

Commentary

Common Myths in the Behavioral Addiction Field

Mark D. Griffiths

International Gaming Research Unit, Psychology Division, Nottingham Trent University,
U.K.

Submitted: March 31, 2018

Revised: April 15, 2018

Accepted: June 30, 2018

Abstract

There is no shortage of controversy and debates within the field of behavioral addiction. In this paper, five myths are outlined concerning various behavioral addictions. These are: (i) behavioral addictions can occur concurrently, (ii) addictions such as videogame addiction are associated with other comorbidities and are therefore not separate disorders, (iii) ‘addictions’ are equivalent to ‘disorders’ in DSM-5 and ICD-11 nomenclature, (iv) very excessive behaviors are addictions, and (v) socially condoned excessive activities and activities engaged in willfully cannot be classed as behavioral addictions. It is argued that views based on these myths depend upon how behavioral addictions are defined in the first place. It is concluded that any behavior which has severe and longstanding clinical impairment and comprising core components of addiction (i.e., salience, conflict, mood modification, tolerance, withdrawal, and relapse) should be conceptualized as a behavioral addiction.

Keywords: Behavioral addiction, DSM-5, ICD-10, myth

Common Myths in the Behavioral Addiction Field

Over the last three decades, research into behavioral addictions has grown greatly following early reviews in the field (e.g., Griffiths, 1996; Marks, 1990; Orford, 1985). There is no shortage of controversy and debates within the field, with recent papers including how best to conceptualize behavioral addiction without pathologizing common behaviors (Kardefelt-Winther, Heeren, Schimmenti et al., 2017), and why similarities underlying behavioral and substance addictions are more important than differences in conceptualizing addictions (Griffiths, 2017). In this paper, I examine what I believe are five current myths concerning various behavioral addictions.

Myth 1: Behavioral Addictions Can Occur Concurrently

A very comprehensive review of eleven different addictions (both substance and behavioral) concluded that many addictions co-occur and are comorbid with each other (Sussman, Lisha & Griffiths, 2011). While it is possible for an individual to have an addiction to two or more psychoactive substances (e.g., nicotine and alcohol) or for an individual to be concurrently addicted to a psychoactive substance and a behavior (e.g., alcohol and gambling, sex and cocaine), the idea that a person can have two concurrent behavioral addictions does not appear to have any face validity. Obviously, this myth depends upon how addictions are defined in the first place. Personally, I have come to the view that an individual who has a genuine behavioral addiction experiences both cognitive and behavioral salience (i.e., they are totally preoccupied both mentally and physically with the behavior they are addicted to) along with other core components (i.e., mood modification, conflict, tolerance, withdrawal symptoms, and relapse; Griffiths, 2005).

In a recent paper on whether compulsive sexual behavior should be classed as an addiction, Kraus, Voon and Potenza (2016) made reference to studies claiming 4–20% of individuals with compulsive sexual behavior also display disordered gambling behavior

(Black, Kehrberg, Flumerfelt & Schlosser, 1997; Grant & Steinberg, 2005; Kraus, Potenza, Martino & Grant, 2015; Raymond, Coleman & Miner, 2003). Our own comprehensive review (Sussman et al., 2011) also highlighted studies claiming that sex addiction could co-occur with shopping addiction (5–31%), work addiction (28–34%), exercise addiction (8–12%). The idea that an individual can have two or more concurrent behavioral addictions is simply untenable because genuine behavioral addictions consume large amounts of time every day. I have argued that it is almost impossible for an individual to be genuinely addicted to (for example) both sex and work (unless the person's occupation was as an actor/actress in the pornographic film industry, and even then it could be argued that such individuals are addicted to just one behavior) (Griffiths, 2016).

Myth 2: Addictions Such as Videogame Addiction Are Associated with Other Comorbidities and Are Therefore Not Separate Disorders

In recent coverage concerning the World Health Organization's (2018) decision to include Gaming Disorder in the latest (eleventh) edition of the International Classification of Diseases (ICD-11), those denying the existence of videogame addiction often resort to the argument that gaming addiction is typically comorbid with other mental health conditions (e.g., anxiety disorders, depression, etc.) and therefore gaming addiction should not be classed as a separate disorder (Kardefelt-Winther et al., 2017; Wood, 2008). However, such an argument is not typically applied to psychoactive substance addictions (such as alcohol use disorder) which is known to be associated with other mood disorders (Griffiths, 2017; 2018a). Recent research using clinical samples of gaming addicts attending treatment centers reported cases of individuals addicted to videogames both with and without underlying comorbidities (Torres-Rodriguez, Griffiths, Carbonell et al., 2018). In my view, diagnosis of addictive disorders should be based not on the underlying causes and etiology of the condition but on the external

symptomatic behavior and consequences. Treatment should of course target the underlying causes, but most addictions comprise different pathways into behavior (Blaszczynski & Nower, 2002) that can be externally identical irrespective of the reason(s) for the acquisition, development and maintenance of the addictive behavior.

