussels (Clinique du jeu pathologique Dostoïevski), and Flanders (VAD, CAD Limburg and Medisch en Psychotherapeutisch Centrum, Studentenvoorzieningen (KU Leuven)). Therapists in these institutions sent out an explanatory letter and a short form drawn up by the research team to the patients deemed likely to join our research. This allowed potential participants to indicate their agreement (and that of their parents, if they were under 18) to an initial meeting with one of the researchers, lasting a few minutes, the purpose being to outline the research orally and to answer any questions, so as to give them an accurate picture of the research aims.

The short form also allowed us to ask patients whether they preferred to tell their story in a group setting or in individual interviews. As we wanted to make sure that everyone was comfortable during the interviewing time, we left this aspect to the narrators to decide for themselves. All the subjects interviewed had opted for an individual interview or replied that they were happy with either approach. We therefore conducted all the interviews on an individual basis.

This initial meeting was likewise the opportunity to set out our ethical markers:

- The research team plans to set up the mechanism for collecting the life stories in close collaboration with the partner care institutions. Researchers guarantee a framework that is both independent of, but also linked to, therapy. In other words, we leave it to the service therapists to pass on our request to participate in the research to those patients that they consider to be in a fit state to participate, and to go through with them the relevance of committing to this process. On the other hand, what is said by participants in their life stories is not intended to be shared with therapists. Every participant will decide individually what elements of his experience of telling his life story he wants to be passed on to his therapist.
- In accordance with the directives of the Belgian Commission on Privacy (CPVP), we guarantee that the data collected is kept anonymous. This will be achieved by changing the person's name and all identifying details.
- Participants can pull out of the research at any point if they so wish.
- During the collection of life stories, researchers shall pay particular attention to listening to the narrators in a supportive and non-interpretative way.

Finally, we asked the participants who agreed to continue whether they had any objection to our recording the subsequent sessions using an audio recorder to help us transcribe the interviews. All participants agreed with the recording procedure.
We quickly realized that the problematic uses we were interested in are rarely the subject of consultation in the therapeutic services, and when they are, they almost always involve excessive video game use. We have thus focused our attention on situations of problematic video game use. Thanks to the partnership with help and care institutions, we were able to contact 10 participants who agreed to collaborate in the research. We also collected 3 additional interviews from non-clinical settings, including one participant who attended a talk given by a member of the research team, another who got in touch with the research team via a psychologist, and a third who responded to a public announcement via flyers about the project. We also set up a Facebook site and a Twitter profile with the aim of recruiting more participants, but these produced no response. We have thus collected a total of 13 life stories involving problematic use of video games as a leitmotiv. Nevertheless, on closer inspection, five of them were not directly concerned with problematic situations at that level. In some cases, participants have intensive periods of video game playing, but this does not appear to thwart other important dimensions of their lives such as family relationships, work, time spent with friends, and other entertainment activities. In other cases, a different set of psychological situations was the common factor in the interviews, with video game playing being a minimal concern in participants' lives. Although these five interviews were excluded from the final sample, we have kept them as (i) reference points to compare players who develop a problematic use of video games with players for whom excessive video game playing does not imply putting at risk key dimensions of their social lives, and (ii) a basis to identify comorbidities usually associated with excessive video game playing. The final sample is thus composed of 8 interviews with individuals who do have a problematic use of video games, for the most part Massively Multiplayer Online Role-Playing Games (henceforth MMORPGs).

The participants are all single males, aged 19-40 years. Some of them are in secondary or higher education, while others dropped out of school at the age of 18 and currently are either unemployed or looking for alternative educational programs. Basic demographic data of the participants are presented in Table 22.

Name*	Age	Gender	Marital Status	Education	Work
Alex	23	Male	Single	CESS	---
Bruno	23	Male	Single	CESDD	---
Gaël	23	Male	Single	CESS	---
Juan	26	Male	Single	CESDD	---
Luc	40	Male	Single	CESS (Technical)	Civil official
Niels	31	Male	Single	Higher professional education	Unemployed
Peter	21	Male	Single	Student at university	---
Pierre	19	Male	Single	Student at university	---

Table 22: Socio-demographic profile participants

CESS: Certificat d'enseignement secondaire supérieur
CESDD: Certificat d'enseignement secondaire du deuxième degré
*Real names have been changed for anonymity and confidentiality reasons.

6.1.3 Life Story Data Collection

Insofar as we wanted to know the extent to which participants' experiences of video games were intertwined with their life experiences at the personal, family and social levels, we conducted two separate (one week apart) 90-minute interviews with each participant.
The first interview focused on their video game playing experiences, their pathway or "journey" into video games. Our aim at this point was to allow the participants to make sense of and to orally reconstruct their gaming experiences. During the initial meeting, we suggested the participants to bring some images (print screen, downloaded images, etc.) stored on a USB memory stick for the first interview. The purpose of this non-compulsory procedure was to allow patients to illustrate their player pathways. We observed that images helped participants both to look forward to the interview in a constructive way and to enrich their narrations. Over half of the people interviewed brought some relevant images. One benefit of proceeding this way is that we can establish a trusting relationship between participant and researcher, before we get to what may be somewhat painful questions during the second interview. This first interview was a suitable method to gauge the significance of video game playing for participants' lives as well as to pinpoint specific moments in which video game use turned out to be problematic.

The second interview focused on participants' lives, including their family, education, work, love life, and therapeutic experiences among others. The aim at this point was to allow participants to tell their own life stories. This second interview enabled us to obtain an understanding of the family and social contexts in which they grew up, what reasons and motivations led participants to start playing video games, how they build links between their life and gaming experiences, and how the latter impinges upon the former.
Interviews were audio recorded and fully transcribed. Interviews with the same participant were merged into a single file and prepared for uploading to NVivo software in order to start coding and narrative analysis.

6.1.4 Rationale for Analyzing Life Stories

The analysis of the life stories was based on a threefold model of initial (i.e., open), axial, and focused (i.e., selective) coding (Charmaz, 2006; Saldaña 2009)). Initial or open coding is the analytical process which breaks up the data into big categories which in turn allows the identification and articulation of sets of meaning from data. Axial coding represents the integration of fragmented data into subcategories or dimensions, elaborating links between them. Focused or selective coding is the process by which large amounts of data can be sifted using the most significant and/or frequent codes. This process requires decisions about the codes which make the most analytic sense for interpreing the categories and dimensions established through initial and axial coding. In order to assess the threefold structure and to decide which codes made most sense, regular meetings were organized by researchers to discuss, via examples of coded fragments, the relevance of the coding procedure. Appendix 9 represents the model of initial, axial and focused coding used in this research.

6.2 Analysis of Life Stories

Based on the threefold model of coding explained in the methodology section, we have selected six themes in order to articulate the analysis of life stories. These themes comprise essential dimensions and properties of participants' lives, including their family, upbringing, and social relationships; education and work experiences; personalities and perceptions of their own psychosocial well-being; their motivation for playing games; the moments in which their playing activities turned out to be problematic; and what they think about their current situation and the eventual outcomes of their therapeutic experiences.

6.2.1 Family, Upbringing, and Social Relationships

One of the common factors among the life stories collected here is the recurring presence of difficult relationships with the father figure. Such relationships appear to infuse many key moments in participants' childhood and adolescence, and they are often recalled in terms of deep conflict, lack of affection, difficult communication, or feelings of emotional abandonment. The reasons for these complicated relationships are related to the break-up of the family nucleus and emerge from experiences of parents' divorce, voluntary separation, blended families, etc. Sometimes, participants' appraisals of those experiences also involve the mother being absent from their upbringing due to work-related reasons or because she tried to reconstruct her love life with many and temporary boyfriends after divorce. However, the relationships with the mother are often less strongly conflictual than those involving the father. In some cases, those difficult relationships are due to the real absence of the father, marking a physical distance between father and son, and the resulting lack of attachment:

> *"In fact, I didn't meet my father. He wasn't someone you can rely on…He just legally recognized me, that's all. But he was a dunce or a rogue. Because he was in jail and he set fire to my great-grandmother's house. So, anyway, I'd never have preferred to meet him. It is just fine that it happened that way." (Juan)*

In other cases, such an absence results from participants breaking off their relationship with their father during adolescence. These situations often reflect turning points that are experienced by participants as painful and/or relief-inducing psychological events, depending on the concerns being at stake:

> *"My relationship with my father was always very tense during adolescence. I left home... Aha! That's perhaps worth mentioning ...when I was 15…and that was the turning point of my improvement in school…I went back to live with my great-grandmother. I left my parents' home when I was 15 because life with my father was too difficult..." (Luc)*

While paternal absence in the above cases implies different degrees of physical distance, other cases represent a sort of symbolic absence being at play in the relationship. This kind of absence can take many forms, for instance, the father's constant inattention to the son's concerns, the lack of communication between father and son, or even the discomfort that the

father's presence may cause. Whichever form it takes, symbolic absence also appears to leave significant traces in participants' minds and lives:

> *"My dad and I have more of a distant relationship. We can talk to each other, but I think that this conversation [with the interviewer] has lasted longer than the ones I can have with my dad in an entire week" (Niels)*

> *"Researcher: And what about your father and family relationships, how did it evolve?*
> *Bruno: He no longer lives with my mother. Anyway, they were never married, so that is the advantage. There are no problems with the law. So, he is no longer there. My mother doesn't get on with him anymore. By the way, my father always annoyed me.*
> *Researcher: What annoyed you?*
> *Bruno: How to tell? Most of the time, he was just sleeping. When he was home, he was either sleeping or drunk. We can't say he was an exemplary father."*

In yet other cases, the difficult situations arise from complicated relationships with the stepfather who takes on the role of the father figure. Although the physical presence of the stepfather appears to provide a more stable upbringing framework, it is experienced as a source of psychological conflict:

> *"Researcher: Something has changed in the relationship [with your parents]?*
> *Alex: It's not really that something has changed, it is just that, well, so to speak, I've never...I've never been able to assert myself against my mother and my stepfather."*

The breaking-up of the family nucleus, together with the different kinds of problematic relationships with the father figure and the influence of other family members, characterize particular upbringing contexts that are experienced in contrasting ways. Most of the time, those contexts appear to be either unstructured, which means that participants could do whatever they wanted to without any real parental control over their actions, or extremely strict and authoritarian, which implies that participants' self-expression and family communication turned out to be highly restricted:

> *"Let's say that because of the divorce ... I mean, because of that situation my mother had very little control over my life ... I was very free to do what I wanted to ... I could actually do whatever I wanted to."(Gaël)*

> *"I once looked it up on Wikipedia and it's called a dysfunctional family. My father is very dominant and has a very short fuse, and is mainly very aggressive. To most people he seems sympathetic, but when you get to know him better and you step on his toes he can really become angry. My mother just stands there taking his side and then I really feel helpless." (Peter)*

> *"My grandfather always told my mother to be very strict with me so that I'm not over-confident ... otherwise, I would miss my life. So that's what happened. That's what I became. I haven't had a father who was there to watch over me. So, suddenly, I could do almost everything I wanted to." (Juan)*

Having grown up in those family contexts appears to have consequences for participants' behavioral and motivational patterns associated with everyday activities, including video game playing. It seems then that the less parental control a participant has over his everyday

activities, the more he will tend to develop excessive behaviors, since there are no extrinsic compelling norms participants should abide by.

In addition to the difficult situations with parents, almost all participants appeared to have weak ties with siblings. Brothers and sisters are certainly referred to as members of the family with whom particular moments of their lives were shared, mostly during childhood and early adolescence, but fraternal relationships are not usually invested with affective attachment:

> *"Researcher: what about your sister?*
> *Alex: Since we were teenagers, each one has made his/her own life alone. I mean, I got along well with my sister, but I didn't share anything with her. Now it's a little bit different. I try to open myself more to her, but it is not easy."*

> *"I don't see why I should be friends with my sister. From time to time we go to the movies, but that's all ... She left home very young…after the [parents'] divorce, so I was 8 years old – she was 9 years older. She left more or less six months after that...with her boyfriend. She emancipated herself, then she left." (Gaël)*

Another striking factor common to the life stories reviewed here is that the participants have had few friends and steady girlfriends/boyfriends. Although we may speculate about some links between the particularities of their upbringing/educational contexts and the difficulties experienced in making friends and building steady relationships (e.g., lack of stable affective models, communication problems, difficulties in articulating inner feelings and thoughts), it may be that those difficulties are also mediated by particular traits of the participants' personalities. Nevertheless, the fact remains that the participants usually mention friendships that faded away over time and allude to girlfriends/boyfriends in conflicting terms. In some cases, participants point to a link between their gaming activities and the fact that this might prevent them from having stable relationships. However, for the most part, their gaming activities do not seem to be central to their difficulty in establishing steady relationships. Although they feel able and are willing to build enduring relationships with girlfriends, their love lives are usually accounted for in terms of heartbreaking, abrupt endings, and long-lasting feelings of dissatisfaction and loss:

> *"Researcher: Was that your first heartbreak?*
> *Gaël: Let's say the first true one, yes. So I stayed alone for a long time after. A very long time. That's all. Then I met the player Xena, aka Andraste, aka Meabh, with whom I stayed for two years…and had a very good relationship. I could see us together in the future... I devoted a lot of time to this thing. And then she's gone and she left a big void. Almost a year has passed since and it is still a problem. So, in the end, I haven't had many girlfriends. But I devote, let's say, a lot of time and attention to my relationships."*

> *"Every time I look for a relationship, I have less fun playing…because I feel guilty about playing. Then I tell myself: "Well, Luc, you're not going to meet someone if you play all the time. Yet your goal is to meet someone. So, move away from there and stop playing!" (Luc)*

> *"There was a time when I met a girl ... my ex, who was the first and last girlfriend I ever had.... that was before I left school. It is because of this that I left school…we talked a lot about many things, including marriage, but well...it didn't work out…" (Juan)*

Overall, the family, upbringing, and love life theme provides us with relevant elements to understand key moments in the participants' lives, moments in which difficult relationships and experiences marked turning points in their development and self-perception. Although these difficult situations may have played a role in the development of problematic video game use, we should be careful not to reduce the emergence of such problematic use to solely those factors. As we will see in the following subsections, other complex elements and processes need to be taken into account

6.2.2 Education and Work

In general, the participants have had conflicting relationships with school, the common factor being that educational settings have not been experienced as a place of personal fulfillment and/or learning. For the most part, participants' evocations of school comprise negative experiences related to relationships either with peers or with some teachers and specific courses, or even with the educational system at large. In the majority of life stories, education is mostly seen as a complicated issue which participants had or have to cope with, and little personal and affective gratification was or is obtained from spending years at school. This has resulted in heightened levels of dissatisfaction with the educational system, tendencies to social isolation, and, in some cases, the decision to drop out of school. Some of these issues are illustrated by Niels and Luc as follows:

> *"I haven't been able to use any of the things I've learned in school. Maybe I chose the wrong orientation. On the other hand I don't regret the studies I did (…). Education may be fun without the theoretical part." (Niels)*

> *"School wasn't really great. You can easily imagine yourself being constantly mocked, being the target of cutting remarks, etc. This taught me to rather enjoy leisure alone. So I had a good time alone or with girls because they were less boring. But then, as a child I was already very alone. And this is still the case now. I don't necessarily look for peers' company. And even when playing games, as I told you [interviewer], I play a lot alone. I'm used to being alone and independent at this level. I don't depend on others for my fulfillment. During primary school everything was OK. There wasn't ... I didn't repeat a grade or something like that. But I had very few friends. I had maybe one or two of them. It's been so throughout my life. So that was in primary. Once in secondary school, things got wickedly complicated." (Luc)*

These difficult situations are present very early in their school pathway, from primary or early secondary school, that is, before their video game practices become problematic. Consequently, given the situations we have found in life stories, it would be wrong to claim that video game playing is the reason explaining participants' school failures. That being said, we should nevertheless consider that once the excessive practice of gaming is developed, it may be an aggravating factor in failure at school. Regarding this point, Gaël explains it as follows:

> *"What's more, at school, it wasn't great either. It wasn't necessarily because of video gaming because, even in boarding school, where study time was monitored, I did nothing but loaf about all the time. By*

the way, I learnt to sleep while sitting up. Because we were being watched over. And yet, I would sleep. So, find the mistake." (Gaël)

As noted above, in some cases, negative experiences in school have to do with difficult relationships with some teachers (who are often blamed by the participants for not being able to understand the students' needs). In several interviews, people talk about having trouble with specific courses, particularly languages (e.g., French, Dutch, or English), either because they have learning and motivational difficulties in that domain, or because they feel the teaching approach is not in line with their expectations. Participants also reported problematic relationships with peers within the school context, relationships that turned out to be situations of constant mockery and sometimes bullying:

"Researcher: What about school?
Juan: Oh ... school, I will never go back there. I mean never! I will try an alternative system. But the regular school system, it was horrible for me. It was hell.
Researcher: In what sense?
Juan: There were always quarrels among students ... teasing in class, all the same ... but I was so shy and when teachers called me to the front, I didn't do anything ... Sometimes I utterly refused to go to the front of the class, because I was afraid that students made fun of me. So it was ... horrible."

"I'm not good at languages ... and concerning my first year in French, I will always remember the score I got. And especially the observation she [the teacher] made about me. I got a successful 50% at the end of the year… and she told me: "I gave you 50% because I don't want to see you again for a second year." Thank you! You can see she wasn't very objective." (Bruno)

"During language courses, when the teacher asked a question, I never answered unless I was 200% sure of my answer. So, to speak in a foreign language which you don't master, where you don't really know what you're saying while learning, it's really something that I hated. The fear of being ridiculous...So, I stayed at the back of the class, checking my watch during the language courses."(Alex)

Another common factor in life stories is the fact that participants have a record of low school performance; most of them have been held back a year more than once, especially during secondary school, and they dropped out at the age of 18. Others have experienced failures during high school or university. The topic of failure at school (i.e., repeating one or more years) is a recurring issue in most interviews and it emerges as something that made participants slip farther behind their peers and gradually disconnected them from the educational system:

"Ah, but I've excelled myself, I repeated all grades from the third on. I repeated the 3rd, passed the 3rd, repeated the 4th, passed the 4th, repeated the 5th, passed the 5th, and the 6th I obviously repeated it…I even failed the final exam…that made me mad and I said "that's enough, I'll never come back to school". So, I didn't get my diploma, I can't earn a living. The school system is hell. It is not for me. It will never be for me." (Bruno)

As many participants dropped out of school before graduating, their current projects include following some professional/technical training in order to get a job and find their place in society. In these projects they are either self-motivated, or motivated by family members who care about their professional future, or are pursuing one of the objectives set in therapy:

> *"I've to take two additional years of training that would allow me to get my CESS in accounting. Hoping to get out of this situation, I'll get a job ... which would be even better. That would allow me to avoid falling back in the Forem because, the waiting period is nice, but nothing more. To be sure, they ask you to search for a job, but what do you want to search for when, once they have found something for you, they tell you "No, we're not going to take you on, there's no point in it. Stay unemployed" I will never forget that answer." (Bruno)*

For those who work or have worked, the common factor is that little satisfaction is taken in working. Many reasons are given for this lack of satisfaction: the impact of working on social and entertainment life, the fact that participants have switched jobs many times a year because they did not like them, and the unbearable stress and pressure they feel in their working settings:

> *"To my mind, work can really have a serious impact on your social life. If you always have to work until late, you can start quitting all your hobbies. You have to start doing individual sports like running, fitness, and swimming". (Niels)*

> *"Sometimes I threw up in the morning before going to work because I was so stressed. And yet, I somewhat like it. Not being stressed, but the work itself, the subject, the fact that - again – I can give information to people. Well, sometimes I've to punish them for fraud, but ... I liked being in contact with people. Yet the work pressure, no, it was too much. Especially at the time in Ixelles, I got up at 4 am or so and I got back home at 7: 30pm. Those were hellish days. (Luc)*

All in all, education and work represent two dimensions of participants' lives in which conflicts at several levels were constant. The common factor at the heart of those dimensions is a deep feeling of dissatisfaction with school and work settings. As far as the educational context is concerned, all participants indicate pathways marked by difficulty in adapting to school, either because of conflictual relationships with peers and teachers or because of frustrating experiences with the system at large. As to working life, it is not entirely perceived as fulfilling participants' expectations, but most of them recognize that getting a job is certainly the only way to find their place in society.

6.2.3 Personality and Well-Being

This theme encompasses participants' perception of their own personality traits and issues that impinge on their psychosocial well-being. Most of the time, those perceptions and issues are evoked at the interface between their gaming and life experiences, and highlight particular ways of dealing with different rewarding or stressful events belonging to their past and current situation.

Some participants manifest different levels of social anxiety such as fear of public speaking, stress when asked a question, or even fear of being unable to tell their own life stories in the context of the interview. Those levels of anxiety are either explicitly expressed before the interview session (e.g., the participant asks the interviewer not to let him speak alone for a long time) or implicitly felt and coupled with some level of introversion during the interviewing time (e.g., long, uncomfortable silence between question and answer):

"Researcher: And now how is it going for you?
Alex: I still play a little, but ... now I'm going into therapy. Well, actually, to begin with, I didn't understand that at the time, but I didn't play particularly because I liked it, but because I had a lot of problems to build relationships with people in general. That's called social phobia. And I also had family problems. I withdrew into myself."

"In general, I'm very shy with people I don't know well. Yet with people I've known for some time I'm very social." (Peter)

"I ended up ... let's say that I had the bad habit of keeping everything to myself: anger, hatred, etc… It took me a lot of time to calm down, to regulate my emotions. Even now, sometimes when I get angry ... I speak aloud, but to say insane things, anyway... I say "what the fuck", you know what I mean. (Juan)

It should be noted that not all the participants necessarily give the impression of shyness. Some of them are more talkative and extroverted, and the lexicon used to tell their stories testifies to their rich imagination and ability to self-evaluate and organize a coherent and fluid story about their lives. However, besides these individual differences, many of them report that they are more open when communicating through a screen than in real life, and that video games allow them to develop and/or enhance their self-confidence. This can be seen as a step towards overcoming social inhibition and sharing time and activities with others:

Initially, I was very reserved. So, I played alone. If there was something I couldn't do, I didn't do it. I only did things I could do. Then, later on, I began to get closer to people…to communicate. But it happened gradually over the years. Then, I really started to be in a group. I noticed that it was even more fun. (Juan)

In addition to social anxiety and introversion/extraversion factors, most of the participants express feelings of loneliness that are consistently referred to throughout their interviews. This point is consistent with the results we obtained via the UCLA Loneliness Scale among compulsive video game players. Within the context of life stories, these feelings appear before problematic video game use, but they may trigger motivational and behavioral responses aimed at coping with loneliness via video games:

"If I take a week off and I don't have a girlfriend, I can spend my week off playing. I just go out to do some shopping. I get something to eat…then I take a shower. But I'll stay at home without seeing anyone on the game except when I feel I need it, when loneliness weighs on me and then I try to meet someone. It's not easy, anyway." (Luc)

Participants also express depressive feelings throughout their life stories. Those feelings often take the form of gloomy views of their own future or negative appraisals of their missed achievements in life, or of something painful that needs to be overcome in order to keep going. Interestingly, within this context video games are depicted as means through which players can find the kind of satisfaction they cannot have in real life. Despite the time and effort necessary to get different gaming rewards, video games are often seen as less frustrating than everyday life. More often than not, those appraisals infuse participants' perception of

their past and current experiences, but also color several facets of what they would like to accomplish in the years to come:

> *"Researcher: And where do you see yourself in the future?*
> *Gael: Hmm, I don't even try to think about that. I'll see when I get there. But, in any case, I'm not an optimist."*

> *"I think I can lose myself in negative feelings sometimes, but I try to block it quite quickly. Despite the fact that I play a lot and I can be really frustrated with myself, I am more 'fight' than 'flight'. I will try to tackle my problems, rather than get carried away by them." (Niels)*

> *"Yes, I really struggle to let things go. And dissatisfaction also pushes me to play. The fact that I somewhat missed my life. Anyway, that's what I feel. I tell myself that I'm 40 years old. I hope the second half of my life will be ... it will better suit my desires and expectations than the first one. "(Luc)*

> *"You need willpower to make sure the computer doesn't interfere with your personal life. Willpower has been very important for me personally because there was a period in high school when I was feeling down and I was also depressed in a certain sense. I also had suicidal thoughts. Luckily, I had the willpower to think: 'No I shouldn't do this, life is much better than just to end it right now.' I wonder why I don't have that same willpower to spend less time on the computer since it just seems to happen every time again." (Peter)*

> *"I wouldn't say that I missed my life, because many could envy my situation. But I haven't really achieved what I wished to. I feel some dissatisfaction with my life in general… unlike real life, in a game you can, via constant effort and devoting time, manage to reach any goal. Even clumsy players can do it ... we could say that this too holds for life, but ... you can sit exams several times until you get it right, but it's no guarantee that you'll get a job or a beautiful house, or the nice car that you've dreamed of… life is full of frustrations, video games are less frustrating." (Luc)*

In some cases, depressive feelings are often accompanied by a negative view of the future, by a sort of pessimism about society or the world at large. This condition makes them highly sensitive to what they take to be salient malfunctions at different levels:

> *"Let's say that I don't like how society works. Some things are almost aberrant…the last one that happened to me is ... I'm in a waiting period, I want to find some work. When there is something I could do, they tell me: 'ah, but you're not unemployed, you don't have any advantage, so we can't take you on'. I'm asked to find a job in order not to be unemployed but on the other hand, when I find something, they tell me: 'But why aren't you unemployed? I won't take you on'. This is so contradictory. Government is nonsense. Just because if you're unemployed, you have a lot of advantages: the Activa plan and all other stuff." (Bruno)*

> *"To me, there's no more respect, not only on the Internet, but in everyday life. People no longer have any respect: courtesy, politeness ... you can see it on the road, at work, everywhere. People think each for himself and God for all. Or each for himself and God for me. ... And I've always appreciated the idealized Middle Ages, with chivalry, values, honor ... We no longer find that now. (Luc)*

Confronted with those negative feelings and pessimism (which may have their roots in early experiences of upbringing and educational settings), participants tend to see video games as a kind of refuge, as a way of coping with negative experiences and evaluations of their personal and social world. Although in some cases playing games is not enough to overcome the

strength of those feelings, participants tend to make video games their affective proxies that provide them with idealized contexts in which social relatedness, communication and personal fulfilment are more easily experienced than they are in real life.

