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SLOTS OF FUN BEHAVIOURAL ADDICTION IN THE 21ST CENTURY

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"Certain individuals use certain substances in certain ways, thought at certain times to be unacceptable by certain other individuals for reasons both certain and uncertain"

(Burglass & Shaffer, 1984)



17/07/2019

2

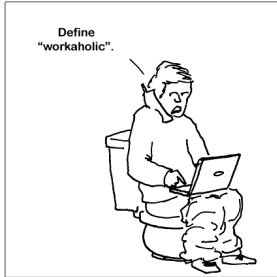


ADDICTION: A DEFINITION

"Addictive behaviour is a repetitive habit pattern that increases the risk of disease and/or associated personal and social problems....often experienced subjectively as 'loss of control'....these habit patterns are typically characterized by immediate gratification (short term reward), often coupled with delayed, deleterious effects (long term costs)....attempts to change an addictive behaviour (via treatment or by self-initiation) are typically marked by high relapse rates"

NTU
Burglass & Shaffer, 1984

Define "workaholic".



(Marlatt, Baer, Donovan & Kivlahan, 1988)

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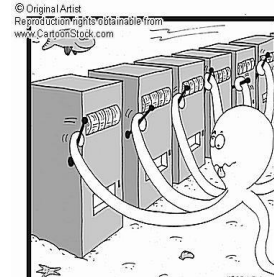
3



GAMBLING ADDICTION HAS CHANGED THE THINKING ABOUT THE NATURE OF ADDICTION

- Gambling addiction is the 'breakthrough' addiction
- Now accepted in psychiatric and medical texts
- Pathological gambling has been re-classified as an 'impulse control disorder' to a behavioural addiction
- No theoretical reason why other behavioural addictions cannot exist

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Compulsive gambling

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4



nature

International weekly journal of science

Nicotine, tobacco and addiction

Sir — For many people, the concept of addiction involves taking of drugs; most official definitions of addiction include drug ingestion. Despite such definitions, there are many potentially addictive behaviours that do not involve drug ingestion, for example gambling, overeating, sex, exercise, computer-game playing, the Internet, pair bonding and work¹. Such diversity has led to all-encompassing definitions of what constitutes addictive behaviour. Trying to define 'addiction' is rather like defining a 'mountain' or 'tree' in that there is no single set of criteria that can ever be necessary or sufficient to define all instances. In essence, the whole is easier to recognize than the parts. Here I suggest six components that in my view need to be fulfilled if a behaviour is to be defined as 'addictive'.

Salience: when the particular activity becomes the most important activity in people's lives and dominates their thinking (preoccupations and cognitive distortions),

Mood modification: the tendency for repeated reversions to earlier patterns of the particular

social environment and psychological constitution. To many, this goes without saying, but others present oversimplified and parsimonious explanations. Behavioural addictions do exist, and should be treated no differently from the better-known chemically based addictions.

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1. Rassin, N. *Psychol. Sci.* 1, 284-287 (2000).
2. Miller, A. & R. *The Addictive Behaviour* (Penguin, London, 1980).
3. O'Brien, J. *Excitatory Appetite: A Psychological View of the Addictions* (Oxford, 1995).

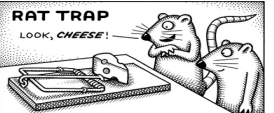


ADDICTION COMPONENTS MODEL

(Griffiths, 1995; 1996; 2005; 2009)

- Salience
- Mood modification
- Tolerance
- Withdrawal
- Conflict
- Relapse

RAT TRAP
LOOK, CHEESE!



HUMAN TRAP
LOOK, AN INTERNET CONNECTION!



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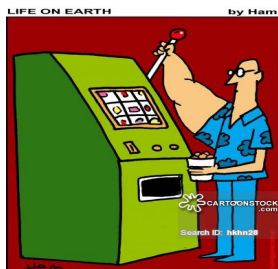
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6



SALIENCE (EXTRACT 1): 'TONY'

- "If I wasn't actually gambling I was spending the rest of my time working out clever little schemes to obtain money to feed my habit. These two activities literally took up all my time

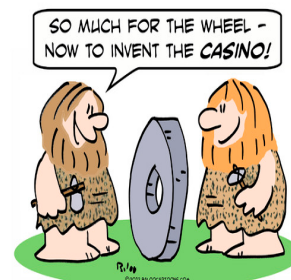


17/07/2019

7

**SALIENCE (EXTRACT 2): 'BRIAN'**

- "Gamble, gamble, gamble your life away... you might as well have put it down the drain. You've got to face the truth that you're having a love affair, and it's with a machine whose lights flash, takes your money and kills your soul"



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8

**SALIENCE (EXTRACT 3): 'DAVID'**

- "During four or five years of compulsive gambling I think I missed about six or seven days of playing fruit machines - keeping in mind that about four or five of those days were Christmas days where it was impossible to gain access to a gambling machine... As you have probably gathered, I ate, slept and breathed gambling machines ... I couldn't even find time to spend with the people I loved... The machines were more important than anything or anyone else"