Myth 3: ‘Addictions’ Are Equivalent to ‘Disorders’ in DSM-5 and ICD-11

Nomenclature:

The latest edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013) and the ICD-11 (World Health Organization, 2018) both now use the term ‘disorder’ in relation to excessive problematic (and potentially addictive) behavior. For instance, the DSM-5 includes Gambling Disorder (formerly ‘pathological gambling’) and Internet Gaming Disorder (newly included in Section III – ‘Emerging Measures and Models’) as examples of behavioral addictions. The ICD-11 also has Gambling Disorder and Gaming Disorder (predominantly online and offline) but does not refer to either disorder as an addiction. In the ICD-11, the criteria for both Gambling Disorder and Gaming Disorder do not include criteria that I would argue as being core to genuine addictions (such as withdrawal symptoms and tolerance) (Griffiths, 2005; 2018b). The criteria for both Gambling Disorder and Internet Gaming Disorder in the DSM-5 do include all my core criteria of addiction. However, to be diagnosed with Gambling Disorder or Internet Gambling Disorder, an individual does not necessarily have to endorse all the core addiction criteria. In short, all genuine gambling and gaming addicts are likely to be diagnosed as having Gambling Disorder and [Internet] Gaming Disorder (as defined in the DSM-5 and ICD-11) but not all those with Gambling Disorder or [Internet] Gaming Disorder are necessarily gambling and gaming addicts.

Myth 4: Very Excessive Behaviors Are Addictions

Using case study evidence, I have demonstrated in two of my most highly cited papers that while almost all genuine behavioral addictions consume the vast majority of an individual's waking hours, time itself is not necessarily an indicator of addiction in itself (see Griffiths, 2000; 2010). The content and the context of the excessive behavior is far more important in establishing problematic and addictive behavior than the number of hours engaged in the activity (Griffiths, 2010). A young emerging adult who has just left university and has no partner or children playing an online videogame 10 hours a day cannot experience the same occupational and relationship conflicts as an older adult with a job, marriage and three children in his life. Put simply, if there are little or no conflicts as a result of very excessive engagement in a behavior, then the behavior simply cannot be classed as an addiction. As I have consistently argued, the main difference between a healthy excessive enthusiasm and an addiction is that healthy excessive enthusiasms add to life and addictions take away from it (Griffiths, 2005).

Myth 5: Socially Condoned Excessive Activities and Activities Engaged in Willfully Cannot Be Classed as Behavioral Addictions:

A recent paper by a number of respected scholars in the behavioral addiction field argued that an activity that is engaged in willfully cannot be classed as a behavioral addiction (Kardefelt-Winther et al., 2017). I have argued that this is a poor criterion for establishing or excluding addictive behavior (both substance and behavioral) because all addictions start with individuals willfully engaging in the behavior or substance that later becomes problematic and/or addictive (Griffiths, 2017; 2018a). For me, any activity that causes severe and long-lasting clinical impairment to an individual is likely to be classed as a genuine addiction if it also includes core components of addictive behavior. Scholars from the same group (e.g., Kardefelt-Winther et al., 2017; Starcevic, Billieux & Schimmenti, 2018) have also questioned

empirical studies I have co-authored on potential addictions to activities such as dancing (Maraz, Urbán, Griffiths & Demetrovics, 2015) and studying (Atroszko, Andreassen, Griffiths & Pallesen, 2015, 2016a, 2016b) citing them as further examples of over-pathologizing everyday life (Billieux, Schimmenti, Khazaal et al., 2015). However, these studies conceptualized ‘dancing addiction’ as a sub-type of exercise addiction, and ‘study addiction’ as a pre-cursor and/or subtype of work addiction – both of which have a long established body of work in the behavioral addiction field including my own empirical research (e.g., Andreassen, Griffiths, Hetland et al., 2014; Andreassen, Griffiths, Sinha et al., 2018; Griffiths, 1997; Griffiths, Urbán, Demetrovics et al., 2015) and psychometrically validated instruments to assess such behavioral addictions (e.g., Andreassen, Griffiths, Hetland & Pallesen, 2012; Griffiths, Szabo & Terry, 2005; Lichtenstein, Griffiths, Hemmingsen et al., 2018).