Another issue addressed by the participants is the difficulty in setting limits on their gaming, and more generally, in setting limits on the activities they engage in, whatever the content. At different points in their interviews, participants indicate they feel unable to control the time spent gaming, but also, and this implies a wider conception of control, that they feel they could not do anything about stressful events that happened to them (e.g., parents' divorce, school failures, unsuccessful relationships with girlfriends). This issue is also consistent with our quantitative results about compulsive video game players' self-mastery and perceived control over their lives:

> *"I really have trouble limiting myself and being reasonable. I do everything to excess. But not only with video games. We spent 8 or 9 hours on the phone last night with the girl I met. So I went to sleep at 4am. She seems to be as excessive as I am." (Luc)*

> *"Well, when I start doing something, I do more than necessary. It's a bit like with computers, once I begin, I don't see the time passing ... it's all or nothing ... When I start something, I usually do it to the very end." (Juan)*

Sometimes, the difficulty in setting limits can be related to obsessive tendencies transferred from everyday life and behavior. Of course, not all participants develop such tendencies, but for those who do, it is a salient personality trait that provides a relevant understanding of the excessive nature of video game playing. This point will be explained in more detail in the playing motivation section.

During periods of excessive gaming, participants indicate disruptions of their circadian rhythm. Such disruptions are often related to playing commitments implicitly or explicitly established with the team or guild so that players are expected to be available for long periods, especially at night. Even though these disruptions are generally considered as a necessary price to be paid for advancing the game, they contribute to seriously disrupting sleeping and waking time:

> *"Researcher: Did you like role-playing?*
> *Juan: Yes, I did. I role-played all the time…and sometimes I got sick, because I suddenly woke up to check out if someone were connected to play with them. Once again, I cut down my sleeping time. I used to set my alarm clock to wake me up and make sure not to oversleep."*

> *"There's no specific time when I wake up. Because I never go to sleep at a specific time either. I can easily get up at 6:00 pm because I went to sleep at 10 am. Or get up at 6 am, but because I went through a complete clock cycle." (Gael)*

> *"[When playing] I had no limit, no control. Sometimes I didn't even eat or drink during the day because I didn't want to leave my student bedroom to go shopping." (Alex)*

In other, albeit rare, cases, circadian rhythm disruption is not due to video game playing. . This can be the case with people who suffer from insomnia, which can be related to periods of hyperactivity and excitement that appear to have deeper psychological reasons not necessarily related to video game playing. In those cases, gaming is mostly used to channel surplus energy that participants need to manage.

6.2.4 Motivations and Playing Style

During the interviews, participants spoke passionately about the ways in which they used video games, interacted with them, and exploited their potential. Games such as MMORPG offer rich environments with which each player will interact in his own way, depending among other things on his motivations. For example, some people prefer to play on their own, while others like playing as a team. Lots of MMORPG allow a certain amount of leeway here. Some may prefer to play against other players (PvP), while others will pit themselves only against artificial intelligence (PvE), etc. Examples of this variety abound, meaning that there are as many ways of playing as there are players. When analyzing the stories, we asked ourselves whether it was possible, nonetheless, to tease out some common features in the 'playing style' and motivations of the excessive players whom we encountered.

We can already posit two things. First, we were soon confronted with the fact that our participants' motivations to play and playing styles had as many differences as they had similarities. Secondly, some participants emphasized that their way of exploiting the potential of the games had evolved. The player typologies must include the fact that over time some of them move through different categories. Gaël, for example, had some phases in his gamer pathway of being in the 'Killers' profile, and others when he was among the 'Explorers' and the 'Socializers' according to Bartle's (1996) typology. Similarly, he had also experimented a lot with regard to the type of character (e.g., race, class, skills, craft) that he preferred to develop. Juan, on the other hand, gradually overcame his shyness and got into team games after a long time playing solo. Other participants, though, show great stability in their playing styles.

Despite these differences, both diachronic and inter-individual, we shall nonetheless try to report on the points the different participants had in common with regard to their motivations for playing. Aside from a clear preference for multi-player games, we have been able to conclude, like Nick Yee (2007) that "The motivations identified as being related to probable problematic engagement in MMORPGs (as reflected by adverse consequences of on-line activities in daily living) are escapism (a subcomponent of the immersion facet that corresponds to the tendency to play MMORPGs to avoid thinking about real-life problems) and advancement (a subcomponent of the achievement facet related to the desire to become powerful and progress rapidly in the game)."

6.2.5 The multi-player experience

When participants trace their pathway as video game players, we see that they have tried out many types of games. That being so, all the players explained that they prefer playing multi-player online games. Some like to concentrate on one game at a time, whereas others will be running a batch of games and alternating between them, sometimes on the same day. The problem for Pierre, for example, does not lie with one game in particular, but in fact has to do with a general dynamic around a set of games (strategy, management, FPS, etc.) and players with whom he regularly interacts:

> *"When I first start my online games (Agame, Battalia, Travian, Ikariam, Tanki Online and so on), it takes an hour and a half. When you take your time to write messages to the others, to attack or whatever, it takes an hour and a half, sometimes a bit longer. Once I've finished them, I go on my tank game, which is on line. Or I might go to 'Call of Duty'. When nobody's talking to me, when I'm doing my gaming on the net, I go to Tank, I make the most of it. But once there's somebody talking to me, I go and join them. I try and finish off my game quickly" (Pierre)*

Among these players, managing the 'game portfolio' becomes an interesting dynamic to study in itself. If playing more than one game multiplies the person's contacts, it also allows them to reduce the boredom and frustrations that commitment to just a single game can generate:

> *"Yes. With all the games I have … for example, if I get destroyed in one game … but if everything's OK in the other games, well then that's fine" (Pierre)*

Most often, though, we find an MMORPG at the center of the gamer's attention for a longer or shorter period of time, sometimes running to several years. The MMORPG cited by participants are: World of Warcraft, Guild Wars, NosTale, Star Wars – The Old Republic, Dofus, Aion, Tera, The 4th Coming, Dark Age of Camelot, Dungeons & Dragons Online, Lord of the Rings Online, and Lineage.

Depending on each participant, the preference for the multi-player mode is explained in various ways. Very often, what is mentioned is the pleasure of playing a team game, the idea of getting together with people in your own guild, communicating and playing with them. Even if it is not easy to evaluate the 'depth' of relationships constructed in this context, the relationships described by participants do apparently stem more from the desire to maintain contact, to collaborate, to help each other and to participate in collective actions than from the wish to commit to significant long-term ties.

However, not all the participants appreciate clan games or guilds. Some will avoid signing up to a team. But they still appreciate having 'people around them', partly because it reduces the feeling of loneliness and partly because it means that the others can act as witnesses to their exploits and to how their characters evolve. 'Epic feats' are all the more valuable if they are validated by somebody else.

In addition, confrontation with other players makes the games more interesting and more stimulating. The point is that they are considered to be less predictable than artificial intelligence (AI). And even if participants do not allude to this explicitly, it is possible that the satisfaction associated with beating other players is not the same as that of a victory over AI:

> *"Strictly speaking, let's say that offline games aren't really rewarding. It's more for just a bit of fun, that's the main thing. Now with online games, it's totally different. It's really … you have your character, so you have your image compared to the other players and also, the game has a mechanism that makes it easy to show your character to other people, so that they can see that you have a powerful character. For instance, with 'Dofus', I've stayed there a long time, not because it's any better made than the others, but because in that game, when a player moves their mouse over my character they can see my grade. When you're fighting one-on-one, for example, all the other characters can join in as spectators and watch the fight. And that means there are two dynamics that you don't get in the other games" (Alex)*

Aside from the desire to be recognized by others, some participants have spoken of the huge satisfaction that they associate with the idea of feeling useful to others and/or cooperating with them. For instance, they might occupy a fulfilling place in the guild and be asked to help achieve its objectives. Or they might help take care of newcomers and help them find their feet in the game and start making progress:

> *"The fact of having your place and being useful to the guild is obviously very attractive. That's why I've … I mean, before, I was doing some damage, then I got to be a tank with 'Star Wars'. Tank is something that interested me a lot more, because from my point of view it was more rewarding. It's a very important role. Especially because I was the main tank in the guild" (Gaël)*

The desire to be recognized and feel useful seems to us to be one of the key elements, particularly in terms of the lives and the difficulties at school and at home that most of the participants report. Above and beyond the clinical aspects, this dimension also ties in with societal and political issues:

> *"I've always liked jobs where you're creating something. It was a bit like I was working, sort of thing. Apart from the fact that I was working in a game. And even with those characters, you don't see them, but I've got loads of high-level skills that I've farmed. Being very useful, yes. For instance, being useful to the guild. When you go on raids and that … so yeah, there's always a job that's really useful" (Juan) [talking about the crafting involved in role play]*

6.2.6 Gaming as escapism

Gaming is used to escape from certain dimensions of life that the gamer sees as problematic. This is the common feature between most of the excessive users that we met. Gaming allows them to get away and is a major driving force in the problem:

> *"We got together at lunch hour to play knights and magicians. Even back then, I needed a way out of my everyday life, perhaps some kind of family atmosphere … there were major conflicts with my father, who I didn't get on with … very disrupted schooling … and so it turned into a love of everything to do with medieval fantasy" (Luc)*

Most participants explicitly mention this trend, and spontaneously associate the most intense periods of gaming with times of suffering and/or crisis:

> *"For me, it helped me to stop thinking about school, about my classes and all the stuff that I was tired of" (Bruno)*

As the playing settings seem to be an integral part of the gaming experience, some participants will actually organize the room where they play – generally their bedroom – to limit intrusions (and the need to come out) while increasing the feeling of immersion in the games:

> *"Well, I've actually got everything in one room: my computers, console, TV, home cinema ... the lot! I've got the lot! Everything around me. I call it my bunker (laughs). It's sort of my bubble ... my little paradise. It's not much of a paradise, but there you go (laughs)" (Juan)*

In this context, parental intrusions are perceived as very painful and can give rise to fits of anger, particularly because they undermine gamers' efforts to distance themselves from areas of suffering.

The tendency to turn to video games (and all that goes with them) as refuges or alternatives to a 'hostile' world can also be seen in the tone of the language used. Unlike other spheres, video games are associated with very positive metaphors and vocabulary:

> *"Video games were the only thing that made me feel good. When it came to real life, I was just doing it because I had to" (Alex)*

Luc also explains that he chose video games as a refuge, partly because the environment and the objectives they involved were easier to control than 'real life':

> *"Finally I'm realizing that what matters most in my life, I have no control over whatsoever. Look at my love life: I can't force anyone to fall in love with me. If I like someone, I can't make them love me back. And even if they did, I can't force them to stay with me forever. Even if in an ideal world I'd love to have a lasting relationship. Nobody knows when they start out. And it's that element of risk that screws me up and I don't get that with a game. I think there's also some kind of link at that level. And so it's true that it's a refuge. That's one thing. And then ... and it's somehow linked ... the second motivation for playing, I think, is the commitment to the objectives. In life, I haven't managed to achieve my goals: the little wife, the nice detached house and so on. In a game, I can" (Luc)*

This desire for control is also sometimes temporarily undermined by the modifications made to the gameplay by game designers. It is interesting to note the extent to which some players are particularly sensitive to these changes, whereas others do not mention them. It depends on the nature of the motivations and the type of interactions with the game that the individual player prefers. Similarly, it is possible that players for whom the notion of control is crucial are less keen on team games where some of the orders are left to the group dynamic. Generally speaking, players will react negatively to changes made by the designers if they challenge the complex, unique and specific interaction that they have with the game.

Some players have explained their disappointment in a refuge game which, after add-ons, ceases to meet their expectations.

6.2.7 The desire to advance and accumulate

In his online video gamer typology, N. Yee (2007) identifies 'advancement' as one of the important motivations of MMORPG players, in other words 'the desire to gain power, progress rapidly, and accumulate in-game symbols of wealth or status'. There is nothing surprising about this motivation, because it is central to the objectives put forward by video games and in particular, MMORPG. The desire to advance and/or accumulate symbols of wealth or status in the game has frequently been cited by the participants. From their reports, we can distinguish two trends within the category of 'advancement' defined by N. Yee.

The first may be easily linked to what we said earlier about the multi-player experience. It is a matter of progressing with your character in order to gain prestige in others' eyes. The others, whether they be team-mates, mere passers-by or adversaries, are witnesses to the progress and can thus validate it. However, it should be noted that while the desire for recognition is a prime motivation in the players we have met, it nevertheless covers some very different realities in terms of playing style. For example, to 'boost' their reputation, some will systematically seek out direct confrontation with the other players (for example, Bartle's 'Killers'), while others will go out of their way to avoid this type of combat as far as possible. The – more or less conscious – motivations will thus combine to produce a way of interacting with the game which will be specific each time.

The second trend has nothing to do with validation by others and is characterized by the desire to accumulate. It may take a form which is indicative of an obsessive compulsive disorder (OCD), in particular via the imperative need that the player may feel to perform certain operations in a defined sequence, or perhaps to collect certain virtual objects which can be gathered during the game, etc.:

> *"I transferred a lot of OCD that I had in my daily life into repetitive tasks in the game. This idea of wanting to reach the maximum level with all my characters. I remember at one time I was clearly manic. On the mantelpiece there were two things, they had to be evenly spaced. I practically got out a ruler. Well, I'm exaggerating a bit, but still … to measure that they were properly … and I don't have that any more. I think the games helped me to get out of that. Where I live, there's a bit of dust, whereas before, I would have been doing a spring-clean every week. So somewhere, it does have some positive effects after all. Now, I don't know if it's better, obviously. If I managed to limit myself to just one character, if I succeeded in making a choice by saying, 'That's the one I like best', I'd have what's really a very reasonable playing time. But the fact of multiplying like that. Because I'm a bit manic about wanting everything to line up, to have them all at the same level, to have them all do their feats, it gets … well, it's clearly OCD. The OCD that I used to have in my life with my candlesticks on the mantelpiece and all that, I've transferred it into the game and I sometimes realize that, but it's completely idiotic. I am aware myself of how stupid it is. What difference can it make? I'd got a bee in my bonnet about this ridiculous target, and the fact that I couldn't achieve it was making me frustrated. Just like in real life, the fact that I hadn't got the house or whatever it was that I wanted … I haven't had the girlfriends I would have liked at the time I needed them, and so it didn't happen. Now it's too*

expensive, so there we are. It's a bit like a dog chasing its tail. I'm stuffed. So in the game, I don't want to come up against this frustration of not being able to achieve the objectives. I'd rather just come away from the whole business and try something else. So I think I am reliving all that frustration" (Luc)

The motivation to collect comes out at all levels: some people will increase the number of games and/or accounts in the same games, others will collect characters and/or digital objects (perhaps intended for crafting):

"Shall I list my games for you? In the game 'Agame', I had four universes, four accounts. In 'Battalia', I had four accounts. I had one game, 'Travian', but it wasn't up to much … but I only had one account. 'Ikariam', I have five or six accounts. I have 'Ondarun', the car game, two accounts, one of each. I have one game, 'Desert Operation', it's the same kind of thing as the other games. I have two different accounts, but on each account I have four. Four accounts on two, is the size of it. I've got my 'Call of Duty', 'Modern Warfare', 'Black Ops', 'MW-2', 'MW-3'. Plus, now, 'Battlefield', but I don't play that. That's it. And that's all. Oh yes, I … an on-line tanks game. It's called 'Tanki Online'... " (Pierre)

It should also be noted that creating and pushing forward a number of characters is counterproductive in terms of the evolution of any individual character: it is easier to push forward and optimize one single character than 5 or 6 (or even more). This is a dilemma that the collector has to face.

But the difficulties with the choice of a character do not necessarily have to do with the desire to collect, and may be a bid to connect to an identity- and relationship-based problem:

"I joined one guild and then … either I changed characters and so … I forgot to … or I changed servers and characters … so that meant that obviously if you have a different server you don't have the same guild. So then at the end of the day, I left my character to rot, so to speak. And so then … it stays in the guild, but … I'm not in touch with all that lot any more. Or else because I wanted to change guilds and I didn't fit in. Whatever – I couldn't find my place" (Gaël)

[talking about the races and classes that can be played in World of Warcraft] They were all so cool. You have to define a 'main' – in inverted commas, 'you have to' – and I didn't know which one. They really were all cool. In the end, I fell in love. You have to in fact, you really have to fall in love. Because even if the class is right, sometimes it's not the right race. I've sometimes found myself mounting a dead knight living at the maximum level. So then like a week later – because you could only create that type of character once – I deleted it so I could create the same one again, but in another race. Because really, Elf was not cool. And I also rode him to the maximum level" (Gaël)

Ultimately, whether for the sake of advancing the status of a single character or of several characters or of collecting digital objects, one activity is common to both objectives: what is known as 'farming'. Most participants perceive this activity as a binding obligation, but one that is necessary to achieve their goals: to optimize their characters, to accumulate material for the craft, to collect rare objects, etc. Some of them explain that they would like to be able to do without it, and they believe that the designers are overdoing it on that front. Others are more ambivalent and explain that they have invested a huge number of hours for what were basically pretty meagre results. Gaël, for instance, reports that with his wasted hours, he helped a 'gold farmer' in his work:

"For one order, a person doing 0 to top reputation, he needed 1500 chests. I farmed the 1500 chests in one day. For 18 hours, I went into a dungeon that was … a dungeon that had a lot of humanoids because it was full of pickpockets. So I had my itinerary planned, which I'd worked out in advance so as to be as efficient as possible. So on the second screen – I've got two screens – I put on a film. And then we were off. So I put on a film, I put on a list of films that I put on. When one was finished, I put on another. When I put on a series, the whole series played. And all day long, from morning till night, I was just doing that. It doesn't worry me at all" (Gaël)

That being so, players who were very intensely involved in farming activities can also, at other times, get just as intensely wrapped up in complex raids or role plays requiring coordinated teamwork. Farming can also form part of a daily ritual as offered by some games. The place assigned to each player in the activities involving more or less narrative or sensory-motor interaction with the game is a dimension that is still so little known that further exploratory work is needed.

"I make allowances. When I'm playing, I don't always want to do role play either. It would be impossible. And so you make allowances. I either do full role play, in which case I play a session where my character will walk rather than run and talk in the game, without the character knowing about mobile phones. And things where you're like: 'That's the game, you have to farm'. Or in a raid, you're not going to start saying, 'Watch out, a monster'. Nope, there's the boss, you have to kill him. It's strategy, innit. Come off it! (laughs)" (Gaël)

6.2.8 More or less 'childish' universes

We have tried to highlight certain common features of how the players we met play. The desire to escape particular dimensions of life is certainly the most striking, but we have also stressed the interest in online multi-player gaming and the dimension of 'advancement' as defined by N. Yee. We have also seen that these different motivations could combine with others and thereby determine individuals' very different playing styles. Some motivations were not cited by all the players, but only by one or two of them; however, they are interesting to note, because they are indispensable for an understanding of the excessive nature of the use of the game by those reporting them. This category includes dimensions that we have already flagged as behaviors that can be assimilated to an obsessive compulsive disorder, but also the desire to control the objectives that have been set, the desire to confront others and assert oneself against them, etc. It is impossible to be exhaustive on this subject here, but we wish to stress one final interesting point. While the majority of the MMORPG are inspired by medieval fantasy or science fiction, others develop very childish universes (children's manga, for example). Persistent use of these games until late adolescence probably reveals difficulty in leaving childhood to join the world of adolescence and then the adult world.

6.2.9 The lifespan of a game

Most of the participants have commented that the 'end of a game' is something very painful for them. Many classic cases may occur, because while some games offer a 'proper ending' to the story that they tell, that is not the case with MMORPG. In those cases, players may have

the feeling of having exhausted the game's possibilities (a feeling that might be fleeting), or they might not like the modifications made by the designers, or the game might be closed down by the publisher etc. Often, this ending is accompanied by a painful feeling which blends sadness and boredom, or even anger in some cases. The solution is then often to dive back quickly into another game:

> *"I've sometimes played so much that I mean I've ended up just standing in front of my computer doing nothing, with my arms folded. Because I'd played so much that I actually got bored … I didn't want to do anything. Total disgust! And a couple of days later, it came back. And then after that, I recovered until it started again" (Juan)*

6.2.10 Tipping points in the life pathway and problematic nature of video game use

We wondered from what stage in the subject's life pathway we could say that his use of video games becomes problematic. All participants identified one or more periods during which their gaming intensified and took a problematic turn.

Like many people of their generation, they have been playing video games since they were children. It is above all a pleasant activity that leaves them with good memories. For them, some video games act like Proust's madeleines and they find them very agreeable to recall.

Some participants have enthused over the technical evolutions that may influence their playing time and the pleasure they get from playing. However, these will not precipitate the problematic nature of their usage. Among these trends, we can highlight the discovery of the internet and more specifically, multi-player game spaces. These often come as a revelation to the players that we have interviewed:

> *"The first time I got access to World of Warcraft, I really loved that game. It was really brilliant. I met people in the game. I could talk to them and play with them. We were groups, we were going out on a quest. Basically it was just fantastic. It was the first time I'd experienced an on-line game. In fact it really was the first time. And it was amazingly interesting" (Gaël)*

In addition, having their own computer in their bedroom (or a laptop), away from parental monitoring, is also a milestone in the intensity of their gaming:

> *"So when I got a computer in my room, I obviously started abusing it. Like, pretending to go to bed, then suddenly I'm up again … getting up and playing a lot, I mean really a lot … I was abusing my mother's trust. I did that very quickly" (Gaël)*

Having said that, it is not until further down the line that participants identify a tipping point towards 'pathological' or 'problem' video gaming. This occurs when two conditions combine: a lack of containing elements and the presence of psychological suffering.