17/07/2019

9

**'REVERSE' SALIENCE**

Journal of Substance Use, August 2005; 10(4): 191-197

**CURRENT OPINION PIECE****A 'components' model of addiction within a biopsychosocial framework**

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ADDICTION COMPONENTS MODEL

(Griffiths, 1995; 1996; 2005; 2009)

- Salience
- Mood modification
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- Withdrawal
- Conflict
- Relapse



17/07/2019

11

Int J Ment Health Addict (2010) 8:119-125
DOI 10.1080/153326409032264**The Role of Context in Online Gaming Excess and Addiction: Some Case Study Evidence**

Mark B. Griffiths

Received: 22 May 2009 / Accepted: 1 July 2009 /
Published online: 7 July 2009
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Abstract Research into online gaming addiction is a relatively new area of psychological study. Furthermore, there are studies that have claimed that online gaming addiction may be addictive because of self-report accounts of very excessive use of up to 10 h a week. This study uses data from two case studies to highlight the role of context in distinguishing excessive gaming from addictive gaming. Both of the gamers in this study claimed to be playing for up to 14 h a day yet and although they were behaviorally identical in terms of their game playing, they were very different in terms of psychological motivation and the meaning and experience of gaming within their lives. It is argued that one of the players appears to be genuinely addicted to online gaming but that the other player is not based on context and consequences. The two cases outlined highlight the importance of context in the life of a gamer and demonstrates that excessive gaming does not necessarily mean that a person is addicted. It is argued that online gaming addiction should be characterized by the extent to which excessive gaming impacts negatively on other areas of the gamers' lives rather than the amount of time spent playing. It is also concluded that an activity cannot be described as an addiction if there are few (or no) negative consequences in the player's life even if the gamer is playing 14 h a day.

Keywords Addiction · Gaming addiction · Online gaming · Online video games · Case study**Introduction**

Research into online gaming addiction is a relatively new area of psychological study. There have been an increasing number of studies in this area although most studies have used ad hoc addiction criteria and/or addiction scales adopted from other areas like gambling addiction and exercise addiction (Yoon and Choo 2006a, b; Smalldal et al. 2008; Ng and Wiener-Haugen 2005; Hussain and Griffiths 2009). There are also studies that have claimed that online gaming addiction may be addictive because of self-report accounts



doi:10.1371/journal.pone.0167012
PLOS ONE

The Psychometric Properties of the Smartphone Application-Based Addiction Scale (SABAS)

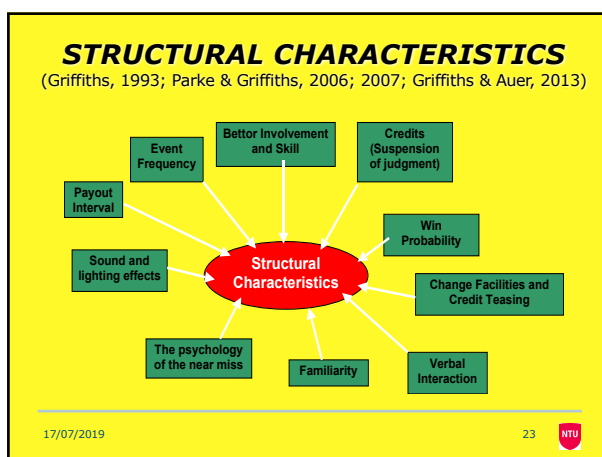
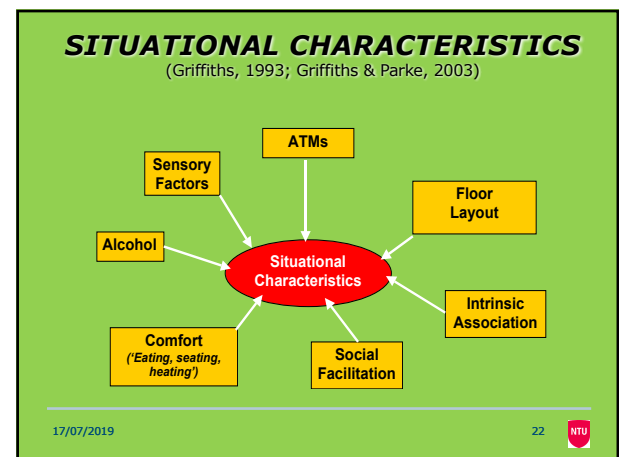
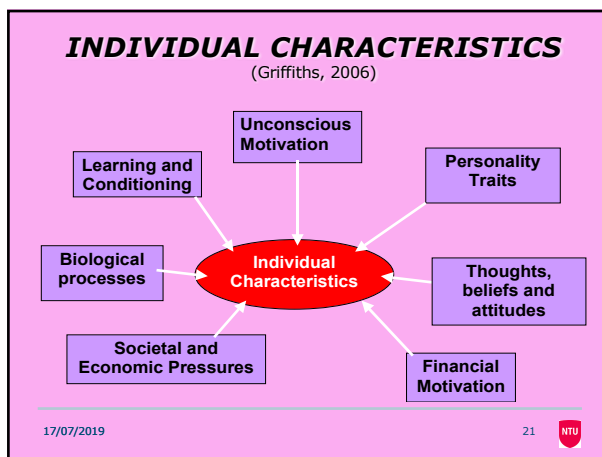
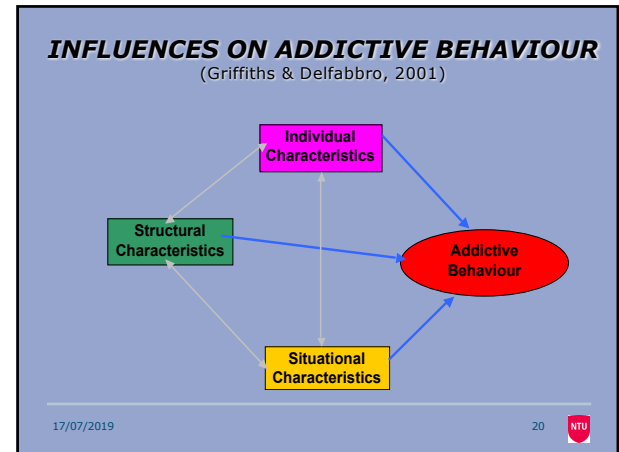
Sander Cui¹, Mark D. Griffiths², Brian Cook³, Zsolt Demetrovics⁴, Attila Szabó⁴