Work addiction and exercise addiction are arguably the most (psychologically) interesting of all potential behavioral addictions given that the activities themselves (i.e., work and exercise) are those that everyone should engage in and are expected within adult daily activity (Griffiths, Demetrovics & Atroszko, 2018). None of us who have carried out empirical research into these behaviors are denying that work and exercise are not beneficial in individuals’ lives, but the empirical evidence has consistently shown that over-engagement in these activities can lead to psychological and medical problems (even if they are not classed as an addiction) and that for a small minority of individuals their excessive problematic behavior can be conceptualized as an addiction (depending upon the operational definition of addiction in the first place) (Griffiths, 2011; Szabo, Griffiths & Demetrovics, 2016).

Workaholics have been conceptualized in different ways. For instance, I have previously noted that workaholics are typically viewed as one (or a combination) of the following (Griffiths, 2011). They are (i) viewed as hyper-performers, (ii) work as a way of stopping themselves thinking about their emotional and personal lives, and (iii) are over

concerned with their work and neglect other areas of their lives. Some of these may indeed be applied to professional videogame (esports) players (Faust, Meyer & Griffiths, 2013), professional gamblers (Bányai, Griffiths, Király & Demetrovics, 2018), and professional athletes (Szabo, Griffiths, de La Vega Marcos et al., 2015) – particularly the reference to ‘hyper-performers’ and the fact that other areas of their lives may be neglected in pursuit of their ultimate goal. It has also been noted that there is a behavioral component and a psychological component to workaholism. The behavioral component comprises working excessively hard (i.e., a high number of hours per day and/or week), whereas the psychological (dispositional) component comprises being obsessed with work (i.e., working compulsively and being unable to detach from work) (Griffiths, 2011). Again, these behavioral and psychological components could potentially be applied to professional videogame players, professional gamblers, and professional athletes.

There are also those who differentiate between positive and negative forms of workaholism. For instance, I have noted that some view workaholism as both a negative and complex process that eventually affects the person’s ability to function properly (Griffiths, 2011). In contrast, there are workaholics who are totally achievement-oriented and have perfectionist and compulsive-dependent traits. Here, the professional gamer, professional gambler or professional athlete might be viewed as a more positive form of workaholism. Research appears to indicate there are a number of central characteristics of workaholics. In short, they typically: (i) spend a great deal of time in work activities, (ii) are preoccupied with work even when they are not working, (iii) work beyond what is reasonably expected from them to meet their job requirements, and (iv) spend more time working because of an inner compulsion, rather than because of any external factors (Griffiths, 2011). Again, some or all of these characteristics could be applied to the professional gamer, the professional gambler, and the professional athlete.

When it comes to Olympic athletes, we all know that they engage excessively in exercise and spend hours and hours every single day either training and competing. For many Olympians, their whole life is dominated by the activity and may impact on their relationships and family life. But does this mean they are addicted to exercise? In short, no. Why? Because the excessive exercise is clearly a by-product of the activity being their job. I do not call myself an internet addict just because I spend 5-10 hours a day on the internet. My excessive internet use is a by-product of the job I have as an academic. In short, my excessive internet use is functional. However, just because I do not believe Olympic athletes are addicted to exercise, it could perhaps be argued that they are addicted to work (and in this case, their work comprises the activity of exercise). There are also those in the field (including myself) who now view ‘workaholism’ and ‘work addiction’ as two related – but different – constructs given that some literature claims there are ‘happy workaholics’ who suffer little in the way of negative detrimental effects in their life (Griffiths et al., 2018).

Concluding remarks

In this short article I have tried to argue that there are a number of myths concerning behavioral addictions and that the views based on these myths depend upon how behavioral addictions are defined in the first place. Based on my own definition of behavioral addiction which centers on severe and longstanding clinical impairment caused by a specific activity (or activities) and comprising core components of addiction (i.e., salience, conflict, mood modification, tolerance, withdrawal, and relapse), I have come to the conclusion that (i) behavioral addictions cannot occur concurrently, (ii) addictions associated with other comorbidities should still be classed and diagnosed as separate disorders, (iii) ‘disorders’ (such as Gaming Disorder and Gambling Disorder) in DSM-5 and ICD-11 are not necessarily addictions, (iv) very excessive behaviors are not necessarily addictions, and (v) socially condoned excessive activities and activities engaged in willfully can still be classed and

diagnosed as behavioral addictions if they fulfil core addiction criteria.