Lack of containment refers to the lack of 'concrete' elements that put a brake on the time-consuming dimension of video gaming. Obviously, something that is containing for one

person will not necessarily be so for others. For example, living in a boarding school will by definition impose a limit on the time available for playing. Having to go to school until the age of 18 will act as a containing element for most players, although not for all. In that context, coming of age is a difficult period during which some people decide to discontinue their secondary schooling. For others, starting university, with all the associated freedoms and autonomy, but also the worries and unhappiness that it can bring, is difficult to manage:

> *"Once I was at university, it was even worse because I was in digs in Brussels. I'd say over the last four months, I completely stopped going to class and I was all alone in my digs and I was playing for 20 hours a day. No limits, no control" (Alex)*

Let us note that this issue of containment goes back to the difficulty that the participants reported in setting their own limits, but also the educational context they have been familiar with since childhood (see the education and work section). One strong dimension in some life stories has been that this lack of containing elements can be seen from very early on, going back to childhood or the onset of adolescence. This is where the question of containment ties in with the question of abandonment, a problem with particularly powerful stressful and depressing potential. Moreover, the lack of containment is not the only ingredient characterizing the situation of the players we have met. The presence of psychological suffering is a fundamental dimension in their problems. Gaming is therefore used, as we have already mentioned, to keep it at bay.

In contrast to what the literature sometimes suggests, it is not the actual playing that is cited as a source of suffering by the players themselves: in fact, a certain context motivates the playing. The contexts encountered by our participants include those involving break-ups and abandonment, such as their parents getting involved in an acrimonious divorce, major suffering with regard to their own identity and sexual orientation, unsatisfying love life or problems associated with working life, etc. (see sections on 'Family, Upbringing, and Social Relationships', 'Education and Work' and 'Personality and Well-Being').

We have seen that it was possible to identify tipping points in the life pathways of the people who told us their stories. In reality, these are longer or shorter periods of intensive use of gaming which, in general, are associated with psychological suffering and a lack of 'containing' elements in their life context. If we extend our reasoning, we can ask how we might best describe the problematic nature of the use in question. What is it that distinguishes it from more 'conventional' use?

On this subject, we first need to point to the time-consuming aspect of the activity. Clearly, this is not a sufficient criterion in itself, but it is the most striking manifestation of the problem. The number of hours that participants report spending on gaming is often spectacular, and leaves little doubt as to the mental over-investment that video games claim from the people in thrall to this problem. Some participants, for example, explain that games are present even when they are occupied with other activities. Whether it be daydreaming about the game or imagining future actions, the periods of problematic use are characterized

by the omnipresence of the game, even outside the actual playing sessions themselves. It seems that thinking about the game, about the universes associated with it, other media productions tied in with it, or the products derived from it (figurines to collect) constitutes a refuge activity in itself:

> *"I got back into the game again. Right back in, deep into it. I was living and breathing the game, I was … at work, I was only thinking about playing, all I wanted to do was quit work and for it to be 4 o'clock so I could rush back and get playing again" (Luc)*

But over-investment in gaming is not a sufficient condition. In the situations that we have encountered, this over-investment is combined with a disengagement from the other important dimensions of the subject's life. This deregulation of 'commitments' lies at the heart of the problematic use raised by the participants. In other words, their use is characterized just as much by over-investment in the games as by disinvestment in the rest. However, it is this second trend that distinguishes a 'harmonious' passion from an 'obsessive passion':

> *"Finally, I really started going downhill at the end of my professional third year. So I ended up unemployed. I was playing 24 hours a day. I didn't deal with anything at all. All the administrative stuff, my mother took care of that. Me, I was unable. And the more I played and all that, the more I shut myself off. I ended up not going out at all. I might go out once a month, if that. The only times I went out was when I really needed a game" (Juan)*

6.2.11 Representation of the problem and therapeutic approach

We have been positively surprised by the ability of most participants to put their situation into words and to distance themselves from it. Participants have shown significant resources within the framework of an exercise like the one we set them.

We have examined their own representations with regard to whether or not their video gaming is problematic. Globally, what dominates the conversations on this subject is ambivalence. Sometimes intensive video gaming is owned as a lifestyle choice or simply a pleasant activity; sometimes it is presented by the subject as the symptom of a problematic relational and psycho-affective context. We have not met any players for whom video gaming has become a source of suffering in itself. What the players identify as a source of unease is actually the context of their life, and then the consequences associated with the vast amount of time consumed by excessive gaming:

> *"How can I put it? You classify yourself as a no-life. People see us as a no-life because they already don't even see us, because we're playing all the time. But when I used to get invited to a party, I used to say 'Meh, I don't feel like it'. That helped get me classified. But I see that instead … Well, I saw it more as a lifestyle in fact. You choose to spend more time playing rather than going to mix with people who are 'a drag', in inverted commas. But then sometimes you do miss it a bit. But just sometimes, mind. So, it's no biggie. The time passes in a different way. You're at your computer at the same time. You don't see that you're spending time. So you aren't aware of what's missing, either. It's just sometimes, when I get the bus, for instance. I say to myself, 'Hmm, it's a long time since I've seen anyone'. Yes, because I do feel a little bit lonely. But it's no problem, I've got my cuddly toy (laughs)" (Gaël)*

In that context, the therapeutic approach embarked upon by most of the participants is generally associated with an ultimatum-like decision made by those around them and not a personal initiative:

> *"It was my mother who took the decision to get a consultation. She and her sister discussed about me ... to put it in a nutshell, I am getting on with real life less and less. There's no other way to put it. So my mother and her sister said to me, 'You need to go and see a psychologist, find out what's wrong, blah blah blah'. And then it's always the same old same old, what works really well with me, to force me to do something, is blackmail" (Bruno)*

> *"It was my father who thought of it, it wasn't me. I wasn't the one who said to myself ... anyway, I'd have been quite happy to stay in my room like that for ten years. If they hadn't kicked me up the backside, I'd never have come here. At the beginning, I came because I didn't want to ... because I couldn't bring myself to confront my father. I wasn't strong enough. But I quickly changed my state of mind. Between the time that I made the appointment to come, between being admitted here, and the time that I came to pre-admission, two weeks ago, and that's when I really thought about it, thought about it and told myself that maybe it wouldn't be too bad" (Alex)*

Excessive use of video games as a 'symptom', the visible, spectacular surface of more deep-seated problems, can be a gateway to a psychotherapeutic consultation and more broadly towards a set of efforts to introduce a change. That being said, this gateway is not validated by all the participants. For example, Luc told us that he had had several therapy sessions about his psycho-affective problems without ever dwelling on his use of video games. For his part, Juan is amazed at the attention being paid to the time that he spends gaming, because he does not see that as being at the heart of the problem. Instead, he intuitively mentions ideas from systemic psychology to do with the 'designated patient' and the 'symptomatic child'. Be that as it may, whether or not the label of 'excessive gamer' or 'compulsive gamer' corresponds to the participant's representations, the exploration of all the dimensions relating to the interaction between the player and his game, and their evolutions, constitutes a very effective way of making a connection and exploring the life and the 'personality' of a keen player. Obviously this has to be done with an understanding attitude, as was the case in the framework of the life stories.

6.3 Conclusions

It is worth recalling that our recruitment procedure, through help and care services, allowed us to interview only people with problematic use of video games. In other words, it seems that very few people seek help for problematic general internet or social networking uses in specialized services. This does not mean that such problematic situations do not exist; our quantitative research suggests that they do, but they are probably not frequently identified as a "disorder" that needs psychotherapeutic treatment. At this point, this is a hypothesis that needs further exploration and research.

In order to analyze the life stories collected here, we have chosen to frame our interpretative practice within a phenomenological approach, paying particular attention to engaging both the *hows* and *whats* of the topic in question: how individuals construct and assign meaning to their video game playing experiences, how they negotiate with institutional life (e.g., family, school, work) about the normativity that informs and shapes their experiences, and how they appraise the implications of their gaming practices for their personal and social lives.

In general, we have found that participants have experienced periods of variable length in which a common factor is salient: an imbalance between life spheres. As we have seen, one or several video games are over-invested in, to the detriment of other important activities such as education or interpersonal relationships (outside of video games). This "deregulation" can be seen mainly through a literal disruption of their everyday routines. However, it should be noted that the persistent time-consuming nature of video game use is just the visible and fragmented surface of a deeper suffering. Such suffering is rooted in both a personal history and a life context originally experienced as dissatisfying. Participants try above all to escape from suffering, not through an altered state of consciousness, as is the case with drugs, but by devoting most of their time to other spaces and activities allowing them to have experiences and interactions they deem more satisfactory. This does not imply withdrawing from oneself, but from some self- and life-related painful aspects in order to favor other less tormenting ones.

Overall, the following steps appear to characterize participants' life stories:

1. A childhood marked by intra-family conflicts and an absent or inhibiting father figure. For most participants, feelings of loneliness and abandonment emerged in and have lasted from childhood, coloring their perception of themselves, society, and the world.
2. An unstructured upbringing context, often lacking "containment" (in relation to the participant's age), or, more rarely, an authoritarian and inhibiting one.
3. Schooling problems concerning relational and motivational aspects (e.g., peers, teachers) as well as learning and performance issues (e.g., specific courses). These difficulties may possibly remain hidden for a long time behind an above average intellectual capacity. School difficulties trigger a process of disengagement, disaffiliation, foreshadowing a negative judgment of the world and society in general.
4. Participants speak enthusiastically about the discovery of multiplayer games, for instance, MMORPG. Detailed analysis of the player-game interaction reveals motivational factors, specific to each player, that provide them with satisfactions they cannot find in other activities. An example is the recognition by others of their skills and achievements.
5. During periods of variable length, characterized by the lack of containing elements (e.g., rules, constraints, extrinsic and intrinsic motivation, control over access to technological devices, etc.) and the heightening of dissatisfaction triggered by different personal and social factors, the dynamic of over-investment/disinvestment increases. Video games are used, *inter alia*, to escape from other life dimensions experienced as painful or tormenting.

6. Later on, a therapeutic solution may be engaged in, usually urged by a parent or perhaps a girlfriend.

These problematic situations can be studied from many perspectives. For example, systems psychology[59] could certainly provide us with an interesting perspective to overcome stigmatizing interpretations by favoring a more cross-generational approach. In addition, we can establish links between the results of the qualitative phase of the research and data on compulsive video games players collected during the quantitative phase. Obviously, the time-consuming factor is observed in all cases. But it is not the only one. Some personality "traits" or "dimensions", detected through specific tests and characterizing the population of compulsive video gamers, are also palpable in the life stories: loneliness, depressive feelings, and the sense of having little control over one's life. We can also point to the "neuroticism" dimension comprised in the "Quick Big Five" test, that is, the tendency to experience negative feelings such as anxiety, anger, or depression, or to the lower score on the "agreeableness" dimension that refers to a pessimistic view of the surrounding world and other people's motivations.

Nevertheless, beyond the psychological elucidation, particularly interesting as a way to generate therapeutic proposals, it is also possible to adopt a more sociological approach to the question. For instance, the concept of "disaffiliation" developed by Robert Castel (2003) seems to us to account for the processes at work when participants disinvest the different spheres of life in favor of alternative venues such as video games. Those processes are rooted in a twofold deficit of filiation (e.g., primary social ties such as family) and affiliations (e.g., collective forms of sociability such as school or work). Insofar as most participants are not strictly excluded, but have weakened ties, the concept of disaffiliation can help shed light on particular modes of dissociation from social bonds that participants express in their interviews.

[59] We refer, for instance, to concepts such as "loyalty conflict" and "split loyalty" developed by Böszörményi-Nagy (1973) in his Contextual approach to family therapy and individual psychotherapy, or the work of Stefano Cirillo (1995) on "concealed abandonment" and "parental stalemate".

CHAPTER 7:

Recommendations

7 Recommendations

Offering profound information based on the results of our mixed method approach and formulating recommendations for policy makers, professionals working in the field, researchers and any other party confronted with one of the different types of problematic, compulsive use of ICT was the main aim of the present study.

During the course of this research we were regularly faced with the question of whether problematic internet and computer use and its subsets such as compulsive gaming or SNS use should be seen as a drug-related issue or as a totally new phenomenon. The existence of different theoretical frameworks in human sciences, in particular in psychology and psychopathology, leads to a difficulty to find a consensus on how to label and classify new behavioural and symptomatic trends. The way of naming over-uses of Internet and video games is one of those difficult issues that are debated through dogmatic and political interests rather than any search for strong scientific evidences. Scientific publications in this regard reveal a latent debate on the real scientific value of each approach. In this context, it is not easy for researchers debating these issues to find an agreement as they mobilize different paradigms and do not manage to understand each other. The way they think is anchored in what Thomas Samuel Kuhn would call "incommensurable" realities. There are thus different concepts used, i.e. compulsive use, excessive use, over-use or addiction, as much as arguments for and against each of these terms depending on the motivations and theoretical frameworks of researchers. Beyond this theoretical debate, our research shows that some uses of Internet and video games are obviously problematic and may be seen as risky behaviours since they have possible negative consequences at long and middle term. The initiative taken by the drug committee in charge of the study of these over-uses was a rewarding one. Moreover, it seems also important to keep on funding studies to understand those problematic behaviours and their evolution in more depth.

As we have seen in the chapter on health care provision, in Belgium there is a basic system aimed at accommodating situations of excessive/problematic ICT use. This system consists of a) specialized services forming networked poles of expertise and providing original initiatives and b) generalist services that cover the entire territory. Although the results of the survey throughout the professional services field show that most organizations feel capable of dealing with issues of compulsive computer and internet use, **specific services are still very scarce** and are **not widespread**. Supporting the system already in place appears to be the first priority with regard to the therapeutic responses to these issues. This support can be achieved, for example, by stimulating the sharing of experience between clinicians about these relatively new situations in the field of mental health. Support for this system can also be given through training generalist services in order to provide them with specific conceptual/analytical tools. **Existing organizations** with expertise in mental health and more specifically in compulsive use of ICT, should be able to give people within their organization the opportunity to **build up specific expertise and knowledge** about these challenging issues.

Although compulsive use of ICT shows some similarities with other types of compulsions or addictions, it does **require a specific and specialised approach**. Since the internet and computers have become an indispensable part of our everyday lives, vital for our professional activities as well as school work, it is impossible to promote complete abstinence or cessation as a treatment approach. Therefore **treatment and prevention initiatives** should first of all focus on a **controlled and responsible use** of computers and the internet.

Furthermore, it is important to ask about internet and game use during **intake interviews** with clients/patients. Indeed, it is possible that compulsive use of computer and the internet does not emerge when it is not specifically addressed and that it takes quite a long time before problematic internet use is recognized. When the possibility of problematic ICT use is indicated, therapists might ask clients to fill in **one or more (short) scales measuring the compulsive use of the internet, games and social networking sites** that were used in this study. When someone scores higher than the cut-off point of the scale, it will be easier to **record** compulsive computer use from the start. To date, there is no systematic registration of problematic internet use in the mental health sector in Belgium. This may be why the phenomenon remains below the radar in the working field. Professionals in the field of psycho-socio-medical help care should be informed about the significance of asking their clients about the use of ICT and the importance they attach to it in their lives. The aim is not just to prevent excessive use, but above all to take the time needed to assess the computer-related activities that are now part and parcel of everyday life for all generations. This dialogue about ICT through psychological counseling, for example, if it is conducted in an open and understanding way, will achieve an atmosphere of confidence between practitioner and client, and stimulate interest in these issues. It also represents an apt gateway to probe underlying situations, for instance, by exploring the motivations to play and playing styles which, in turn, can provide valuable insight into self-knowledge, emotion regulation, basic needs, etc.

Follow-up research on the topic of the different forms of compulsive computer and internet use is of great importance. The use and importance of the internet is still on the rise worldwide, particularly with the current fast and widespread **rise in tablet and smartphone use**. These new mobile devices make it possible to be online anywhere and anytime. Free mobile applications such as WhatsApp are already used by many people as an alternative to texting, indicating that activities in which the internet is used are still expanding. Therefore **longitudinal research** needs to be conducted to register the **evolution** of computer and internet use and its repercussions for problematic use (prevalence and mean age of problematic users) in Belgium over time.

The question arises whether the **games industry** should support research focusing on problematic game use and related topics by analogy with the National Lottery in Belgium which has supported research and treatment for gambling addiction [60].

[60] http://www.nationale-loterij.be/Images/NL/NAT_RA09_NL_tcm9-6849.pdf

If we want to understand why games, social networking sites and other internet activities are used to a great extent, it is important to look at inherent features or aspects that make them so attractive. Even before the development of the internet, communication theorist Marshall McLuhan highlighted that **media characteristics** themselves have an impact on society and its members: "the medium is the message". What is it for instance about social networking sites that makes them so compelling for a substantial part of the active audience that uses them extensively? Is it about the rewarding aspect of almost immediate and massive feedback, the increasing social status visible to all your contacts, the mere fact of being liked by a large number of people? What specific design features contribute to the attraction of the medium and how does design interact with motivation in medium use? This last approach leads us automatically to the **Uses and Gratification Theory** (UGT) as this audience-centered theory defines users as active consumers who make a motivated choice of a certain medium or content in order to meet their needs. Problematic use can emerge when certain needs can only be met by using for example games or social networking sites in the life of a specific individual due to his limitations and contextual baggage. This became very clear in our interviews with compulsive gamers. Many of them were having trouble at school or at work and could therefore get no satisfaction from their studies or job and tried to substitute that with gratification from extensive use of games. Some also suffered from a difficult family situation, had very few friends in real life and tried to compensate by looking for social interaction with other gamers.

To understand why some individuals are more prone than others to develop problematic internet behavior the **Human-Medium-Environment model** offers support.

- Human: Some people are more likely to develop compulsive internet use because of personality characteristics, for example having difficulty **coping** with negative feelings.
- Medium: As stated earlier, each medium or application has its own specific features. One of the main characteristics of the internet is that it can provide an **rewarding** feeling and is therefore often used for **mood modification**.
- Environment: the internet is used by an enormous number of people and internet penetration continues to rise. It has turned out to be one of the most **important social network**s. Wi-Fi and mobile internet have made it possible to **access** the internet almost everywhere by using a laptop, tablet or smartphone.

Future research should therefore **further examine which groups of individuals are more prone** to develop compulsive behavior than others. In addition, it is crucial to take a closer look at the **specific characteristics of online media** and the gratifications people seek and obtain from them.

As we have pointed out in the discussion of the qualitative interviews, the question of **school failure and dropout** is central to the situations we have examined. Problems at school, even if they are only temporary, can have a significant impact on an individual's future. As these difficulties often foreshadow a broader process of **social disaffiliation**, we deem it important

to support educational initiatives aimed at dealing with school dropout, initiatives that take into account the cognitive, affective and motivational aspects of school failure.

In line with the contextual situation of adolescents, but apart from the education system, **adults** may **also** be confronted with failure and painful losses. Our data show that adults who feel they perform less well at work are more likely to give evidence of compulsive internet use.

Using the internet as a compensation for feelings of loss and dissatisfaction with important life factors is related to problematic ICT use. Hence, it is crucial **to increase the number of healthy rewarding moments experienced** by compulsive users in order to effect a shift in safe gratification elements from online life to real life. This may be done by **encouraging** both young people and adults to engage in real-life activities and **obtain fulfillment in work, school, youth movements, social offline bonding, sports, arts and so on**. While being aware of the process of social disaffiliation, we cannot but stress the value of initiatives that provide adolescents with opportunities to be involved in socializing and meaningful projects. As those initiatives already exist (e.g., youth organizations, sports and leisure clubs, etc.), the focus should be on effectively disseminating information about their programs and acting as a relay to make their services more accessible to less privileged social groups. As some of these activities are inexpensive it is not so much a question of affordability here as of ensuring that they effectively enter the realm of possibility for young people whose family circles offer little alternative activities.

In the same vein, it is advisable to emphasize, more than ever, the importance of **media literacy initiatives**. The role played by ICT in our daily lives leaves no doubt about the importance of integrating more consistent media education in school curricula. **Rather than simply highlighting the technical know-how and skills** of youngsters, we should direct educational attention to **possible harmful effects** of online media use. Adolescents need to be aware of the **symptoms of problematic internet use and the availability** of general and specialized and therapeutic services who can help with the problem.

Providing parents and teachers with information aimed at preventing problematic use of ICT is a main issue in a fruitful prevention strategy. We refer, for instance, to the "3-6-9-12: Let's master screens" campaign led by Yapaka.[61] The aim here is to propose benchmarks without furthering anxiety-provoking discourse, as is too often the case in these issues. Our data show that simply **setting time rules** as a parent is no guarantee of non-compulsive ICT use. Instead of purely restrictive parental mediation, a more fruitful strategy consists of discussing the content of what children are doing or being allowed to do online. Our data support this approach: **content rules** are negatively linked with compulsive internet use, that is, the more often parents set content rules, the lower the scores on the CIUS. Future research needs to **delve further into the relationship between parental mediation and problematic internet use** among adolescents. In addition to the role of parents, the **school and teachers** function as

[61] http://www.yapaka.be/quatre-affiches-pour-la-campagne-3-6-9-12

important signaling watchdogs as well. The earlier pupils with important symptoms of problematic ICT use can be identified, the greater the chance that these adolescents will get back on track in a reasonable amount of time without additional failure experiences. We suggest therefore that policy-makers **support and stimulate early intervention initiatives** by specialized organizations, educational services, researchers and consortia. Within our quantitative data results, the characteristics of what we called "group 3" respondents, that is adults or adolescents scoring very high (3 of the maximum 4 on the scales measuring compulsive internet use, compulsive gaming or SNS use) are those who urgently need help. The group 1 to 2 (scoring 2 to 2.99) are the people who should be monitored in order to keep an eye on the evolvement of their ICT behavior and to take action when the situation gets more serious.

We conclude by pointing out again the need to continue doing scientific research on problematic uses of ICT, especially because the socio-technical systems and associated practices change so rapidly that constant examination of them seems necessary. For example, the advent of multimedia tablets, smartphones, and 3G (soon 4G) has introduced significant changes in media use and practices which, at the same time, lead to issues at the family, education, and societal level.

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Appendix 1: Overview publications literature review

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Appendix 2: STROBE Analysis

Analysis grid to evaluate the quality of prevalence studies CIU / CCU based on the STROBE Statement (STrengthening the Reporting of OBservational Studies in Epidemiology). Available at: http://www.strobe-statement.org/. We have considered not only the studies explicitly addressing "compulsive internet/video game use" but also the following terms: pathological Internet use, problematic Internet use, Internet addiction, online game addiction, video game addiction, problematic video game use.

		Quality Scores	
Items	**0 point**	**1 point**	**2 points**
Study Design			
1. Period of recruitment	Not indicated	Year or month	Year and month
2. Settings	Not defined	Describes a university setting or classroom vs. online	Two or more settings: university, classroom, specific courses, online
3. Validity of measure scales	No previous validation	Report alpha values or pilot tests	Validation
4. Cut-offs	Not defined	Discuss criteria	Cut-offs well defined
5. Response Evaluation Scale	Not defined	Report defined scale (Likert, binary, etc.)	Defined scale with exact values (e.g. 5-point Likert scale, "never" to "always")
6. Variables	Not defined	---	Clearly defined
7. Inclusion/exclusion criteria	Not defined	Defined without justification	Defined with justification
8. Method of recruitment	Not reported	---	Reported
9. Response rate	Not reported	---	Reported
10. Sampling methods	Non representative sampling	Strategy close to a representative sampling	Describe analytical methods taking account of sampling strategy
11. Study size	Not reported	---	Explain how the study size was arrived at
12. Statistical Methods	Not described	---	Describes clearly all statistical methods
Results			
13. Report numbers of individuals at each stage of study—e.g. numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analyzed	Not reported	Partially reported	Fully and clearly reported
14. Participants' age	Not reported	Mean or range reported	Fully reported (Mean, Standard Deviation, Range)
15. Participants' gender	Not reported	---	Reported
16. Participant ethnic origin	Not reported	---	Reported
17. Participants having missing data	Not reported	Mention missing data	Explain how missing data were addressed
18. Number of participants corresponding to CIU criteria	Not reported	---	Reported

19. Mean score and score per item on CIU/CCU	Not reported	Partially reported	Reported in general and for each item
CIU specific items			
20. Definition of CIU or related term	Not defined	Defined	Defined with citations
21. Participants' habits of internet use	Not measured	---	Data measured and reported

Appendix 3: Dutch survey spread among Flemish working field

Deze vragenlijst heeft als doel om een stand van zaken op te stellen inzake de mogelijke aanpakken van het compulsieve gebruik van internet en videospelletjes in België. Dit project wordt gefinancierd vanuit het Federaal Wetenschapsbeleid en zal bijdragen aan de formulering van aanbevelingen die toestaan om preventie-initiatieven en hulpverlening gericht op deze problematiek uit te bouwen. Deze vragenlijst mag teruggestuurd worden per mail naar jolien.vangeel@soc.kuleuven.be.