Abstract
The goal of the study was to validate the English version of the Smartphone Application-Based Addiction Scale (SABAS; Cui et al. 2015), which is a short and easy-to-use tool for assessing the risk of smartphone application-based addiction. Another aim was to identify the most frequently used smartphone applications and their perceived importance by the participants. Data were collected from 260 English-speaking volunteers, aged 18 to 69 years. The instruments used were the SABAS, the Smartphone Addiction Questionnaire (SQAQ), the Brief Addiction Screening Scale (BASS), the Smartphone Addiction Scale (SAS), and the Patient Health Questionnaire (PHQ-9). Participants also ranked the importance of their most frequently used smartphone applications. The six items of the SABAS yielded one component, which accounted for 52.38% of the total variance. The internal reliability of the scale was good (Cronbach's alpha 0.81). SQAQ was a significant predictor of SABAS, explaining 17.6% of the total variance. The regression analysis, with SABAS score as the dependent variable and SQAQ, SAS, PHQ-9, and BASS scores as predictors, indicated that approximately 47% of the variance in SABAS was accounted for by the predictors ($R^2 = 0.47$). The English version of the SABAS appears to be a valid and reliable short tool for a quick and easy assessment of smartphone application-based addiction symptoms.

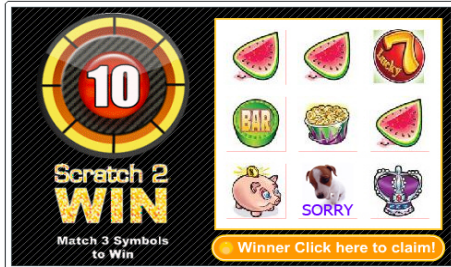
Keywords: Mobile phone dependence; Smartphone addiction; Mobile phone addiction; Smartphone; Social media addiction

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17/07/2019 19 NTU



NEAR MISSES IN SCRATCHCARDS "Paper fruit machines"



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25



NEAR MISSES IN SCRATCHCARDS



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26



NEAR MISSES IN SCRATCHCARDS "Heart-stoppers"



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27



NEAR MISSES IN LOTTERIES

16

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28



FAMILIARITY IN SLOT MACHINES



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29



FAMILIARITY IN SCRATCHCARDS



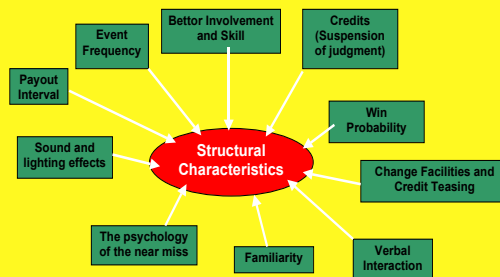
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31



STRUCTURAL CHARACTERISTICS

(Griffiths, 1993; Parke & Griffiths, 2006; 2007; Griffiths & Auer, 2013)



17/07/2019

32



CONCLUSIONS

- Behavioural addictions can (and do) exist.
- Some addictions may be more serious than others depending upon the context
- Addiction is a complex process and is at core biopsychosocial
- Addiction does not just reside within the individual - situational and structural characteristics can play a role



17/07/2019

33



THANK YOU FOR LISTENING!



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34