References

- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders (fifth edition)*. Washington, D.C.: American Psychiatric Association.
- Andreassen, C. S., Griffiths, M. D., Hetland, J. & Pallesen, S. (2012). Development of a Work Addiction Scale. *Scandinavian Journal of Psychology*, *53*, 265-272.
- Andreassen, C. S., Griffiths, M. D., Hetland, J., Kravina, L., Jensen, F., & Pallesen, S. (2014). The prevalence of workaholism: A survey study in a nationally representative sample of Norwegian employees. *PLoS ONE*, *9*(8): e102446.
- Andreassen, C. S., Griffiths, M. D., Sinha, R., Hetland, J. & Pallesen, S. (2016). The relationships between workaholism and symptoms of psychiatric disorders: A large-scale cross-sectional study. *PLoS ONE*, *11*(5): e0152978.
- Atroszko, P. A., Andreassen, C. S., Griffiths, M. D. & Pallesen, S. (2015). Study addiction – A new area of psychological study: Conceptualization, assessment, and preliminary empirical findings. *Journal of Behavioral Addictions*, *4*, 75–84.
- Atroszko, P.A., Andreassen, C.S., Griffiths, M. D. & Pallesen, S. (2016a). Study addiction: A cross-cultural longitudinal study examining temporal stability and predictors of its changes. *Journal of Behavioral Addictions*, *5*, 357–362.
- Atroszko, P. A., Andreassen, C. S., Griffiths, M. D., Pallesen, S. (2016b). The relationship between study addiction and work addiction: A cross-cultural longitudinal study. *Journal of Behavioral Addiction*, *5*, 708–714.
- Bányai, F., Griffiths, M. D., Király, O. & Demetrovics, Z. (2018). The psychology of esports: A systematic literature review. *Journal of Gambling Studies*. Epub ahead of print.
<https://doi.org/10.1007/s10899-018-9763-1>

- Billieux, J., Schimmenti, A., Khazaal, Y., Maurage, P., & Heeren, A. (2015). Are we overpathologizing everyday life? A tenable blueprint for behavioral addiction research. *Journal of Behavioral Addictions, 4*(3), 119-123.
- Black, D. W., Kehrberg, L. L., Flumerfelt, D. L., & Schlosser, S. S. (1997). Characteristics of 36 subjects reporting compulsive sexual behavior. *American Journal of Psychiatry, 154*(2), 243-249.
- Blaszczynski, A., & Nower, L. (2002). A pathways model of problem and pathological gambling. *Addiction, 97*(5), 487-499.
- Faust, K., Meyer, J. & Griffiths, M. D. (2013). Competitive gaming: The potential benefits of scientific study. *International Journal of Cyber Behavior, Psychology and Learning, 3*(1), 67-76.
- Grant, J. E., & Steinberg, M. A. (2005). Compulsive sexual behavior and pathological gambling. *Sexual Addiction & Compulsivity, 12*(2-3), 235-244.
- Griffiths, M. D. (1996). Behavioural addictions: An issue for everybody? *Journal of Workplace Learning, 8*(3), 19-25.
- Griffiths, M. D. (1997). Exercise addiction: A case study. *Addiction Research, 5*, 161-168.
- Griffiths, M. D. (2000). Does internet and computer "addiction" exist? Some case study evidence. *CyberPsychology and Behavior, 3*, 211-218.
- Griffiths, M. D. (2005). A 'components' model of addiction within a biopsychosocial framework. *Journal of Substance Use, 10*, 191-197.
- Griffiths, M. D. (2010). The role of context in online gaming excess and addiction: Some case study evidence. *International Journal of Mental Health and Addiction, 8*, 119-125.
- Griffiths, M. D. (2011). Workaholism: A 21st century addiction. *The Psychologist: Bulletin of the British Psychological Society, 24*, 740-744.