Gegevens van uw organisatie

Naam organisatie : Klik hier als u tekst wilt invoeren.
Soort organisatie[62] : Klik hier als u tekst wilt invoeren.
Adres organisatie : Klik hier als u tekst wilt invoeren.
Telefoonnummer organisatie : Klik hier als u tekst wilt invoeren.
Naam contactpersoon : Klik hier als u tekst wilt invoeren.
E-mail contactpersoon : Klik hier als u tekst wilt invoeren.

Wat uw organisatie betreft, kan u zeggen dat (Schrappen wat niet past) :

	Wij komen nooit met deze problematiek in aanraking.	Wij ontwikkelen een specifiek initiatief.	Wij ontwikkelen geen specifiek initiatief, maar we kunnen de problemen aanpakken wanneer deze zich voordoen.	Systematisch of voor bepaalde situaties verwijzen wij mensen door naar een andere organisatie. (Geef de naam en/of type dienst aan)
Compulsief gebruik van videospelletjes.	Juist/Fout/Weet niet	Juist/Fout	Juist/Fout	Klik hier als u tekst wilt invoeren.
Dwangmatig gebruik van chat, sociale netwerksites, …	Juist/Fout/Weet niet	Juist/Fout	Juist/Fout	Klik hier als u tekst wilt invoeren.
Compulsief online gebruik van geld- en gokspelen	Juist/Fout/Weet niet	Juist/Fout	Juist/Fout	Klik hier als u tekst wilt invoeren.
Compulsief online shoppen	Juist/Fout/Weet niet	Juist/Fout	Juist/Fout	Klik hier als u tekst wilt invoeren.
Dwangmatig online op de beurs spelen	Juist/Fout/Weet niet	Juist/Fout	Juist/Fout	Klik hier als u tekst wilt invoeren.
Compulsief gedrag aangaande seksualiteit op het web	Juist/Fout/Weet niet	Juist/Fout	Juist/Fout	Klik hier als u tekst wilt invoeren.

*Wij zijn geïnteresseerd in documentatie en/of een vorming aangaande deze vragen : **Juist/Fout.***

[1] Bijvoorbeeld, officiële organisatie voor mentale gezondheidszorg, organisatie gespecialiseerd in verslavingszorg, …

Beschrijf hieronder in enkele woorden de specifiek ingerichte initiatieven indien uw organisatie hierover beschikt (als u documentatie heeft ter ondersteuning van uw antwoord, aarzel dan niet om deze aan het document toe te voegen) :

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Komt u in de praktijk verder nog in aanraking met andere soorten problemen die te maken hebben met internetgebruik en videospelletjes ? :

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Appendix 4: French survey spread among Walloon working field

Cette enquête a pour objectif de réaliser un état des lieux des possibilités de prises en charge des usages compulsifs d'Internet et des jeux vidéo sur l'ensemble du territoire belge. Celle-ci est financée par la Politique Scientifique Fédérale et contribuera, à terme, à formuler des recommandations politiques qui permettent d'organiser les actions de prévention et de soins pour cette problématique. ***Ce questionnaire peut-être renvoyé par mail à p.minotte@cresam.be ou par Fax au 081/25.31.46****.*

Les coordonnées de votre service :

Nom de votre service : Cliquez ici pour taper du texte. **Type de service**[63] **:** Cliquez ici pour taper le texte.
Adresse du service : Cliquez ici pour taper du texte. **N° de tél. du service :** Cliquez ici pour taper du texte.
Nom de la personne de contact : Cliquez ici pour taper du texte. **Adresse mail de la personne de contact :** Cliquez ici pour taper du texte.

Concernant votre service, vous pouvez dire que (Supprimez ou barrez la mention inutile à l'intérieur du tableau) :

	Nous rencontrons ce type de problématique.	Nous développons une initiative spécifique.	Nous ne développons pas d'initiative spécifique, mais nous pouvons en général prendre en charge cette problématique lorsqu'elle se présente.	Systématiquement ou pour certaines situations, nous orientons vers (indiquer le nom et/ou le type de service) :
Usage compulsif des jeux vidéo.	Vrai / Faux / Ne sait pas	Vrai / Faux	Vrai / Faux	Cliquez ici pour taper du texte.
Usage compulsif du clavardage, des « chats », réseaux sociaux, etc.	Vrai / Faux / Ne sait pas	Vrai / Faux	Vrai / Faux	Cliquez ici pour taper du texte.
Pratiques compulsives en ligne des jeux d'argent et de hasard.	Vrai / Faux / Ne sait pas	Vrai / Faux	Vrai / Faux	Cliquez ici pour taper du texte.
Achats compulsifs en ligne.	Vrai / Faux / Ne sait pas	Vrai / Faux	Vrai / Faux	Cliquez ici pour taper du texte.
Boursicotage compulsif en ligne.	Vrai / Faux / Ne sait pas	Vrai / Faux	Vrai / Faux	Cliquez ici pour taper du texte.
Pratiques compulsives en ligne liées à la sexualité.	Vrai / Faux / Ne sait pas	Vrai / Faux	Vrai / Faux	Cliquez ici pour taper du texte.

Nous sommes intéressés par de la documentation et/ou une formation concernant ces questions : ***Vrai / Faux.***

Décrire en quelques mots la ou les initiatives spécifiques renseignées ci-dessus (si vous disposez d'une documentation, n'hésitez pas à la joindre à ce document) :

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Rencontrez-vous dans votre pratique d'autres types de problématiques en rapport avec les usages d'Internet, de l'ordinateur ou des jeux vidéo ? :

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Appendix 5: Dutch survey spread among adolescents

Vragenlijst internetgebruik en internetgedrag

Jouw school is op toevallige wijze uitgekozen om deel te nemen aan deze studie. Dit onderzoek gaat over het internetgebruik en -gedrag van Vlamingen en Walen. Er zullen vooral vragen gesteld worden over jouw tijdsbesteding op internet, jouw ervaringen met internet en jouw gamegedrag. De antwoorden die je geeft zijn strikt vertrouwelijk. De school of je ouders kunnen op geen enkele manier te weten komen wat je hebt geantwoord.

A	De volgende vragen gaan over jouw internetgebruik.
1	Heb je thuis toegang tot internet? O Ja O Nee
2	Heb je een eigen computer? O Ja O Nee
3	Waar kan je thuis internetten? O Gemeenschappelijke kamer (vb. woonkamer, keuken, …) O Eigen kamer (vb. je slaapkamer, je bureau) O Beide
4	Heb je een smartphone waarmee je op internet kan ? O Ja O Nee

B	De volgende vragen gaan over jouw tijdsbesteding op internet.

5 Hoeveel tijd besteed je in een doorsnee week **online** op de volgende dagen?

Maandag	..... uur en ..... minuten
Dinsdag	..... uur en ..... minuten
Woensdag	..... uur en ..... minuten
Donderdag	..... uur en ..... minuten
Vrijdag	..... uur en ..... minuten
Zaterdag	..... uur en ..... minuten
Zondag	..... uur en ..... minuten

6 Hoeveel tijd besteed je in een doorsnee schoolweek **online <u>enkel voor schooltaken</u>** op de volgende dagen?

Maandag	..... uur en ..... minuten
Dinsdag	..... uur en ..... minuten
Woensdag	..... uur en ..... minuten
Donderdag	..... uur en ..... minuten
Vrijdag	..... uur en ..... minuten
Zaterdag	..... uur en ..... minuten
Zondag	..... uur en ..... minuten

7 Hieronder staan een aantal activiteiten die je op het internet kan doen. Geef aan **hoe vaak** je die dingen doet.

	Nooit	1 dag per week of minder	2 of 3 dagen per week	4 of 5 dagen per week	(Bijna) elke dag	Meerdere keren per dag
E-mailen	☐	☐	☐	☐	☐	☐
Informatie opzoeken	☐	☐	☐	☐	☐	☐
Chatten	☐	☐	☐	☐	☐	☐
Online games	☐	☐	☐	☐	☐	☐
Erotische websites bezoeken	☐	☐	☐	☐	☐	☐
Downloaden (vb. muziek, films, series)	☐	☐	☐	☐	☐	☐
Filmpjes kijken (vb. YouTube), muziek luisteren (vb. Spotify)	☐	☐	☐	☐	☐	☐
Online shoppen	☐	☐	☐	☐	☐	☐

C De volgende vragen gaan over jouw algemene tijdsbesteding

8 Ben je lid van een jeugdbeweging? (vb. scouts, Chiro, …)

O Ja

O Nee

9 Ben je lid van een club of vereniging? (vb. sportclub, hobbyclub, …)

O Ja

O Nee

10 Hoeveel tijd besteed je tijdens **een doorsnee week** aan de volgende activiteiten?

Huiswerk maken	☐ uur ☐ minuten
Op computer zitten zonder online te zijn	☐ uur ☐ minuten
TV, DVD of video kijken	☐ uur ☐ minuten

Sport	☐ uur ☐ minuten
Niets doen, luieren	☐ uur ☐ minuten
Met vrienden afspreken	☐ uur ☐ minuten

D De volgende vragen gaan over jouw ervaringen met internet.

11 Kan je van onderstaande ervaringen aangeven **hoe vaak** je deze hebt?

	Nooit	Zelden	Soms	Vaak	Zeer vaak
Hoe vaak vind je het moeilijk om met internetten te stoppen?	☐	☐	☐	☐	☐
Hoe vaak ga je langer door met internetten, terwijl je je had voorgenomen om te stoppen?	☐	☐	☐	☐	☐
Hoe vaak zeggen anderen (bijvoorbeeld ouders of vrienden) dat je minder zou moeten internetten?	☐	☐	☐	☐	☐
Hoe vaak ga je liever door met internetten dan dat je je tijd met anderen doorbrengt (bijvoorbeeld ouders of vrienden)?	☐	☐	☐	☐	☐
Hoe vaak kom je slaap te kort door het internetten?	☐	☐	☐	☐	☐
Hoe vaak ben je in gedachten aan het internetten, ook als je niet online bent?	☐	☐	☐	☐	☐
Hoe vaak verheug je je op de volgende keer dat je kan internetten?	☐	☐	☐	☐	☐
Hoe vaak denk je dat je eigenlijk minder zou moeten internetten?	☐	☐	☐	☐	☐
Hoe vaak heb je geprobeerd om minder tijd aan internetten te besteden en is dat niet gelukt?	☐	☐	☐	☐	☐
Hoe vaak voel je je rot wanneer je niet kunt internetten?	☐	☐	☐	☐	☐
Hoe vaak maak je snel snel je huiswerk om te kunnen internetten?	☐	☐	☐	☐	☐
Hoe vaak maak je je huiswerk niet omdat je wilt internetten?	☐	☐	☐	☐	☐
Hoe vaak internet je omdat je je rot voelt?	☐	☐	☐	☐	☐
Hoe vaak internet je om een probleem te vergeten?	☐	☐	☐	☐	☐

E De volgende vragen gaan over je ouder(s)/voogd

12 Hoe vaak komt het voor dat je moeder, vader of voogd …

	Nooit	Zelden	Soms	Vaak	Zeer vaak
… zegt dat je niet mag internetten?	☐	☐	☐	☐	☐
… zegt dat je maar tot een bepaald uur mag internetten?	☐	☐	☐	☐	☐
… zegt dat je niet te lang mag internetten?	☐	☐	☐	☐	☐
… zegt dat je alleen mag internetten op een bepaalde voorwaarde (bijvoorbeeld huiswerk maken, afwas doen)?	☐	☐	☐	☐	☐
… zegt dat je de computer moet uitzetten?	☐	☐	☐	☐	☐
… zegt dat je internet alleen voor school mag gebruiken?	☐	☐	☐	☐	☐
… zegt dat je als straf niet mag internetten?	☐	☐	☐	☐	☐

13 Wat mag je wel en niet van je ouders/voogd?

	Helemaal oneens	Oneens	Noch eens, noch oneens	Eens	Helemaal eens
Ik mag zo vaak internetten als ik wil.	☐	☐	☐	☐	☐
Ik mag zo lang internetten als ik wil.	☐	☐	☐	☐	☐
Ik mag zelf kiezen wanneer ik internet.	☐	☐	☐	☐	☐
Ik mag doen waar ik zin in heb op internet.	☐	☐	☐	☐	☐
Ik mag zelf kiezen welke sites ik bezoek.	☐	☐	☐	☐	☐
Ik mag zelf kiezen met wie ik contact heb via internet.	☐	☐	☐	☐	☐
Mijn ouders/voogd zijn goed op de hoogte van wat ik doe op internet.	☐	☐	☐	☐	☐
Ik ga op internet zonder dat mijn ouders/voogd het weten.	☐	☐	☐	☐	☐

F	De volgende vragen gaan over hoe je je over het algemeen voelt

14 Ga je graag naar school?

O	O	O	O	O	O	O	O	O	O
1	2	3	4	5	6	7	8	9	10
Helemaal niet graag									Heel graag

15 Hoe gaat het op school op het vlak van punten?

O	O	O	O	O	O	O	O	O	o
1	2	3	4	5	6	7	8	9	10
Heel slecht									Heel goed

16 Geef voor elke van de 30 onderstaande woorden aan wat op jou van toepassing is: **"Ik ben ..."**

	Helemaal oneens	Oneens	Noch eens, noch oneens	Eens	Helemaal eens
... prettig (aardig voor anderen)	☐	☐	☐	☐	☐
... fantasierijk	☐	☐	☐	☐	☐
... prikkelbaar	☐	☐	☐	☐	☐
... slordig	☐	☐	☐	☐	☐
... terughoudend	☐	☐	☐	☐	☐
... onderzoekend	☐	☐	☐	☐	☐
... zenuwachtig	☐	☐	☐	☐	☐
... zorgvuldig	☐	☐	☐	☐	☐
... stil	☐	☐	☐	☐	☐
... hulpvaardig	☐	☐	☐	☐	☐
... snel (emotioneel) geraakt	☐	☐	☐	☐	☐
... ordelijk	☐	☐	☐	☐	☐
... gesloten	☐	☐	☐	☐	☐
... veelzijdig	☐	☐	☐	☐	☐

	Helemaal oneens	Oneens	Noch eens, noch oneens	Eens	Helemaal eens
… vriendelijk	☐	☐	☐	☐	☐
… nauwkeurig	☐	☐	☐	☐	☐
… spraakzaam	☐	☐	☐	☐	☐
… vernieuwend	☐	☐	☐	☐	☐
… behulpzaam	☐	☐	☐	☐	☐
… ongerust	☐	☐	☐	☐	☐
… schuchter	☐	☐	☐	☐	☐
… aangenaam	☐	☐	☐	☐	☐
… artistiek	☐	☐	☐	☐	☐
… angstig	☐	☐	☐	☐	☐
… netjes	☐	☐	☐	☐	☐
… teruggetrokken	☐	☐	☐	☐	☐
… systematisch	☐	☐	☐	☐	☐
… sympathiek	☐	☐	☐	☐	☐
… nerveus	☐	☐	☐	☐	☐
… creatief	☐	☐	☐	☐	☐

17 Geef aan in welke mate je het eens bent met de volgende stellingen.

	Helemaal oneens	Oneens	Noch eens, noch oneens	Eens	Helemaal eens
Er is altijd wel iemand in mijn omgeving bij wie ik met mijn dagdagelijkse problemen terecht kan.	☐	☐	☐	☐	☐
Ik mis een goede vriend(in).	☐	☐	☐	☐	☐
Ik ervaar leegte om mij heen.	☐	☐	☐	☐	☐
Er zijn genoeg mensen op wie ik in geval van narigheid kan terugvallen.	☐	☐	☐	☐	☐

	Helemaal oneens	Oneens	Noch eens, noch oneens	Eens	Helemaal eens
Ik mis gezelligheid om mij heen.	☐	☐	☐	☐	☐
Ik vind mijn kring van kennissen te beperkt.	☐	☐	☐	☐	☐
Ik heb veel mensen op wie ik volledig kan vertrouwen.	☐	☐	☐	☐	☐
Er zijn voldoende mensen met wie ik me nauw verbonden voel.	☐	☐	☐	☐	☐
Ik mis mensen om me heen.	☐	☐	☐	☐	☐
Vaak voel ik me in de steek gelaten.	☐	☐	☐	☐	☐
Wanneer ik daar behoefte aan heb, kan ik altijd bij mijn vrienden terecht.	☐	☐	☐	☐	☐

18 Geef aan in welke mate je het eens bent met de volgende stellingen.

	Helemaal oneens	Oneens	Noch eens, noch oneens	Eens	Helemaal eens
Sommige van de problemen waarvoor ik sta kan ik met geen mogelijkheid oplossen.	☐	☐	☐	☐	☐
Soms heb ik het gevoel dat er met mij gesold wordt.	☐	☐	☐	☐	☐
Ik heb maar weinig controle over de dingen die met me gebeuren.	☐	☐	☐	☐	☐
Ik kan nagenoeg alles doen wat ik me heb voorgenomen.	☐	☐	☐	☐	☐
Ik voel me vaak hulpeloos in het omgaan met problemen van het dagelijks leven.	☐	☐	☐	☐	☐
Wat er in de toekomst met me gebeurt hangt in grote mate van mezelf af.	☐	☐	☐	☐	☐
Er is weinig dat ik kan doen in het veranderen van belangrijke dingen in mijn leven.	☐	☐	☐	☐	☐

19 Geef aan in welke mate je het eens bent met de volgende stellingen.

	Helemaal oneens	Oneens	Noch eens, noch oneens	Eens	Helemaal eens
Over het algemeen ben ik tevreden over mezelf.	☐	☐	☐	☐	☐
Soms denk ik dat ik nergens goed in ben.	☐	☐	☐	☐	☐
Ik heb het idee dat ik een aantal goede kwaliteiten heb.	☐	☐	☐	☐	☐

	Helemaal oneens	Oneens	Noch eens, noch oneens	Eens	Helemaal eens
Ik kan dingen net zo goed als andere mensen.	☐	☐	☐	☐	☐
Naar mijn gevoel heb ik niet veel om trots op te zijn.	☐	☐	☐	☐	☐
Af en toe voel ik me absoluut nutteloos.	☐	☐	☐	☐	☐
In vergelijking met anderen vind ik me even waardevol.	☐	☐	☐	☐	☐
Ik zou willen dat ik respect voor mezelf kon hebben.	☐	☐	☐	☐	☐
Alles bij elkaar genomen heb ik sterk de indruk dat ik een mislukkeling ben.	☐	☐	☐	☐	☐
Ik sta positief tegenover mezelf.	☐	☐	☐	☐	☐

20 Hoe vaak heb je de volgende gevoelens gehad in de laatste 12 maanden?

	Nooit	Zelden	Soms	Vaak	Altijd
Me te moe voelen om iets te doen	☐	☐	☐	☐	☐
Me ongelukkig, somber en neerslachtig voelen	☐	☐	☐	☐	☐
Moeite hebben om in slaap te vallen of te blijven slapen	☐	☐	☐	☐	☐
Weinig hoop voor de toekomst hebben	☐	☐	☐	☐	☐
Me nerveus en gespannen voelen	☐	☐	☐	☐	☐
Me te veel zorgen maken over de dingen	☐	☐	☐	☐	☐

G De volgende vragen gaan over videogames

21 Speel je games?

O Ja

O Nee ***(→ga door naar vraag 32)***

22 Speel je games via een console of op de computer (niet online)?

O Ja

O Nee

23	Speel je online games? O Ja O Nee
24	Hoeveel tijd besteed je aan gamen via een console of computer (niet online) op **een doorsnee schooldag**? ☐ uur ☐ minuten
25	Hoeveel tijd besteed je aan gamen via een console of computer (niet online) op een **doorsnee dag** dat je **niet naar school** gaat (weekend, vakantie)? ☐ uur ☐ minuten
26	Hoeveel tijd besteed je aan online gamen op **een doorsnee schooldag**? ☐ uur ☐ minuten
27	Hoeveel tijd besteed je aan online gamen op een **doorsnee dag** dat je **niet naar school** gaat (weekend, vakantie)? ☐ uur ☐ minuten
28	Welke soorten games speel je? (meerdere antwoorden mogelijk) O Avontuurgames O Actie-FPS (First Person Shooter) O Vechtgames O Race- en sportgames O Strategiegames O MMORPG (Massively Multiplayer Online Role-Playing Games) O Sociale games O Digitale versies van traditionele spelletjes O Puzzelgames
29	Wat zijn je drie favoriete games op dit moment? ..... 2 ..... 3 ..... O Weet ik niet
30	Hoeveel nieuwe spelletjes probeer je per maand? O 0 O 1 O 2

O 3
O 4 en meer

31 Kan je van onderstaande ervaringen aangeven **hoe vaak** je deze hebt?

	Nooit	Zelden	Soms	Vaak	Zeer vaak
Hoe vaak vind je het moeilijk om met gamen te stoppen?	☐	☐	☐	☐	☐
Hoe vaak ga je langer door met gamen, terwijl je je had voorgenomen om te stoppen?	☐	☐	☐	☐	☐
Hoe vaak zeggen anderen (bijvoorbeeld ouders of vrienden) dat je minder zou moeten gamen?	☐	☐	☐	☐	☐
Hoe vaak ga je liever door met gamen dan dat je je tijd met anderen doorbrengt (bijvoorbeeld ouders of vrienden)?	☐	☐	☐	☐	☐
Hoe vaak kom je slaap te kort door het gamen?	☐	☐	☐	☐	☐
Hoe vaak ben je in gedachten aan het gamen?	☐	☐	☐	☐	☐
Hoe vaak verheug je je op de volgende keer dat je kan gamen?	☐	☐	☐	☐	☐
Hoe vaak denk je dat je eigenlijk minder zou moeten gamen?	☐	☐	☐	☐	☐
Hoe vaak heb je geprobeerd om minder tijd aan gamen te besteden en is dat niet gelukt?	☐	☐	☐	☐	☐
Hoe vaak voel je je rot wanneer je niet kunt gamen?	☐	☐	☐	☐	☐
Hoe vaak maak je snel snel je huiswerk om te kunnen gamen?	☐	☐	☐	☐	☐
Hoe vaak maak je je huiswerk niet omdat je wilt gamen?	☐	☐	☐	☐	☐
Hoe vaak game je omdat je je rot voelt?	☐	☐	☐	☐	☐
Hoe vaak game je om een probleem te vergeten?	☐	☐	☐	☐	☐

H De volgende vragen gaan over sociale netwerksites

32 Heb je een profiel op een sociale netwerksite?

O Ja

O Nee ***(→ ga door naar vraag 37)***

33 Op welke sociale netwerksite(s) heb je een profiel? (meerdere antwoorden mogelijk)

O Netlog

O Facebook

O MySpace

O Twitter

	O Andere: .....
34	Hoeveel tijd besteed je aan sociale netwerksites op **een doorsnee schooldag**? ☐ uur ☐ minuten
35	Hoeveel tijd besteed je aan sociale netwerksites op **doorsnee dag** dat je **niet naar school** gaat (weekend, vakantie)? ☐ uur ☐ minuten

36 Hoe vaak gedurende het laatste jaar heb/ben je... ?

	Nooit	Zelden	Soms	Vaak	Zeer vaak
... veel aan sociale netwerksites gedacht of gepland om een sociale netwerksite te gebruiken?	☐	☐	☐	☐	☐
... nagedacht over hoe je meer tijd kan vrijmaken om op sociale netwerksites te zitten?	☐	☐	☐	☐	☐
... veel nagedacht over wat er zopas op sociale netwerksites is gebeurd?	☐	☐	☐	☐	☐
... meer tijd op sociale netwerksites gespendeerd dan oorspronkelijk gepland?	☐	☐	☐	☐	☐
... de drang gevoeld om meer en meer sociale netwerksites te gebruiken?	☐	☐	☐	☐	☐
... het gevoel gehad dat je sociale netwerksites meer en meer moest gebruiken om er evenveel plezier uit te halen?	☐	☐	☐	☐	☐
... sociale netwerksites gebruikt om persoonlijke problemen te vergeten?	☐	☐	☐	☐	☐
... sociale netwerksites gebruikt om gevoelens van schuld, angst, hulpeloosheid en depressie te verminderen?	☐	☐	☐	☐	☐
... sociale netwerksites gebruikt om rusteloosheid te verminderen?	☐	☐	☐	☐	☐
... meegemaakt dat anderen je zeiden dat je je sociale netwerksitegebruik moest verminderen, maar dat je niet naar hen hebt geluisterd?	☐	☐	☐	☐	☐
... geprobeerd om minder op sociale netwerksites te zitten en is dit niet gelukt?	☐	☐	☐	☐	☐
... beslist om minder sociale netwerksites te gebruiken, maar is dit niet gelukt?	☐	☐	☐	☐	☐
... rusteloos of lastig geworden wanneer je in de onmogelijkheid was om sociale netwerksites te gebruiken?	☐	☐	☐	☐	☐
... geïrriteerd geraakt wanneer je geen sociale netwerksites kon gebruiken?	☐	☐	☐	☐	☐
... je slecht gevoeld, voor verschillende redenen, wanneer je een tijdje niet op sociale netwerksites kon inloggen?	☐	☐	☐	☐	☐
... sociale netwerksites zo veel gebruikt dat het een negatieve invloed had op je studies?	☐	☐	☐	☐	☐

	Nooit	Zelden	Soms	Vaak	Zeer vaak
… minder prioriteit gegeven aan hobby's, andere vrije tijdsactiviteiten en sport door sociale netwerksites?	☐	☐	☐	☐	☐
… je vrienden, familie of partner verwaarloosd door sociale netwerksites?	☐	☐	☐	☐	☐

I De volgende vragen gaan over jezelf

37 Ik ben een …

O Jongen

O Meisje

38 Wat is je geboortedatum?

☐☐ - ☐☐ - ☐☐☐☐

dag **maand** **jaar**

39 Wat is je opleiding?

O Algemeen secundair onderwijs (ASO)

O Kunstsecundair onderwijs (KSO)

O Technisch secundair onderwijs (TSO)

O Beroepsecundair onderwijs (BSO)

40 Welke richting volg je?

……

41 In welke jaar zit je?

O Eerste jaar

O Tweede jaar

O Derde jaar

O Vierde jaar

O Vijfde jaar

O Zesde jaar

O Zevende jaar

42 Wat is je gezinssituatie?

O Ouders getrouwd

O Ouders gescheiden

O Ouders samenwonend

O Alleenstaande ouder

O Andere: ……

43	Ik ben … O Enig kind O De jongste O De oudste O Niet de jongste en niet de oudste O Deel van een tweeling
44	Hoeveel broers heb je? (inclusief halfbroers, halfzussen) ☐
45	Hoeveel zussen heb je? (inclusief halfbroers, halfzussen) ☐
46	Welke nationaliteit heb je? ……
47	Welke nationaliteit heeft je vader? ……
48	Welke nationaliteit heeft je moeder? ……
49	Wat is het hoogste diploma dat je vader behaalde? O Geen O Lager onderwijs O Middelbaar algemeen onderwijs O Middelbaar technisch onderwijs O Middelbaar beroepsonderwijs O Hogeschool O Universiteit O Weet ik niet
50	Wat is het hoogste diploma dat je moeder behaalde? O Geen O Lager onderwijs O Middelbaar algemeen onderwijs O Middelbaar technisch onderwijs O Middelbaar beroepsonderwijs

	O	Hogeschool
	O	Universiteit
	O	Weet ik niet
51	Welke uitspraken vind je het meest van toepassing op het inkomen (geld) van jullie gezin thuis? Duid een antwoord aan.	
	O	Wij komen thuis zeer moeilijk rond.
	O	Wij komen thuis moeilijk rond.
	O	Wij komen thuis eerder moeilijk rond.
	O	Wij komen thuis eerder gemakkelijk rond.
	O	Wij komen thuis gemakkelijk rond.
	O	Wij komen thuis zeer gemakkelijk rond.

We danken je van harte voor je medewerking.

Indien je bereid bent om deel te nemen aan de vervolgstudie (een interview), gelieve hieronder jouw voornaam, naam, telefoonnummer en/of gsm-nummer door te geven.

Voornaam

Naam

Telefoonnummer

Gsm-nummer

Appendix 6: French survey spread among adolescents

FACULTES UNIVERSITAIRES NOTRE-DAME DE LA PAIX
Département des sciences politiques, sociales et de la communication

Questionnaire sur l'utilisation d'internet et le comportement en ligne

Ton école a été choisie au hasard pour participer à cette étude. Celle-ci porte sur l'usage de l'ordinateur, d'internet et des jeux vidéo chez les jeunes wallons et flamands. Ce questionnaire contient notamment des questions sur ton emploi du temps sur internet, tes expériences avec internet et les jeux vidéo, et ton comportement en ligne. Tes réponses sont confidentielles et secrètes. L'école et tes parents ne pourront en aucun cas savoir ce que tu as répondu.

A	Les questions suivantes portent sur ton accès à internet.
1	As-tu une connexion internet à la maison? O Oui O Non
2	Possèdes-tu un ordinateur? O Oui O Non
3	Où peux-tu aller sur internet à la maison? O Chambre commune (p.e. salon, cuisine, …) O Ta chambre (ou ton bureau) O Les deux
4	As-tu un Smartphone avec lequel tu peux accéder à l'internet ? O Oui O Non

B	Les questions suivantes portent sur le temps que tu passes en ligne.

5 Lors d'une semaine habituelle, combien de temps passes-tu **sur internet**?

Lundi	…….. heure(s) et …….. minutes
Mardi	…….. heure(s) et …….. minutes
Mercredi	…….. heure(s) et …….. minutes
Jeudi	…….. heure(s) et …….. minutes
Vendredi	…….. heure(s) et …….. minutes
Samedi	…….. heure(s) et …….. minutes
Dimanche	…….. heure(s) et …….. minutes

6 Lors d'une semaine d'école habituelle, combien de temps passes-tu sur internet **pour effectuer des tâches scolaires** ?

Lundi	…….. heure(s) et …….. minutes
Mardi	…….. heure(s) et …….. minutes
Mercredi	…….. heure(s) et …….. minutes
Jeudi	…….. heure(s) et …….. minutes
Vendredi	…….. heure(s) et …….. minutes
Samedi	…….. heure(s) et …….. minutes
Dimanche	…….. heure(s) et …….. minutes

7 Voici quelques activités que l'on peut faire sur internet. Indique **à quelle fréquence** tu fais ces activités.

	Jamais	1 jour par semaine ou moins	2 ou 3 jours par semaine	4 ou 5 jours par semaine	(Presque) chaque jour	Plus d'une fois par jour
Lire/envoyer des mails	☐	☐	☐	☐	☐	☐
Chercher des informations	☐	☐	☐	☐	☐	☐
Chatter	☐	☐	☐	☐	☐	☐
Jouer à des jeux en ligne	☐	☐	☐	☐	☐	☐
Visiter des sites érotiques	☐	☐	☐	☐	☐	☐
Télécharger (p.e. musique, films, feuilletons…)	☐	☐	☐	☐	☐	☐
Regarder des vidéos (p.e. YouTube), écouter de la musique (p.e. Spotify)	☐	☐	☐	☐	☐	☐
Acheter sur internet	☐	☐	☐	☐	☐	☐

C Les questions suivantes portent sur tes passe-temps en général

8 Es-tu membre d'un mouvement de jeunesse? (p.e. Les Scouts, Patro, …)

O Oui

O Non

9 Es-tu membre d'un club ou d'une association? (p.e. association sportive, club d'hobby, …)

O Oui

O Non

10 Lors **d'une semaine habituelle**, combien de temps passes-tu à faire les activités suivantes?

Faire les devoirs	☐	Heure(s)	☐	minutes
Utiliser l'ordinateur, mais pas internet	☐	Heure(s)	☐	minutes
Regarder la télé, DVD, vidéos	☐	Heure(s)	☐	minutes

Faire du sport	☐ Heure(s) ☐ minutes
Ne rien faire	☐ Heure(s) ☐ minutes
Rendez-vous avec des amis	☐ Heure(s) ☐ minutes

D Les questions suivantes portent sur ton expérience d'internet

11 Indique **à quelle fréquence** tu ressens les choses suivantes…

	Jamais	Rarement	Parfois	Souvent	Très souvent
Trouves-tu difficile d'arrêter d'utiliser internet lorsque tu es en ligne?	☐	☐	☐	☐	☐
Continues-tu à utiliser internet malgré ton intention d'arrêter ta séance?	☐	☐	☐	☐	☐
D'autres personnes (parents, amis) te disent que tu devrais utiliser moins internet?	☐	☐	☐	☐	☐
Préfères-tu utiliser internet plutôt que de passer du temps avec d'autres personnes (parents, amis)?	☐	☐	☐	☐	☐
Manques-tu de sommeil à cause d'internet?	☐	☐	☐	☐	☐
Penses-tu à internet même quand tu n'es pas en ligne?	☐	☐	☐	☐	☐
Te réjouis-tu d'avoir ta prochaine séance d'internet?	☐	☐	☐	☐	☐
Penses-tu que tu devrais moins utiliser internet?	☐	☐	☐	☐	☐
As-tu essayé sans succès de passer moins de temps sur internet?	☐	☐	☐	☐	☐
As-tu le cafard quand tu ne peux pas aller sur internet?	☐	☐	☐	☐	☐
Te dépêches-tu pour terminer ton travail scolaire afin d'aller sur internet?	☐	☐	☐	☐	☐
Négliges-tu tes obligations scolaires parce que tu préfères aller sur internet?	☐	☐	☐	☐	☐
Vas-tu sur internet lorsque tu as le cafard?	☐	☐	☐	☐	☐
Utilises-tu internet pour échapper à tes soucis?	☐	☐	☐	☐	☐

E Les questions suivantes portent sur tes parents ou ton tuteur

12 A quelle fréquence ta mère, ton père, ou ton tuteur ...

	Jamais	Rarement	Parfois	Souvent	Très souvent
... dit que tu ne peux pas aller sur internet?	☐	☐	☐	☐	☐
... dit que tu peux aller sur internet jusqu'à une certaine heure?	☐	☐	☐	☐	☐
... dit que tu ne peux pas aller sur internet pendant longtemps?	☐	☐	☐	☐	☐
... dit que tu ne peux aller sur internet que sous certaines conditions (p.e. après les devoirs, la vaisselle)?	☐	☐	☐	☐	☐
... dit que tu dois éteindre l'ordinateur?	☐	☐	☐	☐	☐
... dit que tu ne peux utiliser l'internet que pour les tâches de l'école?	☐	☐	☐	☐	☐
... te punit en t'interdisant d'aller sur internet?	☐	☐	☐	☐	☐

13 Qu'est-ce que tes parents (ou ton tuteur) te permettent ou t'interdissent de faire?

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fait d'accord
Je peux aller sur internet autant de fois que je veux	☐	☐	☐	☐	☐
Je peux aller sur internet aussi longtemps que je veux	☐	☐	☐	☐	☐
Je peux choisir quand je vais sur internet	☐	☐	☐	☐	☐
Je peux faire ce que je veux sur internet.	☐	☐	☐	☐	☐
Je peux choisir les sites web que je visite	☐	☐	☐	☐	☐
Je peux choisir qui je contacte sur internet	☐	☐	☐	☐	☐
Mes parents (ou mon tuteur) savent ce que je fais sur internet	☐	☐	☐	☐	☐
Je vais sur internet sans que mes parents (ou mon tuteur) le sachent	☐	☐	☐	☐	☐

F	**Les questions suivantes portent sur ton état d'esprit général et sur ta personnalité**

14 Aimes-tu aller à l'école?

O	O	O	O	O	O	O	O	O	O
1	2	3	4	5	6	7	8	9	10
Pas du tout									Avec grand plaisir

15 Quels sont tes résultats à l'école en général?

O	O	O	O	O	O	O	O	O	O
1	2	3	4	5	6	7	8	9	10
Très mauvais									Très bons

16 Indique pour les 30 mots ci-dessous ce qui s'applique à toi. **"Je suis ..."**

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fait d'accord
... aimable	☐	☐	☐	☐	☐
... imaginatif/imaginative	☐	☐	☐	☐	☐
... irritable	☐	☐	☐	☐	☐
... désordonné(e)	☐	☐	☐	☐	☐
... réservé(e)	☐	☐	☐	☐	☐
... investigateur	☐	☐	☐	☐	☐
... agité(e)	☐	☐	☐	☐	☐
... soigneux/soigneuse	☐	☐	☐	☐	☐
... silencieux/silencieuse	☐	☐	☐	☐	☐
... serviable	☐	☐	☐	☐	☐
... émotif/émotive	☐	☐	☐	☐	☐
... ordonné(e)	☐	☐	☐	☐	☐
... renfermé(e)	☐	☐	☐	☐	☐
... polyvalent(e) (j'ai plusieurs talents)	☐	☐	☐	☐	☐

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fait d'accord
... gentil(le)	☐	☐	☐	☐	☐
... précis(e)	☐	☐	☐	☐	☐
... bavard(e)	☐	☐	☐	☐	☐
... innovateur/innovatrice (je propose de nouvelles idées)	☐	☐	☐	☐	☐
... obligeant(e)	☐	☐	☐	☐	☐
... inquiet(e)	☐	☐	☐	☐	☐
... timide	☐	☐	☐	☐	☐
... agréable	☐	☐	☐	☐	☐
... artistique	☐	☐	☐	☐	☐
... anxieux/anxieuse	☐	☐	☐	☐	☐
... soigné(e)	☐	☐	☐	☐	☐
... solitaire	☐	☐	☐	☐	☐
... systématique	☐	☐	☐	☐	☐
... sympathique	☐	☐	☐	☐	☐
... nerveux/nerveuse	☐	☐	☐	☐	☐
... créateur/créatrice	☐	☐	☐	☐	☐

17 Indique dans quelle mesure tu es d'accord avec les affirmations suivantes.

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fait d'accord
Il y a toujours quelqu'un de mon entourage à qui je peux parler de mes problèmes quotidiens	☐	☐	☐	☐	☐
Ça me manque d'avoir un ami très proche	☐	☐	☐	☐	☐
J'ai l'impression que quelque chose me manque dans la vie, même si je ne sais pas de quoi il s'agit	☐	☐	☐	☐	☐
Il y a beaucoup de gens sur qui je peux m'appuyer quand j'ai des problèmes	☐	☐	☐	☐	☐

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fait d'accord
Le plaisir de la compagnie des autres me manque	☐	☐	☐	☐	☐
Je trouve mon cercle d'amis et de connaissances trop limité	☐	☐	☐	☐	☐
Il y a beaucoup de gens à qui je peux faire entièrement confiance	☐	☐	☐	☐	☐
Il y a suffisamment de gens avec qui je me sens proche	☐	☐	☐	☐	☐
Ça me manque d'avoir de gens autour de moi	☐	☐	☐	☐	☐
Je me sens souvent abandonné(e), rejeté(e)	☐	☐	☐	☐	☐
Je peux faire appel à mes amis quand j'en ai besoin	☐	☐	☐	☐	☐

18 Indique dans quelle mesure tu es d'accord avec les affirmations suivantes.

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fait d'accord
Pour certains de mes problèmes, il n'y a vraiment aucun moyen pour que je puisse les résoudre	☐	☐	☐	☐	☐
Parfois j'ai l'impression qu'on me marche sur les pieds	☐	☐	☐	☐	☐
J'ai peu de contrôle sur les choses qui m'arrivent	☐	☐	☐	☐	☐
Je peux faire à peu près tout ce que je me mets en tête de faire	☐	☐	☐	☐	☐
Je me sens souvent impuissant(e) face aux problèmes de la vie	☐	☐	☐	☐	☐
Ce que l'avenir m'apportera dépend en grande partie de moi	☐	☐	☐	☐	☐
Je ne peux pas faire grand-chose pour changer des choses importantes dans ma vie	☐	☐	☐	☐	☐

19 Indique dans quelle mesure tu es d'accord avec les affirmations suivantes.

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fait d'accord
Dans l'ensemble, je suis satisfait(e) de moi même	☐	☐	☐	☐	☐
A certains moments, je pense que je ne suis bon(ne) en rien	☐	☐	☐	☐	☐
Je pense que j'ai un certain nombre de qualités	☐	☐	☐	☐	☐

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fait d'accord
Je suis capable de faire les choses aussi bien que les autres gens	☐	☐	☐	☐	☐
Je pense que je n'ai pas de quoi être fier	☐	☐	☐	☐	☐
A certains moments, je me sens vraiment inutile	☐	☐	☐	☐	☐
J'ai de la valeur comme personne au même niveau que les autres	☐	☐	☐	☐	☐
Je voudrais avoir du respect pour moi même	☐	☐	☐	☐	☐
Dans l'ensemble, j'ai tendance à penser que je suis un échec	☐	☐	☐	☐	☐
J'ai une image positive de moi-même	☐	☐	☐	☐	☐

20 Durant ces 12 derniers mois, **à quelle fréquence** as-tu eu les sentiments suivants?

	Jamais	Rarement	Parfois	Souvent	Toujours
Je me sens trop fatigué(e) pour faire des choses	☐	☐	☐	☐	☐
Je me sens malheureux/malheureuse, triste ou déprime(e)	☐	☐	☐	☐	☐
J'ai du mal à m'endormir ou à rester endormi(e)	☐	☐	☐	☐	☐
Je me sens désespéré(e) quant à l'avenir	☐	☐	☐	☐	☐
Je me sens nerveux/nerveuse, tendu(e)	☐	☐	☐	☐	☐
Je me sens très inquiet(e) ou soucieux/soucieuse des choses	☐	☐	☐	☐	☐

G Les questions suivantes portent sur ton utilisation des jeux vidéo et en ligne

21 Joues-tu à des jeux?

O Oui

O Non (→ aller à la question 32)

22 Joues-tu à des jeux vidéo sur PC/console?

O Oui

O Non

23	Joues-tu à des jeux en ligne? O Oui O Non
24	Lors d'une journée d'école habituelle, combien de temps consacres-tu aux jeux sur PC/Console ? ☐ Heure(s) ☐ minutes
25	Lors d'une journée habituelle **sans école (weekend, vacances)**, combien de temps consacres-tu aux jeux sur PC/Console ? ☐ Heure(s) ☐ minutes
26	Lors d'une journée d'école habituelle, combien de temps consacres-tu aux jeux en ligne ? ☐ Heure(s) ☐ minutes
27	Lors d'une journée habituelle **sans école (weekend, vacances)**, combien de temps consacres-tu aux jeux en ligne ? ☐ Heure(s) ☐ minutes
28	À quelles sortes de jeux joues-tu? (plus d'une réponse possible) O Aventure O Action-FPS (First Person Shooter) O Jeux de combat O Course et sport O Stratégie O MMORPG (Massively Multiplayer Online Role-Playing Games) O Jeux sociaux O Versions digitales des jeux traditionnels O Jeux de puzzle
29	Quels sont tes trois jeux favoris en ce moment? 1 ..... 2 ..... 3 ..... O Je ne sais pas
30	Combien de nouveaux jeux essaies-tu par mois? O 0 O 1 O 2 O 3 O 4 et plus

31 Indique **à quelle fréquence** tu éprouves les choses suivantes…

	Jamais	Rarement	Parfois	Souvent	Très souvent
Trouves-tu difficile d'arrêter de jouer aux jeux vidéo/en ligne?	☐	☐	☐	☐	☐
Continues-tu à jouer aux jeux vidéo/en ligne malgré ton intention d'arrêter ta séance?	☐	☐	☐	☐	☐
D'autres personnes (parents, amis) te disent que tu devrais jouer moins aux jeux vidéo/en ligne?	☐	☐	☐	☐	☐
Préfères-tu continuer à jouer aux jeux vidéo/en ligne plutôt que de passer du temps avec d'autres personnes (parents, amis)?	☐	☐	☐	☐	☐
Manques-tu de sommeil à cause des jeux vidéo/en ligne?	☐	☐	☐	☐	☐
Penses-tu aux jeux vidéo/en ligne même quand tu fais d'autres activités?	☐	☐	☐	☐	☐
Es-tu impatient(e) d'avoir ta prochaine session de jeux vidéo/en ligne?	☐	☐	☐	☐	☐
Penses-tu que tu devrais moins jouer aux jeux vidéo/en ligne?	☐	☐	☐	☐	☐
As-tu essayé sans succès de passer moins de temps à jouer aux jeux vidéo/en ligne?	☐	☐	☐	☐	☐
Te sentes-tu déprimé(e) ou as-tu le cafard lorsque tu ne peux pas jouer aux jeux vidéo/en ligne?	☐	☐	☐	☐	☐
Te dépêches-tu pour terminer ton travail scolaire afin d'aller jouer aux jeux vidéo/en ligne?	☐	☐	☐	☐	☐
Négliges-tu tes obligations scolaires parce que tu préfères jouer aux jeux vidéo/en ligne?	☐	☐	☐	☐	☐
Joues-tu aux jeux vidéo/en ligne lorsque tu as le cafard?	☐	☐	☐	☐	☐
Utilises-tu les jeux vidéo/en ligne pour échapper à tes soucis ou pour soulager des sentiments négatifs?	☐	☐	☐	☐	☐

H Les questions suivantes portent sur ton utilisation des réseaux sociaux.

32 As-tu un profil sur un des réseaux sociaux?

O Oui

O Non (→ aller à la question 37)

33 Sur quels réseaux sociaux as-tu un profil (plus d'une réponse possible)

O Netlog

O Facebook

O MySpace

O Twitter

O Autre: ……

34 Lors d'une **journée d'école habituelle**, combien de temps passes-tu sur les réseaux sociaux ?

☐ Heure(s) ☐ minutes

35 Lors d'une journée habituelle **sans école (weekend, vacances)**, combien de temps passes-tu sur les réseaux sociaux ?

☐ Heure(s) ☐ minutes

36 Durant cette dernière année, **à quelle fréquence** as-tu…

	Jamais	Rarement	Parfois	Souvent	Très souvent
Passé beaucoup de temps à penser aux réseaux sociaux ou à planifier de les utiliser?	☐	☐	☐	☐	☐
Réfléchi à la façon dont tu pourrais avoir plus de temps libre à consacrer aux réseaux sociaux?	☐	☐	☐	☐	☐
Pensé à ce qui s'est passé récemment sur les réseaux sociaux?	☐	☐	☐	☐	☐
Passé plus de temps que prévu sur les réseaux sociaux?	☐	☐	☐	☐	☐
Ressenti le besoin d'utiliser de plus en plus les réseaux sociaux?	☐	☐	☐	☐	☐
Ressenti que tu devais utiliser de plus en plus les réseaux sociaux afin d'en obtenir le même plaisir?	☐	☐	☐	☐	☐
Utilisé les réseaux sociaux pour oublier des problèmes personnels?	☐	☐	☐	☐	☐
Utilisé les réseaux sociaux pour diminuer les sentiments de culpabilité, d'anxiété, d'impuissance et de dépression?	☐	☐	☐	☐	☐
Utilisé les réseaux sociaux afin de diminuer ton impatience?	☐	☐	☐	☐	☐
Entendu les autres te dire de diminuer ton utilisation des réseaux sociaux mais tu ne les as pas écouté?	☐	☐	☐	☐	☐
Tenté sans succès de diminuer ton utilisation des réseaux sociaux?	☐	☐	☐	☐	☐
Décidé sans succès d'utiliser moins fréquemment les réseaux sociaux?	☐	☐	☐	☐	☐
Ressenti de l'impatience ou de l'inquiétude quand tu ne peux pas utiliser les réseaux sociaux?	☐	☐	☐	☐	☐
Ressenti de l'agacement si l'on t'interdisait d'utiliser les réseaux sociaux?	☐	☐	☐	☐	☐
Ressenti un mal être si pour des raisons diverses tu ne pouvais pas te connecter aux réseaux sociaux pendant un certain temps?	☐	☐	☐	☐	☐
Utilisé les réseaux sociaux de façon excessive de sorte que cela a eu un impact négatif sur tes études?	☐	☐	☐	☐	☐

	Jamais	Rarement	Parfois	Souvent	Très souvent
Accordé moins d'importance à tes hobbies, tes loisirs et le sport à cause des réseaux sociaux?	☐	☐	☐	☐	☐
Ignoré les membres de ta famille ou tes amis à cause des réseaux sociaux?	☐	☐	☐	☐	☐

I Les questions suivantes portent sur toi-même et sur ta famille

37 Je suis un(e) …

O Garçon

O Fille

38 Quelle es ta date de naissance?

		-			-				
jour			mois			année			

39 Quel type d'enseignement fréquentes-tu?

O Enseignement général

O Enseignement artistique

O Enseignement technique

O Enseignement professionnel

40 Quelle est ton orientation scolaire? (→ pour les écoles artistiques, techniques et professionnelles)

……

41 En quelle année es-tu?

O 1ère année O 5me année

O 2me année O 6me année

O 3me année O 7me année

O 4me année

42 Quelle est ta situation familiale?

O Parents mariés

O Parents séparés

O Parents concubins (vivant ensemble mais pas mariés)

O Parents isolés

O Autre: ……

43	Je suis ... O Enfant unique O Le plus jeune O L'ainé O Pas le plus jeune, pas l'ainé O Jumeau, jumelle
44	Combien de frères as-tu? (y compris tes demi-frères) ☐
45	Combien de sœurs as-tu? (y compris tes demi-sœurs) ☐
46	Quelle est ta nationalité? .....
47	Quelle est la nationalité de ton père? .....
48	Quelle est la nationalité de ta mère? .....
49	Quel est le plus haut diplôme de ta mère? O Pas de diplôme O Enseignement fondamental O Enseignement secondaire général O Enseignement secondaire technique O Enseignement secondaire professionnel O Enseignement supérieur non universitaire O Université O Je ne sais pas
50	Quel est le plus haut diplôme de ton père? O Pas de diplôme O Enseignement fondamental O Enseignement secondaire général O Enseignement secondaire technique O Enseignement secondaire professionnel

	O	Enseignement supérieur non universitaire
	O	Université
	O	Je ne sais pas
51	Quelle affirmation décrit le mieux la situation financière de ta famille?	
	O	Nous nous en sortons très difficilement
	O	Nous nous en sortons difficilement
	O	Nous nous en sortons plutôt difficilement
	O	Nous nous en sortons plutôt facilement
	O	Nous nous en sortons facilement
	O	Nous nous en sortons très facilement

Nous te remercions sincèrement pour ta coopération!