- Griffiths, M. D. (2016). Compulsive sexual behaviour as a behavioural addiction: The impact of the Internet and other issues. *Addiction, 111*, 2107-2109.
- Griffiths, M. D. (2017). Behavioural addiction and substance addiction should be defined by their similarities not their dissimilarities. *Addiction, 112*, 1718-1720.
- Griffiths, M.D. (2018a). 'Behavioural addiction' and 'selfitis' as constructs – The truth is out there! *Australian and New Zealand Journal of Psychiatry*, Epub ahead of print.
<https://doi.org/10.1177/0004867418782423>.
- Griffiths, M.D. (2018b). Five myths about gaming disorder. *Social Health and Behavior Journal*, in press.
- Griffiths, M.D., Demetrovics, Z. & Atroszko, P.A. (2018). Ten myths about work addiction. *Journal of Behavioral Addictions*. Epub ahead of print. doi: 10.1556/2006.7.2018.05
- Griffiths, M. D., Szabo, A. & Terry, A. (2005). The Exercise Addiction Inventory: A quick and easy screening tool for health practitioners. *British Journal of Sports Medicine, 39*, 30-31.
- Griffiths, M. D., Urbán, R., Demetrovics, Z., Lichtenstein, M. B., de la Vega, R., Kun, B., Ruiz-Barquín, R., Youngman, J. & Szabo, A. (2015). A cross-cultural re-evaluation of the Exercise Addiction Inventory (EAI) in five countries. *Sports Medicine Open, 1*, 5.
- Kardefelt-Winther, D., Heeren, A., Schimmenti, A., van Rooij, A., Maurage, P., Carras, M., ... & Billieux, J. (2017). How can we conceptualize behavioural addiction without pathologizing common behaviours? *Addiction, 112*(10), 1709-1715.
- Kraus, S. W., Potenza, M. N., Martino, S., & Grant, J. E. (2015). Examining the psychometric properties of the Yale–Brown Obsessive–Compulsive Scale in a sample of compulsive pornography users. *Comprehensive Psychiatry, 59*, 117-122.
- Kraus, S. W., Voon, V., & Potenza, M. N. (2016). Should compulsive sexual behavior be considered an addiction? *Addiction, 111*(12), 2097-2106.

- Lichtenstein, M. B., Griffiths, M. D., Hemmingsen, S. D., Bojesen, A. B. & Støving, R. K. (2018). Exercise addiction in adolescents and emerging adults – Validation of a youth version of the Exercise Addiction Inventory. *Journal of Behavioral Addictions*, 7, 117-125.
- Maraz, A., Urbán, R., Griffiths, M. D. & Demetrovics Z. (2015). An empirical investigation of dance addiction. *PLoS ONE*, 10(5): e0125988.
- Marks, I. (1990). Behavioural (non-chemical) addictions. *British Journal of Addiction*, 85(11), 1389-1394
- Orford, J. (1985). *Excessive appetites: A psychological view of addictions*. Chichester: Wiley.
- Raymond, N. C., Coleman, E., & Miner, M. H. (2003). Psychiatric comorbidity and compulsive/impulsive traits in compulsive sexual behavior. *Comprehensive Psychiatry*, 44(5), 370-380.
- Starcevic, V., Billieux, J., & Schimmenti, A. (2018). Selfitis, selfie addiction, Twitteritis: Irresistible appeal of medical terminology for problematic behaviours in the digital age. *Australian & New Zealand Journal of Psychiatry*, Epub ahead of print. <https://doi.org/10.1177/0004867418763532>.
- Sussman, S., Lisha, N. & Griffiths, M. D. (2011). Prevalence of the addictions: A problem of the majority or the minority? *Evaluation and the Health Professions*, 34, 3-56.
- Szabo, A., Griffiths, M. D., de La Vega Marcos, R., Mervo, B. & Demetrovics, Z. (2015). Methodological and conceptual limitations in exercise addiction research. *Yale Journal of Biology and Medicine*, 86, 303-308.
- Szabo, A., Griffiths, M. D. & Demetrovics, Z. (2016). Exercise addiction. In V. Preedy (Ed.), *The neuropathology of drug addictions and substance misuse (Vol. 3)* (pp. 984-992). London: Academic Press.

- Torres-Rodriguez, A., Griffiths, M.D., Carbonell, X. Farriols-Hernando, N. & Torres-Jimenez, E. (2018). Internet gaming disorder treatment: A case study evaluation of four adolescent problematic gamers. *International Journal of Mental Health and Addiction*. Epub ahead of print. <https://doi.org/10.1007/s11469-017-9845-9>.
- Wood, R. T. A. (2007). Problems with the concept of video game “addiction”: Some case study examples. *International Journal of Mental Health and Addiction*, 6(2), 169-178.
- World Health Organization (2018). *International classification of diseases (11th Edition)*. Geneva: World Health Organization.