Appendix 7: Dutch survey spread among adults

A	De volgende vragen gaan over uw internetgebruik.
1	Heeft u thuis toegang tot internet? O Ja O Nee
2	Heeft u een eigen computer? O Ja O Nee
3	Heeft u een smartphone waarmee u op internet kan ? O Ja O Nee

B	De volgende vragen gaan over uw tijdsbesteding op internet.

4 Hoeveel tijd besteedt u in een doorsnee week gemiddeld **online** op de volgende dagen?

Maandag	..... uur en ..... minuten
Dinsdag	..... uur en ..... minuten
Woensdag	..... uur en ..... minuten
Donderdag	..... uur en ..... minuten
Vrijdag	..... uur en ..... minuten
Zaterdag	..... uur en ..... minuten
Zondag	..... uur en ..... minuten

5 Werkt u?

O Ja
O Nee

6 Studeert u?

O Ja
O Nee

Voorwaarde: WORK = JA

7 Hoeveel tijd besteedt u in een doorsnee week gemiddeld **online <u>enkel voor werk gerelateerde zaken</u>** op de volgende dagen?

Maandag	..... uur en ..... minuten
Dinsdag	..... uur en ..... minuten
Woensdag	..... uur en ..... minuten
Donderdag	..... uur en ..... minuten
Vrijdag	..... uur en ..... minuten
Zaterdag	..... uur en ..... minuten
Zondag	..... uur en ..... minuten

<u>Voorwaarde: STUDY = JA</u>

8 Hoeveel tijd besteedt u in een doorsnee week gemiddeld **online <u>enkel voor school gerelateerde zaken</u>** op de volgende dagen?

Maandag	..... uur en ..... minuten
Dinsdag	..... uur en ..... minuten
Woensdag	..... uur en ..... minuten
Donderdag	..... uur en ..... minuten
Vrijdag	..... uur en ..... minuten
Zaterdag	..... uur en ..... minuten
Zondag	..... uur en ..... minuten

9 Hieronder staan een aantal activiteiten die u op het internet kan doen. Geef aan **hoe vaak** u die dingen doet.

	Nooit (0)	1 dag per week of minder (1)	2 of 3 dagen per week (2)	4 of 5 dagen per week (3)	(Bijna) elke dag (4)	Meerdere keren per dag (5)
E-mailen (OLACT_1)	☐	☐	☐	☐	☐	☐
Informatie opzoeken (OLACT_2)	☐	☐	☐	☐	☐	☐
Chatten (OLACT_3)	☐	☐	☐	☐	☐	☐
Online gok- en geldspelen (OLACT_4)	☐	☐	☐	☐	☐	☐
Erotische websites bezoeken (OLACT_5)	☐	☐	☐	☐	☐	☐
Downloaden (vb. muziek, films, series) (OLACT_6)	☐	☐	☐	☐	☐	☐
Filmpjes kijken (vb. YouTube) (OLACT_7)	☐	☐	☐	☐	☐	☐
Muziek luisteren (vb. Spotify) (OLACT_8)	☐	☐	☐	☐	☐	☐

Online shoppen (OLACT_9)	☐	☐	☐	☐	☐	☐
Online games (OLACT_10)	☐	☐	☐	☐	☐	☐
Online op de beurs spelen (OLACT_11)	☐	☐	☐	☐	☐	☐
Online datingsites bezoeken (OLACT_12)	☐	☐	☐	☐	☐	☐
Sociale netwerksites (vb. Facebook, Twitter) (OLACT_13)	☐	☐	☐	☐	☐	☐
Surfen zonder specifiek doel (OLACT_14)	☐	☐	☐	☐	☐	☐

Voorwaarde: OLACT_4 > 3

10 Kan u van onderstaande ervaringen aangeven **hoe vaak** u deze heeft?

	Nooit	Zelden	Soms	Vaak	Zeer vaak
Hoe vaak vindt u het moeilijk om met online gokken te stoppen?	☐	☐	☐	☐	☐
Hoe vaak gaat u langer door met online gokken, terwijl u zich had voorgenomen om te stoppen?	☐	☐	☐	☐	☐
Hoe vaak zeggen anderen (bijvoorbeeld partner, kinderen, ouders of vrienden) dat u minder zou moeten online gokken?	☐	☐	☐	☐	☐
Hoe vaak gaat u liever door met online gokken dan dat u tijd met anderen doorbrengt (bijvoorbeeld partner, kinderen, ouders of vrienden)?	☐	☐	☐	☐	☐
Hoe vaak komt u slaap te kort door online gokken?	☐	☐	☐	☐	☐
Hoe vaak bent u in gedachten met online gokken bezig, ook als u niet online bent?	☐	☐	☐	☐	☐
Hoe vaak ziet u al van tevoren uit naar uw volgende uw volgende mogelijkheid om u bezig te houden met online gokken?	☐	☐	☐	☐	☐
Hoe vaak denkt u dat u eigenlijk minder zou moeten online gokken?	☐	☐	☐	☐	☐
Hoe vaak heeft u geprobeerd om minder tijd aan online gokken te besteden en is dat niet gelukt?	☐	☐	☐	☐	☐
Hoe vaak voelt u zich rusteloos, humeurig of geïrriteerd wanneer u niet online kan gokken?	☐	☐	☐	☐	☐
Hoe vaak maakt u snel snel uw werk (huiswerk) af om te kunnen online gokken?	☐	☐	☐	☐	☐
Hoe vaak komt u uw dagdagelijkse verplichtingen (op het gebied van werk, school of gezin) niet na omdat u liever wil online gokken?	☐	☐	☐	☐	☐
Hoe vaak houdt u zich bezig met online gokken wanneer u zich rot voelt?	☐	☐	☐	☐	☐

Hoe vaak houdt u zich bezig met online gokken om problemen te ontvluchten of negatieve gevoelens te verlichten?	☐	☐	☐	☐	☐

Voorwaarde: OLACT 5 > 3

11 Kan u van onderstaande ervaringen aangeven **hoe vaak** u deze heeft?

	Nooit	Zelden	Soms	Vaak	Zeer vaak
Hoe vaak vindt u het moeilijk om met online erotiek te stoppen?	☐	☐	☐	☐	☐
Hoe vaak gaat u langer door met online erotiek, terwijl u zich had voorgenomen om te stoppen?	☐	☐	☐	☐	☐
Hoe vaak zeggen anderen (bijvoorbeeld partner, kinderen, ouders of vrienden) dat u minder met online erotiek bezig zou moeten zijn?	☐	☐	☐	☐	☐
Hoe vaak gaat u liever door met online erotiek dan dat u tijd met anderen doorbrengt (bijvoorbeeld partner, kinderen, ouders of vrienden)?	☐	☐	☐	☐	☐
Hoe vaak komt u slaap te kort door het online erotiek?	☐	☐	☐	☐	☐
Hoe vaak bent u in gedachten met online erotiek bezig, ook als u niet online bent?	☐	☐	☐	☐	☐
Hoe vaak ziet u al van tevoren uit naar uw volgende mogelijkheid om u met online erotiek bezig te houden?	☐	☐	☐	☐	☐
Hoe vaak denkt u dat u eigenlijk minder zou moeten bezig zijn met online erotiek?	☐	☐	☐	☐	☐
Hoe vaak heeft u geprobeerd om minder tijd aan online erotiek besteden en is dat niet gelukt?	☐	☐	☐	☐	☐
Hoe vaak voelt u zich rusteloos, humeurig of geïrriteerd wanneer u niet bezig kunt zijn met online erotiek?	☐	☐	☐	☐	☐
Hoe vaak maakt u snel snel uw werk (huiswerk) af om met online erotiek te kunnen bezig zijn?	☐	☐	☐	☐	☐
Hoe vaak komt u uw dagdagelijkse verplichtingen (op het gebied van werk, school of gezin) niet na omdat u liever bezig bent met online erotiek?	☐	☐	☐	☐	☐
Hoe vaak houdt u zich bezig met online erotiek wanneer u zich rot voelt?	☐	☐	☐	☐	☐
Hoe vaak houdt u zich bezig met online erotiek om problemen te ontvluchten of negatieve gevoelens te verlichten?	☐	☐	☐	☐	☐

Voorwaarde: OLACT 9 >3

12 Kan u van onderstaande ervaringen aangeven **hoe vaak** u deze heeft?

	Nooit	Zelden	Soms	Vaak	Zeer vaak
Hoe vaak vindt u het moeilijk om met online shoppen te stoppen?	☐	☐	☐	☐	☐

Hoe vaak gaat u langer door met online shoppen, terwijl u zich had voorgenomen om te stoppen?	☐	☐	☐	☐	☐
Hoe vaak zeggen anderen (bijvoorbeeld partner, kinderen, ouders of vrienden) dat u minder zou moeten online shoppen?	☐	☐	☐	☐	☐
Hoe vaak gaat u liever door met online shoppen dan dat u tijd met anderen doorbrengt (bijvoorbeeld partner, kinderen, ouders of vrienden)?	☐	☐	☐	☐	☐
Hoe vaak komt u slaap te kort door online shoppen?	☐	☐	☐	☐	☐
Hoe vaak bent u in gedachten met online shoppen bezig, ook als u niet online bent?	☐	☐	☐	☐	☐
Hoe vaak ziet u al van tevoren uit naar uw volgende uw volgende mogelijkheid om u bezig te houden met online shoppen?	☐	☐	☐	☐	☐
Hoe vaak denkt u dat u eigenlijk minder zou moeten online shoppen?	☐	☐	☐	☐	☐
Hoe vaak heeft u geprobeerd om minder tijd aan online shoppen te besteden en is dat niet gelukt?	☐	☐	☐	☐	☐
Hoe vaak voelt u zich rusteloos, humeurig of geïrriteerd wanneer u niet online kan shoppen?	☐	☐	☐	☐	☐
Hoe vaak maakt u snel snel uw werk (huiswerk) af om te kunnen online shoppen?	☐	☐	☐	☐	☐
Hoe vaak komt u uw dagdagelijkse verplichtingen (op het gebied van werk, school of gezin) niet na omdat u liever wil online shoppen?	☐	☐	☐	☐	☐
Hoe vaak houdt u zich bezig met online shoppen wanneer u zich rot voelt?	☐	☐	☐	☐	☐
Hoe vaak houdt u zich bezig met online shoppen om problemen te ontvluchten of negatieve gevoelens te verlichten?	☐	☐	☐	☐	☐

Voorwaarde: OLACT 11 > 3

13 Kan u van onderstaande ervaringen aangeven **hoe vaak** u deze heeft?

	Nooit	Zelden	Soms	Vaak	Zeer vaak
Hoe vaak vindt u het moeilijk om met online op de beurs spelen te stoppen?	☐	☐	☐	☐	☐
Hoe vaak gaat u langer door met online op de beurs spelen, terwijl u zich had voorgenomen om te stoppen?	☐	☐	☐	☐	☐
Hoe vaak zeggen anderen (bijvoorbeeld partner, kinderen, ouders of vrienden) dat u minder zou moeten online op de beurs spelen?	☐	☐	☐	☐	☐
Hoe vaak gaat u liever door met online op de beurs spelen dan dat u tijd met anderen doorbrengt (bijvoorbeeld partner, kinderen, ouders of vrienden)?	☐	☐	☐	☐	☐
Hoe vaak komt u slaap te kort door online op de beurs spelen?	☐	☐	☐	☐	☐
Hoe vaak bent u in gedachten met online op de beurs spelen bezig, ook als u niet online bent?	☐	☐	☐	☐	☐
Hoe vaak ziet u al van tevoren uit naar uw volgende uw volgende mogelijkheid om u bezig te houden met online op de beurs spelen?	☐	☐	☐	☐	☐

Hoe vaak denkt u dat u eigenlijk minder zou moeten online op de beurs spelen?	☐	☐	☐	☐	☐
Hoe vaak heeft u geprobeerd om minder tijd aan online op de beurs spelen te besteden en is dat niet gelukt?	☐	☐	☐	☐	☐
Hoe vaak voelt u zich rusteloos, humeurig of geïrriteerd wanneer u niet online kan shoppen?	☐	☐	☐	☐	☐
Hoe vaak maakt u snel snel uw werk (huiswerk) af om online op de beurs te kunnen online spelen?	☐	☐	☐	☐	☐
Hoe vaak komt u uw dagdagelijkse verplichtingen (op het gebied van werk, school of gezin) niet na omdat u liever online op de beurs wil spelen?	☐	☐	☐	☐	☐
Hoe vaak houdt u zich bezig met online op de beurs spelen wanneer u zich rot voelt?	☐	☐	☐	☐	☐
Hoe vaak houdt u zich bezig met online op de beurs spelen om problemen te ontvluchten of negatieve gevoelens te verlichten?	☐	☐	☐	☐	☐

Voorwaarde: OLACT_12 > 3

14 Kan u van onderstaande ervaringen aangeven **hoe vaak** u deze heeft?

	Nooit	Zelden	Soms	Vaak	Zeer vaak
Hoe vaak vindt u het moeilijk om met het bezoeken van online datingsites te stoppen?	☐	☐	☐	☐	☐
Hoe vaak gaat u langer door met online datingsites te bezoeken, terwijl u zich had voorgenomen om te stoppen?	☐	☐	☐	☐	☐
Hoe vaak zeggen anderen (bijvoorbeeld partner, kinderen, ouders of vrienden) dat u minder zou moeten online datingssites bezoeken?	☐	☐	☐	☐	☐
Hoe vaak gaat u liever door met online datingssites te bezoeken dan dat u tijd met anderen doorbrengt (bijvoorbeeld partner, kinderen, ouders of vrienden)?	☐	☐	☐	☐	☐
Hoe vaak komt u slaap te kort door online datingsites te bezoeken?	☐	☐	☐	☐	☐
Hoe vaak bent u in gedachten met online datingsites bezig, ook als u niet online bent?	☐	☐	☐	☐	☐
Hoe vaak ziet u al van tevoren uit naar uw volgende uw volgende mogelijkheid om u bezig te houden met online datingsites te bezoeken?	☐	☐	☐	☐	☐
Hoe vaak denkt u dat u eigenlijk minder online datingsites zou moeten bezoeken?	☐	☐	☐	☐	☐
Hoe vaak heeft u geprobeerd om minder tijd aan online datingsites te besteden en is dat niet gelukt?	☐	☐	☐	☐	☐
Hoe vaak voelt u zich rusteloos, humeurig of geïrriteerd wanneer u geen online datingsites kan bezoeken?	☐	☐	☐	☐	☐
Hoe vaak maakt u snel snel uw werk (huiswerk) af om online datingsites te kunnen bezoeken?	☐	☐	☐	☐	☐
Hoe vaak komt u uw dagdagelijkse verplichtingen (op het gebied van werk, school of gezin) niet na omdat u liever online datingsites wil bezoeken?	☐	☐	☐	☐	☐

Hoe vaak houdt u zich bezig met online datingssites te bezoeken wanneer u zich rot voelt?	☐	☐	☐	☐	☐
Hoe vaak houdt u zich bezig met online datingsites te bezoeken om problemen te ontvluchten of negatieve gevoelens te verlichten?	☐	☐	☐	☐	☐

C De volgende vragen gaan over jouw algemene tijdsbesteding

15 Bent u lid van een club of vereniging? (vb. sportclub, hobbyclub, …)

O Ja

O Nee

16 Hoeveel tijd besteedt u tijdens **een doorsnee week** aan de volgende activiteiten?

Huishoudelijke taken	☐ uur ☐ minuten
Op computer zitten zonder online te zijn	☐ uur ☐ minuten
TV, DVD of video kijken	☐ uur ☐ minuten
Sport	☐ uur ☐ minuten
Niets doen, luieren	☐ uur ☐ minuten
Met vrienden afspreken	☐ uur ☐ minuten

D De volgende vragen gaan over jouw ervaringen met internet.

17 Kan u van onderstaande ervaringen aangeven **hoe vaak** u deze heeft?

	Nooit	Zelden	Soms	Vaak	Zeer vaak
Hoe vaak vindt u het moeilijk om met internetten te stoppen?	☐	☐	☐	☐	☐

Hoe vaak gaat u langer door met internetten, terwijl u zich had voorgenomen om te stoppen?	☐	☐	☐	☐	☐
Hoe vaak zeggen anderen (bijvoorbeeld partner, kinderen, ouders of vrienden) dat u minder zou moeten internetten?	☐	☐	☐	☐	☐
Hoe vaak gaat u liever door met internetten dan dat u tijd met anderen doorbrengt (bijvoorbeeld partner, kinderen, ouders of vrienden)?	☐	☐	☐	☐	☐
Hoe vaak komt u slaap te kort door het internetten?	☐	☐	☐	☐	☐
Hoe vaak bent u in gedachten met internet bezig, ook als u niet online bent?	☐	☐	☐	☐	☐
Hoe vaak ziet u alvan tevoren uit naar uw volgende internetsessie?	☐	☐	☐	☐	☐
Hoe vaak denkt u dat u eigenlijk minder zou moeten internetten?	☐	☐	☐	☐	☐
Hoe vaak heeft u geprobeerd om minder tijd aan internetten te besteden en is dat niet gelukt?	☐	☐	☐	☐	☐
Hoe vaak voelt u zich rusteloos, humeurig of geïrriteerd wanneer u niet kan internetten?	☐	☐	☐	☐	☐
Hoe vaak maakt u snel snel uw werk (huiswerk) af om te kunnen internetten?	☐	☐	☐	☐	☐
Hoe vaak komt u uw dagdagelijkse verplichtingen (op het gebied van werk, school of gezin) niet na omdat u liever wil internetten?	☐	☐	☐	☐	☐
Hoe vaak gaat u internetten wanneer u zich rot voelt?	☐	☐	☐	☐	☐
Hoe vaak internet u om problemen te ontvluchten of negatieve gevoelens te verlichten?	☐	☐	☐	☐	☐

E De volgende vragen gaan over je omgeving

18 Hoe vaak komt het voor iemand uit je omgeving zegt dat …

	Nooit	Zelden	Soms	Vaak	Zeer vaak
… zegt dat je niet mag internetten?	☐	☐	☐	☐	☐
… zegt dat je maar tot een bepaald uur mag internetten?	☐	☐	☐	☐	☐
… zegt dat je niet te lang mag internetten?	☐	☐	☐	☐	☐
… zegt dat je alleen mag internetten op een bepaalde voorwaarde (bijvoorbeeld taken maken, afwas doen)?	☐	☐	☐	☐	☐
… zegt dat je de computer moet uitzetten?	☐	☐	☐	☐	☐
… zegt dat je internet alleen voor school of werk mag gebruiken?	☐	☐	☐	☐	☐

… zegt dat je als straf niet mag internetten?	☐	☐	☐	☐	☐

Voorwaarde: WORK = JA

19 Geef aan in welke mate u het eens bent met onderstaande stellingen.

	Helemaal oneens	Oneens	Noch eens, noch oneens	Eens	Helemaal eens
Ik spendeer tijdens de werkuren te veel tijd op internet voor persoonlijke zaken.	☐	☐	☐	☐	☐
Mijn werkgever heeft al eens een opmerking gegeven omdat ik internet gebruikte voor persoonlijke zaken.	☐	☐	☐	☐	☐

F De volgende vragen gaan over hoe je je over het algemeen voelt

20 **Voorwaarde: WORK=JA**

Duid aan op een schaal van 1 tot 10 hoe graag je naar het werk gaat?

O	O	O	O	O	O	O	O	O	O
1	2	3	4	5	6	7	8	9	10

Helemaal niet graag — Heel graag

21 **Voorwaarde: STUDY= JA**

Duid aan op een schaal van 1 tot 10 hoe graag je naar school gaat?

O	O	O	O	O	O	O	O	O	O
1	2	3	4	5	6	7	8	9	10

Helemaal niet graag — Heel graag

22 Geef voor elke van de 30 onderstaande woorden aan wat op u van toepassing is: **"Ik ben …"**

	Helemaal oneens	Oneens	Noch eens, noch oneens	Eens	Helemaal eens
… prettig (aardig voor anderen)	☐	☐	☐	☐	☐
… fantasierijk	☐	☐	☐	☐	☐
… prikkelbaar	☐	☐	☐	☐	☐
… slordig	☐	☐	☐	☐	☐
… terughoudend	☐	☐	☐	☐	☐

... onderzoekend	☐	☐	☐	☐	☐
... zenuwachtig	☐	☐	☐	☐	☐
... zorgvuldig	☐	☐	☐	☐	☐
... stil	☐	☐	☐	☐	☐
... hulpvaardig	☐	☐	☐	☐	☐
... snel (emotioneel) geraakt	☐	☐	☐	☐	☐
... ordelijk	☐	☐	☐	☐	☐
... gesloten	☐	☐	☐	☐	☐
... veelzijdig	☐	☐	☐	☐	☐
... vriendelijk	☐	☐	☐	☐	☐
... nauwkeurig	☐	☐	☐	☐	☐
... spraakzaam	☐	☐	☐	☐	☐
... vernieuwend	☐	☐	☐	☐	☐
... behulpzaam	☐	☐	☐	☐	☐
... ongerust	☐	☐	☐	☐	☐
... schuchter	☐	☐	☐	☐	☐
... aangenaam	☐	☐	☐	☐	☐
... artistiek	☐	☐	☐	☐	☐
... angstig	☐	☐	☐	☐	☐
... netjes	☐	☐	☐	☐	☐
... teruggetrokken	☐	☐	☐	☐	☐
... systematisch	☐	☐	☐	☐	☐
... sympathiek	☐	☐	☐	☐	☐
... nerveus	☐	☐	☐	☐	☐

… creatief	☐	☐	☐	☐	☐

23 Geef aan in welke mate u het eens bent met de volgende stellingen.

	Helemaal oneens	Oneens	Noch eens, noch oneens	Eens	Helemaal eens
Er is altijd wel iemand in mijn omgeving bij wie ik met mijn dagdagelijkse problemen terecht kan.	☐	☐	☐	☐	☐
Ik mis een goede vriend(in).	☐	☐	☐	☐	☐
Ik ervaar leegte om mij heen.	☐	☐	☐	☐	☐
Er zijn genoeg mensen op wie ik in geval van narigheid kan terugvallen.	☐	☐	☐	☐	☐
Ik mis gezelschap om mij heen.	☐	☐	☐	☐	☐
Ik vind mijn kring van kennissen te beperkt.	☐	☐	☐	☐	☐
Ik heb veel mensen op wie ik volledig kan vertrouwen.	☐	☐	☐	☐	☐
Er zijn voldoende mensen met wie ik me nauw verbonden voel.	☐	☐	☐	☐	☐
Ik mis mensen om me heen.	☐	☐	☐	☐	☐
Vaak voel ik me in de steek gelaten.	☐	☐	☐	☐	☐
Wanneer ik daar behoefte aan heb, kan ik altijd bij mijn vrienden terecht.	☐	☐	☐	☐	☐

24 Geef aan in welke mate u het eens bent met de volgende stellingen.

	Helemaal oneens	Oneens	Noch eens, noch oneens	Eens	Helemaal eens
Sommige van de problemen waarvoor ik sta kan ik met geen mogelijkheid oplossen.	☐	☐	☐	☐	☐
Soms heb ik het gevoel dat er met mij gesold wordt.	☐	☐	☐	☐	☐
Ik heb maar weinig controle over de dingen die met me gebeuren.	☐	☐	☐	☐	☐
Ik kan nagenoeg alles doen wat ik me heb voorgenomen.	☐	☐	☐	☐	☐
Ik voel me vaak hulpeloos in het omgaan met problemen van het dagelijks leven.	☐	☐	☐	☐	☐
Wat er in de toekomst met me gebeurt hangt in grote mate van mezelf af.	☐	☐	☐	☐	☐

Er is weinig dat ik kan doen in het veranderen van belangrijke dingen in mijn leven.	☐	☐	☐	☐	☐

25 Geef aan in welke mate u het eens bent met de volgende stellingen.

	Helemaal oneens	Oneens	Noch eens, noch oneens	Eens	Helemaal eens
Over het algemeen ben ik tevreden over mezelf.	☐	☐	☐	☐	☐
Soms denk ik dat ik nergens goed in ben.	☐	☐	☐	☐	☐
Ik heb het idee dat ik een aantal goede kwaliteiten heb.	☐	☐	☐	☐	☐
Ik kan dingen net zo goed als andere mensen.	☐	☐	☐	☐	☐
Naar mijn gevoel heb ik niet veel om trots op te zijn.	☐	☐	☐	☐	☐
Af en toe voel ik me absoluut nutteloos.	☐	☐	☐	☐	☐
In vergelijking met anderen vind ik me even waardevol.	☐	☐	☐	☐	☐
Ik zou willen dat ik respect voor mezelf kon hebben.	☐	☐	☐	☐	☐
Alles bij elkaar genomen heb ik sterk de indruk dat ik een mislukkeling ben.	☐	☐	☐	☐	☐
Ik sta positief tegenover mezelf.	☐	☐	☐	☐	☐

26 Hoe vaak heeft u de de volgende gevoelens gehad in de laatste 12 maanden?

	Nooit	Zelden	Soms	Vaak	Altijd
Me te moe voelen om iets te doen	☐	☐	☐	☐	☐
Me ongelukkig, somber en neerslachtig voelen	☐	☐	☐	☐	☐
Moeite hebben om in slaap te vallen of te blijven slapen	☐	☐	☐	☐	☐
Weinig hoop voor de toekomst hebben	☐	☐	☐	☐	☐
Me nerveus en gespannen voelen	☐	☐	☐	☐	☐
Me te veel zorgen maken over de dingen	☐	☐	☐	☐	☐

G	De volgende vragen gaan over videogames
27	Speelt u games? GAME_GEN O Ja (=1) O Nee (=0)
28	**Voorwaarde: GAME_GEN=1** Speelt u games via een console of offline op de computer? GAME_OF O Ja (=1) O Nee (=0)
29	**Voorwaarde: GAME_GEN=1** Speelt u online games? GAME_ON O Ja (=1) O Nee (=0)
30	**Voorwaarde: GAME_OF=1** Hoeveel tijd besteedt u gemiddeld aan gamen via een console of offline op de computer op **een doorsnee school/werkdag**? ☐ uur ☐ minuten
31	**Voorwaarde: GAME_OF=1** Hoeveel tijd besteedt u gemiddeld aan gamen via een console of offline op de computer op een **doorsnee dag** dat u **niet naar school/werk** gaat (weekend, vakantie)? ☐ uur ☐ minuten
32	**Voorwaarde: GAME_ON=1** Hoeveel tijd besteedt u gemiddeld aan online gamen op **een doorsnee school/werkdag**? ☐ uur ☐ minuten
33	**Voorwaarde: GAME_ON=1** Hoeveel tijd besteedt u gemiddeld aan online gamen op een **doorsnee dag** dat u **niet naar school/werk** gaat (weekend, vakantie)? ☐ uur ☐ minuten
34	**Voorwaarde: GAME_GEN=1** Welke soorten games speelt u? (meerdere antwoorden mogelijk) O Avontuurgames

	O Actie-FPS (First Person Shooter) O Vechtgames O Race- en sportgames O Strategiegames O MMORPG (Massively Multiplayer Online Role-Playing Games) (vb. World of Warcraft O Sociale games (vb. Farmville, Zynga Poker, Maffia Wars) O Digitale versies van traditionele spelletjes O Puzzelgames O Andere: .....
35	**Voorwaarde: GAME_GEN=1** Wat zijn uw drie favoriete games op dit moment? 1 ..... 2 ..... 3 ..... O Weet ik niet
36	**Voorwaarde: GAME_GEN=1** Hoeveel nieuwe spelletjes probeert u per maand? O 0 O 1 O 2 O 3 O 4 en meer

Voorwaarde: GAME_GEN=1

37 Kan u van onderstaande ervaringen aangeven **hoe vaak** u deze heeft?

	Nooit	Zelden	Soms	Vaak	Zeer vaak
Hoe vaak vindt u het moeilijk om met gamen te stoppen?	☐	☐	☐	☐	☐
Hoe vaak gaat u langer door met gamen, terwijl u zich had voorgenomen om te stoppen?	☐	☐	☐	☐	☐
Hoe vaak zeggen anderen (bijvoorbeeld partner, kinderen, ouders of vrienden) dat u minder zou moeten gamen?	☐	☐	☐	☐	☐
Hoe vaak gaat u liever door met gamen dan dat u tijd met anderen doorbrengt (bijvoorbeeld partner, kinderen, ouders of vrienden)?	☐	☐	☐	☐	☐
Hoe vaak komt u slaap te kort door het gamen?	☐	☐	☐	☐	☐
Hoe vaak bent u in gedachten met gamen bezig, ook als u niet online bent?	☐	☐	☐	☐	☐

Hoe vaak ziet u alvan tevoren uit naar uw volgende gamesessie?	☐	☐	☐	☐	☐
Hoe vaak denkt u dat u eigenlijk minder zou moeten gamen?	☐	☐	☐	☐	☐
Hoe vaak heeft u geprobeerd om minder tijd aan gamen te besteden en is dat niet gelukt?	☐	☐	☐	☐	☐
Hoe vaak voelt u zich rusteloos, humeurig of geïrriteerd wanneer u niet kan gamen?	☐	☐	☐	☐	☐
Hoe vaak maakt u snel snel uw werk (huiswerk) af om te kunnen gamen?	☐	☐	☐	☐	☐
Hoe vaak komt u uw dagdagelijkse verplichtingen (op het gebied van werk, school of gezin) niet na omdat u liever wil gamen?	☐	☐	☐	☐	☐
Hoe vaak gaat u gamen wanneer u zich rot voelt?	☐	☐	☐	☐	☐
Hoe vaak gamet u om problemen te ontvluchten of negatieve gevoelens te verlichten?	☐	☐	☐	☐	☐

H	**De volgende vragen gaan over sociale netwerksites**
38	Heeft u een profiel op een sociale netwerksite (vb. Facebook, Twitter)? SNS_profile O Ja (=1) O Nee (=0)
39	**Voorwaarde: SNS_profile=1** Op welke sociale netwerksite(s) heeft u een profiel? (meerdere antwoorden mogelijk) O Netlog O Facebook O MySpace O Twitter O LinkedIn O Andere: .....
40	**Voorwaarde: SNS_profil =1** Hoeveel tijd besteedt u gemiddeld aan sociale netwerksites op **een doorsnee school/werkdag**? ☐ uur ☐ minuten
41	**Voorwaarde: SNS_profile=1** Hoeveel tijd besteedt u gemiddeld aan sociale netwerksites op **doorsnee dag** dat u **niet naar school/werk** gaat (weekend, vakantie)? ☐ uur ☐ minuten

Voorwaarde: SNS_profile=1

42 Hoe vaak gedurende het laatste jaar heeft/bent u… ?

	Nooit	Zelden	Soms	Vaak	Zeer vaak
… veel aan sociale netwerksites gedacht of gepland om een sociale netwerksite te gebruiken?	☐	☐	☐	☐	☐
… nagedacht over hoe u meer tijd kan vrijmaken om op sociale netwerksites te zitten?	☐	☐	☐	☐	☐
… veel nagedacht over wat er zopas op sociale netwerksites is gebeurd?	☐	☐	☐	☐	☐
… meer tijd op sociale netwerksites gespendeerd dan oorspronkelijk gepland?	☐	☐	☐	☐	☐
… de drang gevoeld om meer en meer sociale netwerksites te gebruiken?	☐	☐	☐	☐	☐
… het gevoel gehad dat u sociale netwerksites meer en meer moest gebruiken om er evenveel plezier uit te halen?	☐	☐	☐	☐	☐
… sociale netwerksites gebruikt om persoonlijke problemen te vergeten?	☐	☐	☐	☐	☐
… sociale netwerksites gebruikt om gevoelens van schuld, angst, hulpeloosheid en depressie te verminderen?	☐	☐	☐	☐	☐
… sociale netwerksites gebruikt om rusteloosheid te verminderen?	☐	☐	☐	☐	☐
… meegemaakt dat anderen u zeiden dat u uw sociale netwerksitegebruik moest verminderen, maar dat u niet naar hen hebt geluisterd?	☐	☐	☐	☐	☐
… geprobeerd om minder op sociale netwerksites te zitten en is dit niet gelukt?	☐	☐	☐	☐	☐
… beslist om minder sociale netwerksites te gebruiken, maar is dit niet gelukt?	☐	☐	☐	☐	☐
… rusteloos of lastig geworden wanneer u in de onmogelijkheid was om sociale netwerksites te gebruiken?	☐	☐	☐	☐	☐
… geïrriteerd geraakt wanneer u geen sociale netwerksites kon gebruiken?	☐	☐	☐	☐	☐
… u slecht gevoeld, voor verschillende redenen, wanneer u een tijdje niet op sociale netwerksites kon inloggen?	☐	☐	☐	☐	☐
… sociale netwerksites zo veel gebruikt dat het een negatieve invloed had op uw werk of studies?	☐	☐	☐	☐	☐
… minder prioriteit gegeven aan hobby's, andere vrije tijdsactiviteiten en sport door sociale netwerksites?	☐	☐	☐	☐	☐
… vrienden, familie of partner verwaarloosd door sociale netwerksites?	☐	☐	☐	☐	☐

I	De volgende vragen gaan over jezelf
43	Ik ben een … O Man O Vrouw
44	Wat is uw geboortedatum? ☐☐ - ☐☐ - ☐☐☐☐ **dag** **maand** **jaar**
45	U bent … O Alleenstaand O In een relatie en niet samenwonend O In een relatie en samenwonend O Getrouwd O Gescheiden O Weduwe/weduwnaar
46	Ik ben … O Enig kind O De jongste O De oudste O Niet de jongste en niet de oudste O Deel van een tweeling
47	Welke nationaliteit heeft u? ……
48	**<u>Voorwaarde: STUDIE = 1</u>** Welke opleiding volgt u? O Algemeen secundair onderwijs (ASO) O Kunstsecundair onderwijs (KSO) O Technisch secundair onderwijs (TSO) O Beroepsecundair onderwijs (BSO) O Hogeschool O Universitair onderwijs O Andere: ……;;

49	**<u>Voorwaarde: STUDIE = o</u>** Wat is het hoogste diploma dat u behaalde? O Geen O Lager onderwijs O Middelbaar algemeen onderwijs O Middelbaar technisch onderwijs O Middelbaar beroepsonderwijs O Hogeschool O Universiteit
50	Welke van de volgende beschrijvingen komt het best overeen met uw beroepsstatuut? O Ik heb een voltijdse job O Ik heb een deeltijdse job O Mijn arbeidsprestaties werden tijdelijk volledig stopgezet/ik geniet van tijdskrediet O Ik heb een job, maar ik ben dit werk nog niet begonnen. O Ik ben student/ik opleiding O Ik ben huisman/huisvrouw O Ik ben arbeidsongeschikt O Ik ben werkloos O Ik ben met pensioen O Andere: .....
51	Welke van de volgende omschrijvingen stemt het best overeen met uw beroepsstatuut? O Zelfstandige O Bediende O Arbeider O Ik werk niet
52	Welke uitspraken vindt u het meest van toepassing op het inkomen (geld) van uw gezin thuis? Duid een antwoord aan. O Wij komen thuis zeer moeilijk rond. O Wij komen thuis moeilijk rond. O Wij komen thuis eerder moeilijk rond. O Wij komen thuis eerder gemakkelijk rond. O Wij komen thuis gemakkelijk rond. O Wij komen thuis zeer gemakkelijk rond.

Appendix 8: French survey spread among adults

A	**Les questions suivantes portent sur votre accès à internet.**
1	Avez-vous une connexion internet à la maison? O Oui O Non
2	Possédez-vous un ordinateur? O Oui O Non
3	Avez-vous un Smartphone avec lequel vous pouvez accéder à internet ? O Oui O Non

B	**Les questions suivantes portent sur le temps que vous passez en ligne.**

4 Lors d'une semaine habituelle, combien de temps passez-vous **sur internet**?

Lundi	..... heure(s) et ..... minutes
Mardi	..... heure(s) et ..... minutes
Mercredi	..... heure(s) et ..... minutes
Jeudi	..... heure(s) et ..... minutes
Vendredi	..... heure(s) et ..... minutes
Samedi	..... heure(s) et ..... minutes
Dimanche	..... heure(s) et ..... minutes

5 Travaillez-vous ? WORK

O Oui (=1)
O Non (=0)

6 Etudiez-vous ? STUDY

O Oui (=1)
O Non (=0)

Condition: WORK = 1

7 Lors d'une semaine habituelle, combien de temps passez-vous en moyenne sur internet **pour effectuer des tâches liées à votre travail** ?

Lundi	..... heure(s) et ..... minutes
Mardi	..... heure(s) et ..... minutes
Mercredi	..... heure(s) et ..... minutes

Jeudi	..... heure(s) et ..... minutes
Vendredi	..... heure(s) et ..... minutes
Samedi	..... heure(s) et ..... minutes
Dimanche	..... heure(s) et ..... minutes

Condition: STUDY = 1

8 Lors d'une semaine d'école habituelle, combien de temps passez-vous en moyenne sur internet **pour effectuer des tâches scolaires** ?

Lundi	..... heure(s) et ..... minutes
Mardi	..... heure(s) et ..... minutes
Mercredi	..... heure(s) et ..... minutes
Jeudi	..... heure(s) et ..... minutes
Vendredi	..... heure(s) et ..... minutes
Samedi	..... heure(s) et ..... minutes
Dimanche	..... heure(s) et ..... minutes

9 Voici quelques activités que l'on peut faire sur internet. Indiquez **à quelle fréquence** vous faites ces activités.

	Jamais	1 jour par semaine ou moins	2 ou 3 jours par semaine	4 ou 5 jours par semaine	(Presque) chaque jour	Plus d'une fois par jour
	(0)	(1)	(2)	(3)	(4)	(5)
Lire/envoyer des mails OLACT_1	☐	☐	☐	☐	☐	☐
Chercher des informations OLACT_2	☐	☐	☐	☐	☐	☐
Chatter OLACT_3	☐	☐	☐	☐	☐	☐
Jouer à des jeux d'argent et de hasard en ligne OLACT_4	☐	☐	☐	☐	☐	☐
Visiter des sites érotiques OLACT_5	☐	☐	☐	☐	☐	☐
Télécharger (p.e. musique, films, feuilletons…) OLACT_6	☐	☐	☐	☐	☐	☐
Regarder des vidéos (p.e. YouTube),OLACT_7	☐	☐	☐	☐	☐	☐
Ecouter de la musique (p.e. Spotify) OLACT_8						
Acheter sur internet OLACT_9	☐	☐	☐	☐	☐	☐
Jouer à des jeux en ligne OLACT_10	☐	☐	☐	☐	☐	☐

Boursicoter en ligne OLACT_11	☐	☐	☐	☐	☐	☐
Visiter des sites de rencontres OLACT_12	☐	☐	☐	☐	☐	☐
Visiter des réseaux sociaux (p.e. Facebook, Twitter) OLACT_13	☐	☐	☐	☐	☐	☐
Flâner sur Internet sans objectif précis OLACT_14	☐	☐	☐	☐	☐	☐

Condition: OLACT_4 > 3

10 Indiquez à quelle fréquence vous ressentez les choses suivantes

	Jamais	Rarement	Parfois	Souvent	Très souvent
Trouvez-vous difficile d'arrêter de jouer aux jeux d'argent et de hasard en ligne?	☐	☐	☐	☐	☐
Continuez-vous à jouer aux jeux d'argent et de hasard malgré votre intention d'arrêter votre séance?	☐	☐	☐	☐	☐
D'autres personnes (partenaire, enfants, parents, amis) vous disent que vous devriez jouer moins aux jeux d'argent et de hasard?	☐	☐	☐	☐	☐
Préférez-vous jouer aux jeux d'argent et de hasard plutôt que de passer du temps avec d'autres personnes (partenaire, enfants, parents, amis)?	☐	☐	☐	☐	☐
Manquez-vous de sommeil à cause des jeux d'argent et de hasard?	☐	☐	☐	☐	☐
Pensez-vous aux jeux d'argent et de hasard même quand vous n'êtes pas en ligne?	☐	☐	☐	☐	☐
Vous réjouissez-vous d'avoir votre prochaine séance de jeux d'argent et de hasard?	☐	☐	☐	☐	☐
Pensez-vous que vous devriez moins jouer aux jeux d'argent et de hasard?	☐	☐	☐	☐	☐
Avez-vous essayé sans succès de passer moins de temps sur les jeux d'argent et de hasard?	☐	☐	☐	☐	☐
Vous sentez-vous agité, indisposé ou irrité quand vous ne pouvez pas jouer aux jeux d'argent et de hasard?	☐	☐	☐	☐	☐
Vous dépêchez-vous pour terminer votre travail (scolaire) afin de jouer aux jeux d'argent et de hasard?	☐	☐	☐	☐	☐
Négligez-vous vos obligations quotidiennes (famille, travail, école) parce que vous préférez jouer aux jeux d'argent et de hasard?	☐	☐	☐	☐	☐
Jouez-vous aux jeux d'argent et de hasard lorsque vous êtes déprimé?	☐	☐	☐	☐	☐
Jouez-vous aux jeux d'argent et de hasard pour échapper à vos soucis ou pour soulager des sentiments négatifs?	☐	☐	☐	☐	☐

Condition: OLACT_5> 3

11. Indiquez à quelle fréquence vous ressentez les choses suivantes

	Jamais	Rarement	Parfois	Souvent	Très souvent
Trouvez-vous difficile d'arrêter de visiter les sites érotiques lorsque vous êtes en ligne?	☐	☐	☐	☐	☐
Continuez-vous à visiter les sites érotiques malgré votre intention d'arrêter votre séance?	☐	☐	☐	☐	☐
D'autres personnes (partenaire, enfants, parents, amis) vous disent que vous devriez visiter moins les sites érotiques?	☐	☐	☐	☐	☐
Préférez-vous visiter les sites érotiques plutôt que de passer du temps avec d'autres personnes (partenaire, enfants, parents, amis)?	☐	☐	☐	☐	☐
Manquez-vous de sommeil à cause des sites érotiques?	☐	☐	☐	☐	☐
Pensez-vous aux sites érotiques même quand vous n'êtes pas en ligne?	☐	☐	☐	☐	☐
Vous réjouissez-vous d'avoir votre prochaine séance de sites érotiques?	☐	☐	☐	☐	☐
Pensez-vous que vous devriez moins visiter les sites érotiques?	☐	☐	☐	☐	☐
Avez-vous essayé sans succès de passer moins de temps sur les sites érotiques?	☐	☐	☐	☐	☐
Vous sentez-vous agité, indisposé ou irrité quand vous ne pouvez pas visiter les sites érotiques?	☐	☐	☐	☐	☐
Vous dépêchez-vous pour terminer votre travail (scolaire) afin de visiter les sites érotiques?	☐	☐	☐	☐	☐
Négligez-vous vos obligations quotidiennes (famille, travail, école) parce que vous préférez visiter les sites érotiques?	☐	☐	☐	☐	☐
Visitez-vous les sites érotiques lorsque vous êtes déprimé?	☐	☐	☐	☐	☐
Visitez-vous les sites érotiques pour échapper à vos soucis ou pour soulager des sentiments négatifs?	☐	☐	☐	☐	☐

Condition: OLACT_9 > 3

12. Indiquez à quelle fréquence vous ressentez les choses suivantes

	Jamais	Rarement	Parfois	Souvent	Très souvent
Trouvez-vous difficile d'arrêter d'acheter en ligne lorsque vous êtes sur internet?	☐	☐	☐	☐	☐
Continuez-vous à acheter en ligne malgré votre intention d'arrêter votre séance?	☐	☐	☐	☐	☐
D'autres personnes (partenaire, enfants, parents, amis) vous disent que vous devriez acheter moins en ligne?	☐	☐	☐	☐	☐
Préférez-vous acheter en ligne plutôt que de passer du temps avec d'autres personnes (partenaire, enfants, parents, amis)?	☐	☐	☐	☐	☐

Manquez-vous de sommeil à cause des achats en ligne?	☐	☐	☐	☐	☐
Pensez-vous à acheter en ligne même quand vous n'êtes pas sur internet?	☐	☐	☐	☐	☐
Vous réjouissez-vous d'avoir votre prochaine séance d'achats en ligne?	☐	☐	☐	☐	☐
Pensez-vous que vous devriez moins acheter en ligne?	☐	☐	☐	☐	☐
Avez-vous essayé sans succès d'acheter moins en ligne?	☐	☐	☐	☐	☐
Vous sentez-vous agité, indisposé ou irrité quand vous ne pouvez pas acheter en ligne?	☐	☐	☐	☐	☐
Vous dépêchez-vous pour terminer votre travail (scolaire) afin de faire des achats en ligne?	☐	☐	☐	☐	☐
Négligez-vous vos obligations quotidiennes (famille, travail, école) parce que vous préférez acheter en ligne?	☐	☐	☐	☐	☐
Achetez-vous en ligne lorsque vous êtes déprimé?	☐	☐	☐	☐	☐
Achetez-vous en ligne pour échapper à vos soucis ou pour soulager des sentiments négatifs?	☐	☐	☐	☐	☐

Condition: OLACT 11> 3

13. Indiquez à quelle fréquence vous ressentez les choses suivantes

	Jamais	Rarement	Parfois	Souvent	Très souvent
Trouvez-vous difficile d'arrêter de boursicoter en ligne lorsque vous êtes sur internet?	☐	☐	☐	☐	☐
Continuez-vous à boursicoter en ligne malgré votre intention d'arrêter votre séance?	☐	☐	☐	☐	☐
D'autres personnes (partenaire, enfants, parents, amis) vous disent que vous devriez passer moins de temps à boursicoter en ligne?	☐	☐	☐	☐	☐
Préférez-vous boursicoter en ligne plutôt que de passer du temps avec d'autres personnes (partenaire, enfants, parents, amis)?	☐	☐	☐	☐	☐
Manquez-vous de sommeil à cause du boursicotage en ligne?	☐	☐	☐	☐	☐
Pensez-vous au boursicotage en ligne même quand vous n'êtes pas sur internet?	☐	☐	☐	☐	☐
Vous réjouissez-vous d'avoir votre prochaine séance de boursicotage en ligne?	☐	☐	☐	☐	☐
Pensez-vous que vous devriez passer moins de temps à boursicoter en ligne?	☐	☐	☐	☐	☐
Avez-vous essayé sans succès de passer moins de temps à boursicoter en ligne?	☐	☐	☐	☐	☐
Vous sentez-vous agité, indisposé ou irrité quand vous ne pouvez pas passer du temps à boursicoter en ligne?	☐	☐	☐	☐	☐

Vous dépêchez-vous pour terminer votre travail (scolaire) afin de boursicoter en ligne?	☐	☐	☐	☐	☐
Négligez-vous vos obligations quotidiennes (famille, travail, école) parce que vous préférez boursicoter en ligne?	☐	☐	☐	☐	☐
Passez-vous du temps à boursicoter en ligne lorsque vous êtes déprimé?	☐	☐	☐	☐	☐
Passez-vous du temps à boursicoter en ligne pour échapper à vos soucis ou pour soulager des sentiments négatifs?	☐	☐	☐	☐	☐

Condition: OLACT 12 > 3

14. Indiquez à quelle fréquence vous ressentez les choses suivantes

	Jamais	Rarement	Parfois	Souvent	Très souvent
Trouvez-vous difficile d'arrêter de visiter les sites de rencontres lorsque vous êtes en ligne?	☐	☐	☐	☐	☐
Continuez-vous à visiter les sites de rencontres malgré votre intention d'arrêter votre séance?	☐	☐	☐	☐	☐
D'autres personnes (partenaire, enfants, parents, amis) vous disent que vous devriez visiter moins les sites de rencontres?	☐	☐	☐	☐	☐
Préférez-vous visiter les sites de rencontres plutôt que de passer du temps avec d'autres personnes (partenaire, enfants, parents, amis)?	☐	☐	☐	☐	☐
Manquez-vous de sommeil à cause des sites de rencontres?	☐	☐	☐	☐	☐
Pensez-vous aux sites de rencontres même quand vous n'êtes pas en ligne?	☐	☐	☐	☐	☐
Vous réjouissez-vous d'avoir votre prochaine séance de sites de rencontres?	☐	☐	☐	☐	☐
Pensez-vous que vous devriez moins visiter les sites de rencontres?	☐	☐	☐	☐	☐
Avez-vous essayé sans succès de passer moins de temps sur les sites de rencontres?	☐	☐	☐	☐	☐
Vous sentez-vous agité, indisposé ou irrité quand vous ne pouvez pas visiter les sites de rencontres?	☐	☐	☐	☐	☐
Vous dépêchez-vous pour terminer votre travail (scolaire) afin de visiter les sites de rencontres?	☐	☐	☐	☐	☐
Négligez-vous vos obligations quotidiennes (famille, travail, école) parce que vous préférez visiter les sites de rencontres?	☐	☐	☐	☐	☐
Visitez-vous les sites de rencontres lorsque vous êtes déprimé?	☐	☐	☐	☐	☐
Visitez-vous les sites de rencontres pour échapper à vos soucis ou pour soulager des sentiments négatifs?	☐	☐	☐	☐	☐

C	Les questions suivantes portent sur vos passe-temps en général

15 Êtes-vous membre d'un club ou d'une association? (p.e. association sportive, club d'hobby, …)

O Oui

O Non

16 Lors **d'une semaine habituelle**, combien de temps passez-vous à faire les activités suivantes?

Tâches domestiques	☐	Heure(s) ☐ minutes
Utiliser l'ordinateur, mais pas internet	☐	Heure(s) ☐ minutes
Regarder la télé, DVD, vidéos	☐	Heure(s) ☐ minutes
Faire du sport	☐	Heure(s) ☐ minutes
Ne rien faire	☐	Heure(s) ☐ minutes
Rendez-vous avec des amis	☐	Heure(s) ☐ minutes

D	Les questions suivantes portent sur votre expérience d'internet

17 Indiquez **à quelle fréquence** vous ressentez les choses suivantes…

	Jamais	Rarement	Parfois	Souvent	Très souvent
Trouvez-vous difficile d'arrêter d'utiliser internet lorsque vous êtes en ligne?	☐	☐	☐	☐	☐
Continuez-vous à utiliser internet malgré votre intention d'arrêter votre session?	☐	☐	☐	☐	☐
D'autres personnes (partenaire, enfants, parents, amis) vous disent que vous devriez utiliser moins internet?	☐	☐	☐	☐	☐
Préférez-vous utiliser internet plutôt que de passer du temps avec d'autres personnes (partenaire, enfants, parents, amis)?	☐	☐	☐	☐	☐

Manquez-vous de sommeil à cause d'internet?	☐	☐	☐	☐	☐
Pensez-vous à internet même quand vous n'êtes pas en ligne?	☐	☐	☐	☐	☐
Vous réjouissez-vous d'avoir votre prochaine séance d'internet?	☐	☐	☐	☐	☐
Pensez-vous que vous devriez moins utiliser internet?	☐	☐	☐	☐	☐
Avez-vous essayé sans succès de passer moins de temps sur internet?	☐	☐	☐	☐	☐
Vous sentez-vous agité, indisposé ou irrité quand vous ne pouvez pas aller sur internet?	☐	☐	☐	☐	☐
Vous dépêchez-vous pour terminer votre travail (scolaire) afin d'aller sur internet?	☐	☐	☐	☐	☐
Négligez-vous vos obligations quotidiennes (famille, travail, école) parce que vous préférez aller sur internet?	☐	☐	☐	☐	☐
Allez-vous sur internet lorsque vous êtes déprimé?	☐	☐	☐	☐	☐
Allez-vous sur internet pour échapper à vos soucis ou pour soulager des sentiments négatifs?	☐	☐	☐	☐	☐

E Les questions suivantes portent sur votre entourage

18 A quelle fréquence quelqu'un de votre entourage …

	Jamais	Rarement	Parfois	Souvent	Très souvent
… dit que vous ne pouvez pas aller sur internet?	☐	☐	☐	☐	☐
… dit que vous pouvez aller sur internet jusqu'à une certaine heure?	☐	☐	☐	☐	☐
… dit que vous ne pouvez pas aller sur internet pendant longtemps?	☐	☐	☐	☐	☐
… dit que vous ne pouvez aller sur internet que sous certaines conditions (p.e. après les devoirs, après les tâches ménagères)?	☐	☐	☐	☐	☐
… dit que vous devez éteindre l'ordinateur?	☐	☐	☐	☐	☐
… dit que vous ne pouvez utiliser l'internet que pour les tâches scolaires/professionnelles?	☐	☐	☐	☐	☐
… vous punit en vous interdisant d'aller sur internet?	☐	☐	☐	☐	☐

Condition: WORK=1

19 Indiquez dans quelle mesure vous êtes d'accord avec les affirmations suivantes

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fait d'accord
Je consacre trop de temps en ligne (sur internet) pour des choses personnelles pendant les heures de travail	☐	☐	☐	☐	☐
Mon employeur m'a déjà fait une remarque parce que j'ai utilisé Internet pour autre chose que mon travail.	☐	☐	☐	☐	☐

F Les questions suivantes portent sur votre état d'esprit général et sur votre personnalité

20 **CONDITION: WORK = 1**

Sur une échelle de 1 à 10, indiquez combien vous aimez aller travailler

O	O	O	O	O	O	O	O	O	O
1	2	3	4	5	6	7	8	9	10
Pas du tout									Avec grand plaisir

21 **CONDITION: STUDY = 1**

Sur une échelle de 1 à 10, indiquez combien vous aimez aller à l'école

O	O	O	O	O	O	O	O	O	O
1	2	3	4	5	6	7	8	9	10
Pas du tout									Avec grand plaisir

22 Indiquez pour les 30 mots ci-dessous ce qui s'applique à vous. **"Je suis ..."**

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fait d'accord
... aimable	☐	☐	☐	☐	☐
... imaginatif/imaginative	☐	☐	☐	☐	☐
... irritable	☐	☐	☐	☐	☐
... désordonné(e)	☐	☐	☐	☐	☐
... réservé(e)	☐	☐	☐	☐	☐
... investigateur	☐	☐	☐	☐	☐

... agité(e)	☐	☐	☐	☐	☐
... soigneux/soigneuse	☐	☐	☐	☐	☐
... silencieux/silencieuse	☐	☐	☐	☐	☐
... serviable	☐	☐	☐	☐	☐
... émotif/émotive	☐	☐	☐	☐	☐
... ordonné(e)	☐	☐	☐	☐	☐
... renfermé(e)	☐	☐	☐	☐	☐
... polyvalent(e)	☐	☐	☐	☐	☐
... gentil(le)	☐	☐	☐	☐	☐
... précis(e)	☐	☐	☐	☐	☐
... bavard(e)	☐	☐	☐	☐	☐
... innovateur/innovatrice	☐	☐	☐	☐	☐
... obligeant(e)	☐	☐	☐	☐	☐
... inquiet(e)	☐	☐	☐	☐	☐
... timide	☐	☐	☐	☐	☐
... agréable	☐	☐	☐	☐	☐
... artistique	☐	☐	☐	☐	☐
... anxieux/anxieuse	☐	☐	☐	☐	☐
... soigné(e)	☐	☐	☐	☐	☐
... solitaire	☐	☐	☐	☐	☐
... systématique	☐	☐	☐	☐	☐
... sympathique	☐	☐	☐	☐	☐
... nerveux/nerveuse	☐	☐	☐	☐	☐
... créateur/créatrice	☐	☐	☐	☐	☐

23 Indiquez dans quelle mesure vous êtes d'accord avec les affirmations suivantes.

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fait d'accord
Il y a toujours quelqu'un de mon entourage à qui je peux parler de mes problèmes quotidiens	☐	☐	☐	☐	☐
Ça me manque d'avoir un ami très proche	☐	☐	☐	☐	☐
J'ai l'impression que quelque chose me manque dans la vie, même si je ne sais pas de quoi il s'agit	☐	☐	☐	☐	☐
Il y a beaucoup de gens sur qui je peux m'appuyer quand j'ai des problèmes	☐	☐	☐	☐	☐
Le plaisir de la compagnie des autres me manque	☐	☐	☐	☐	☐
Je trouve mon cercle d'amis et de connaissances trop limité	☐	☐	☐	☐	☐
Il y a beaucoup de gens à qui je peux faire entièrement confiance	☐	☐	☐	☐	☐
Il y a suffisamment de gens avec qui je me sens proche	☐	☐	☐	☐	☐
Ça me manque d'avoir des gens autour de moi	☐	☐	☐	☐	☐
Je me sens souvent abandonné(e), rejeté(e)	☐	☐	☐	☐	☐
Je peux faire appel à mes amis quand j'en ai besoin	☐	☐	☐	☐	☐

24. Indiquez dans quelle mesure vous êtes d'accord avec les affirmations suivantes.

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fait d'accord
Pour certains de mes problèmes, il n'y a vraiment aucun moyen pour que je puisse les résoudre	☐	☐	☐	☐	☐
Parfois j'ai l'impression qu'on me marche sur les pieds	☐	☐	☐	☐	☐
J'ai peu de contrôle sur les choses qui m'arrivent	☐	☐	☐	☐	☐
Je peux faire à peu près tout ce que je me mets en tête de faire	☐	☐	☐	☐	☐
Je me sens souvent impuissant(e) face aux problèmes de la vie	☐	☐	☐	☐	☐
Ce que l'avenir m'apportera dépend en grande partie de moi	☐	☐	☐	☐	☐
Je ne peux pas faire grand-chose pour changer des choses importantes dans ma vie	☐	☐	☐	☐	☐

25. Indiquez dans quelle mesure vous êtes d'accord avec les affirmations suivantes.

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fait d'accord
Dans l'ensemble, je suis satisfait(e) de moi-même	☐	☐	☐	☐	☐
A certains moments, je pense que je ne suis bon(ne) en rien	☐	☐	☐	☐	☐
Je pense que j'ai un certain nombre de qualités	☐	☐	☐	☐	☐
Je suis capable de faire les choses aussi bien que les autres gens	☐	☐	☐	☐	☐
Je pense que je n'ai pas de quoi être fier	☐	☐	☐	☐	☐
A certains moments, je me sens vraiment inutile	☐	☐	☐	☐	☐
J'ai de la valeur comme personne au même niveau que les autres	☐	☐	☐	☐	☐
Je voudrais avoir du respect pour moi-même	☐	☐	☐	☐	☐
Dans l'ensemble, j'ai tendance à penser que je suis un échec	☐	☐	☐	☐	☐
J'ai une image positive de moi-même	☐	☐	☐	☐	☐

26. Durant ces 12 derniers mois, **à quelle fréquence** avez-vous eu les sentiments suivants?

	Jamais	Rarement	Parfois	Souvent	Toujours
Je me sens trop fatigué(e) pour faire des choses	☐	☐	☐	☐	☐
Je me sens malheureux/malheureuse, triste ou déprime(e)	☐	☐	☐	☐	☐
J'ai du mal à m'endormir ou à rester endormi(e)	☐	☐	☐	☐	☐
Je me sens désespéré(e) quant à l'avenir	☐	☐	☐	☐	☐
Je me sens nerveux/nerveuse, tendu(e)	☐	☐	☐	☐	☐
Je me sens très inquiet(e) ou soucieux/soucieuse des choses	☐	☐	☐	☐	☐

G	Les questions suivantes portent sur votre utilisation des jeux vidéo et des jeux en ligne

27 Jouez-vous à des jeux? GAME_GEN

O Oui (=1)

O Non (=0)

28 **CONDITION: GAME_GEN= 1**

Jouez-vous à des jeux vidéo sur PC/console? GAME_OF

O Oui (=1)

O Non (=0)

29 **CONDITION: GAME_GEN= 1**

Jouez-vous à des jeux en ligne? GAME_ON

O Oui (=1)

O Non (=0)

30 **CONDITION: GAME_OF= 1**

Lors d'une journée d'école/de travail habituelle, combien de temps consacrez-vous en moyenne aux jeux sur PC/Console ?

☐ Heure(s) ☐ minutes

31 **CONDITION: GAME_OF= 1**

Lors d'une journée habituelle **sans école/sans travail (weekend, vacances)**, combien de temps consacrez-vous en moyenne aux jeux sur PC/Console ?

☐ Heure(s) ☐ minutes

32 **CONDITION: GAME_ON= 1**

Lors d'une journée d'école/de travail habituelle, combien de temps consacrez-vous en moyenne aux jeux en ligne ?

☐ Heure(s) ☐ minutes

33 **CONDITION: GAME_ON= 1**

Lors d'une journée habituelle **sans école/sans travail (weekend, vacances)**, combien de temps consacrez-vous en moyenne aux jeux en ligne ?

☐ Heure(s) ☐ minutes

34 **CONDITION: GAME_GEN= 1**

À quelles sortes de jeux jouez-vous? (plus d'une réponse possible)

O Aventure
O Action-FPS (First Person Shooter)
O Jeux de combat
O Course et sport
O Stratégie
O MMORPG (Massively Multiplayer Online Role-Playing Games) (p.e. World of Warcraft)
O Jeux sociaux (p.e. Farmville, Zynga Poker, Maffia Wars)
O Versions digitales des jeux traditionnels
O Jeux de puzzle
O Autre : .....

35 **CONDITION: GAME_GEN= 1**

Quels sont vos trois jeux favoris en ce moment?

1 .....

2 .....

3 .....

O Je ne sais pas

36 **CONDITION: GAME_GEN= 1**

Combien de nouveaux jeux essayez-vous par mois?

O 0
O 1
O 2
O 3
O 4 et plus

CONDITION: GAME_GEN= 1

37 Indiquez **à quelle fréquence** vous éprouvez les choses suivantes…

	Jamais	Rarement	Parfois	Souvent	Très souvent
Trouvez-vous difficile d'arrêter de jouer aux jeux vidéo et jeux vidéo en ligne?	☐	☐	☐	☐	☐
Continuez-vous à jouer aux jeux vidéo et jeux vidéo en ligne malgré votre intention d'arrêter votre séance?	☐	☐	☐	☐	☐
D'autres personnes (partenaire, enfants, parents, amis) vous disent que vous devriez jouer moins aux jeux vidéo et jeux vidéo en ligne?	☐	☐	☐	☐	☐
Préférez-vous continuer à jouer aux jeux vidéo et jeux vidéo en ligne plutôt que de passer du temps avec d'autres personnes (partenaire, enfants, parents, amis)?	☐	☐	☐	☐	☐

Manquez-vous de sommeil à cause des jeux vidéo et jeux vidéo en ligne?	☐	☐	☐	☐	☐
Pensez-vous aux jeux vidéo et jeux vidéo en ligne même quand vous faites d'autres activités?	☐	☐	☐	☐	☐
Êtes-vous impatient(e) d'avoir votre prochaine session de jeux vidéo et jeux vidéo en ligne?	☐	☐	☐	☐	☐
Pensez-vous que vous devriez moins jouer aux jeux vidéo et jeux vidéo en ligne?	☐	☐	☐	☐	☐
Avez-vous essayé sans succès de passer moins de temps à jouer aux jeux vidéo et jeux vidéo en ligne?	☐	☐	☐	☐	☐
Vous sentez-vous déprimé(e), indisposé(e) ou irrité(e) lorsque vous ne pouvez pas jouer aux jeux vidéo et jeux vidéo en ligne?	☐	☐	☐	☐	☐
Vous dépêchez-vous pour terminer votre travail (scolaire) afin d'aller jouer aux jeux vidéo et jeux vidéo en ligne?	☐	☐	☐	☐	☐
Négligez-vous vos obligations quotidiennes (famille, travail, école) parce que vous préférez jouer aux jeux vidéo et jeux vidéo en ligne?	☐	☐	☐	☐	☐
Jouez-vous aux jeux vidéo et jeux vidéo en ligne lorsque vous êtes déprimé(e)?	☐	☐	☐	☐	☐
Jouez-vous aux jeux vidéo et jeux vidéo en ligne pour échapper à vos soucis ou pour soulager des sentiments négatifs?	☐	☐	☐	☐	☐

H Les questions suivantes portent sur votre utilisation des réseaux sociaux.

38 Avez-vous un profil sur un réseau social (p.e. Facebook, Twitter)? SNS_profile

O Oui (=1)

O Non (=0)

39 **CONDITION: SNS_profile = 1**

Sur quels réseaux sociaux avez-vous un profil (plus d'une réponse possible)

O Netlog

O Facebook

O MySpace

O Twitter

O LinkedIn

O Autre: .....

40 **CONDITION: SNS_profile = 1**

Lors d'une **journée d'école /travail habituelle**, combien de temps passez-vous en moyenne sur les réseaux sociaux ?

☐ Heure(s) ☐ minutes

41 **CONDITION: SNS_profile = 1**

Lors d'une journée habituelle **sans école/sans travail (weekend, vacances)**, combien de temps passez-vous en moyenne sur les réseaux sociaux ?

☐ Heure(s) ☐ minutes

CONDITION: SNS_profile = 1

42 Durant cette dernière année, **à quelle fréquence** avez-vous…

	Jamais	Rarement	Parfois	Souvent	Très souvent
Passé beaucoup de temps à penser aux réseaux sociaux ou à planifier de les utiliser?	☐	☐	☐	☐	☐
Réfléchi à la façon dont vous pourriez avoir plus de temps libre à consacrer aux réseaux sociaux?	☐	☐	☐	☐	☐
Pensé à ce qui s'est passé récemment sur les réseaux sociaux?	☐	☐	☐	☐	☐
Passé plus de temps que prévu sur les réseaux sociaux?	☐	☐	☐	☐	☐
Ressenti le besoin d'utiliser de plus en plus les réseaux sociaux?	☐	☐	☐	☐	☐
Ressenti que vous deviez utiliser de plus en plus les réseaux sociaux afin d'en obtenir le même plaisir?	☐	☐	☐	☐	☐
Utilisé les réseaux sociaux pour oublier des problèmes personnels?	☐	☐	☐	☐	☐
Utilisé les réseaux sociaux pour diminuer les sentiments de culpabilité, d'anxiété, d'impuissance et de dépression?	☐	☐	☐	☐	☐
Utilisé les réseaux sociaux afin de diminuer votre impatience?	☐	☐	☐	☐	☐
Entendu les autres vous dire de diminuer votre utilisation des réseaux sociaux mais vous ne les avez pas écouté?	☐	☐	☐	☐	☐
Tenté sans succès de diminuer votre utilisation des réseaux sociaux?	☐	☐	☐	☐	☐
Décidé sans succès d'utiliser moins fréquemment les réseaux sociaux?	☐	☐	☐	☐	☐
Ressenti de l'impatience ou de l'inquiétude quand vous ne pouvez pas utiliser les réseaux sociaux?	☐	☐	☐	☐	☐
Ressenti de l'agacement si l'on vous interdisait d'utiliser les réseaux sociaux?	☐	☐	☐	☐	☐
Ressenti un mal être si pour des raisons diverses vous ne pouviez pas vous connecter aux réseaux sociaux pendant un certain temps?	☐	☐	☐	☐	☐
Utilisé les réseaux sociaux de façon excessive de sorte que cela a eu un impact négatif sur vos études/travail?	☐	☐	☐	☐	☐
Accordé moins d'importance à vos hobbies, vos loisirs et le sport à cause des réseaux sociaux?	☐	☐	☐	☐	☐

Ignoré les membres de votre famille ou vos amis à cause des réseaux sociaux?	☐	☐	☐	☐	☐

I Les questions suivantes portent sur vous-même et sur votre famille

43 Je suis un(e) …

O Homme

O Femme

44 Quelle est votre date de naissance?

☐☐ - ☐☐ - ☐☐☐☐

jour mois année

45 Je suis…

O Seul(e)

O Dans une relation mais pas cohabitant

O Dans une relation et cohabitant

O Marié(e)

O Divorcé(e)

O Veuf/veuve

46 Je suis …

O Enfant unique

O Le plus jeune

O L'ainé

O Pas le plus jeune, pas l'ainé

O Jumeau, jumelle

47 Quelle est votre nationalité?

……

48 **Condition: STUDY=1**

Quel type d'études suivez-vous ?

O Enseignement général

O Enseignement artistique

O Enseignement technique

O Enseignement professionnel

O Enseignement supérieur non-universitaire

	O Université O Autre : .....
49	**Condition: STUDY=0** Quel est votre plus haut diplôme ? O Pas de diplôme O Enseignement fondamental O Enseignement secondaire général O Enseignement secondaire artistique O Enseignement secondaire technique O Enseignement secondaire professionnel O Enseignement supérieur non-universitaire O Université
50	Quelle description correspond le mieux à votre situation professionnelle? O Job à temps plein O Job à temps partiel O Je suis temporairement en arrêt complet de travail /je bénéficie de crédits-temps O J'ai trouvé un travail que je vais commencer prochainement O Je suis étudiant/en formation O Je suis homme/femme au foyer O Je suis en incapacité de travail O Je suis au chômage O Je suis pensionné/retraité O Autre.....
51	Quelle description correspond le mieux à votre statut professionnel? O Je travaille comme indépendant O Employé O Ouvrier O Je ne travaille pas
52	Quelle affirmation décrit le mieux la situation financière de votre famille? O Nous nous en sortons très difficilement O Nous nous en sortons difficilement O Nous nous en sortons plutôt difficilement O Nous nous en sortons plutôt facilement O Nous nous en sortons facilement O Nous nous en sortons très facilement

Appendix 9: Codebook Life Histories

Model of initial, axial, and focused coding used in this research. Asterisk (*) represents the adaptation of Yee's (2006) typology of motivations for online game players.

Categories	Dimensions	Properties		Code
Gaming Experience	Encounters with and Management of Technology	First Experience		1
		Multiple games management		2
		Multiple screens		3
		Play location		4
		Technical change management		5
		Types of games		6
	Gaming Motivation	Game close-off		7
		Specific game motivation		8
	Yee's Motivation Types*	Achievement Component	Advancement	9
			Mechanics	10
			Competition	11
		Social Component	Socializing	12
			Relationship	13
			Teamwork	14
		Immersion Component	Discovery	15
			Role-Playing	16
			Customization	17
			Escapism	18
	Internal dynamics of playing	Avatar		19
		Guild		20
		Gameplay		21
		Playing time		22
Life Experience	Family Life	Father		23
		Mother		24
		Siblings		25
		Other		26
		Upbringing		27
	Personal Life	Affects		28
		Daily routine		29
		Extra-game motivation		30
		Personality		31
		Representations of the world		32
		Representations of the future		33
	Help and Resilience	Protection/risk factor		34
		Self-perception of problematic use		35
		Therapeutic experience		36
	Risk Behavior	Drugs		37

		Illegal behavior	38
		Self-injury	39
	Social Life	Education	40
		Friendship	41
		IRL (encounters In Real Life)	42
		Love relationship	43
		Work	44
Comorbidity			45
Key Moments			46
Time Line			47