Chapter 3

Determining the Risk of Digital Addiction to Adolescent Targets of Internet Trolling: Implications for the UK Legal System

Jonathan Bishop
Centre for Research into Online Communities and E-Learning Systems, UK

ABSTRACT

Research on digital addiction has been increasing significantly since the start of the 2010s. What is not currently available is a measurement scale to assess the extent to which adolescents are at risk of abuse on the Internet that might lead them to develop digital addiction. This chapter sets out to develop a check-list that can be used to risk assess those youths who might be at risk of digital addiction. Through using data from a study into 1,828 young people aged 9-16, the study devised a 6-point check-list based on using a t-test to determine those at high risk and those at low risk. The check-list can be seen as a reliable way for screening those adolescents for whom concerns are raised over their online activities. The chapter concludes that further research will be needed to test the scale with people in older age ranges.

INTRODUCTION

The Internet has opened up opportunities for many to gain access to ideas and social relationships not otherwise possible in a geographic locality, such as an organic community (Van Dijk, 1999; Van Dijk, 2005). With this has come new problems for vulnerable groups in society, most evidently children and adolescents. Whilst at one point sex offenders might frequent places offline where they are likely to access children, now they use social media platforms accessible by children to abuse them, either emotionally, physically or both. Equally, whilst at one point children would only get bullied outside of the home, such as at school or after school clubs, now as a result of Internet technologies they can be bullied even from the presumed security of their family setting. Adolescents have a less developed prefrontal cortex compared to adults, and this can put them at greater risk of psychiatric harm and therefore the need to
Determining the Risk of Digital Addiction to Adolescent Targets of Internet Trolling

develop compulsions to self-medicate away the rises in serotonin levels as a result of not having come to terms with such a trauma. One means of escapism for youths is the Internet, for which the seductive properties can detach them from their unwanted thoughts (Leung, 2003).

DIGITAL ADDICTION

Digital addiction is a term distinct from Internet addiction. The term digital addiction assumes that a person has compulsive tendencies and that the Internet and other technology is the means by which they reduce the anxiety levels that come about from the trauma creating the need for compulsive behaviours. The assumption is that digital addicts would be pursuing some other form of addiction if the Internet and digital technology did not exist.

Serotonergic-Dopaminergic Asynchronicity

Dopamine dysregulation has been an established concept for a number of years (Murray, Lappin, & Di Forti, 2008; O’Sullivan, Evans, & Lees, 2009), and the links between dopamine and serotonin regulation and psychiatric conditions is without doubt. It is only recently, however, the development of neuroeconomics equations have been achieved in order to allow for the systematic manipulation of what have become known as ‘phantasies’ (Bishop, 2012; Bishop, 2011). Phantasies can been seen as inhibitors to flow between synapses that are created by the brain to protect a given neurological function from harm caused by an influx of traumatic stimuli requiring that function, which if accessed would overload and impair it permanently. Such psychiatric injuries are called ‘bleasures’ (Bishop, 2014a; Bishop, 2014c; Bishop, 2014d), as explored in the case of King v Bristow Helicopters Ltd [2002] 1 All ER (Comm) 385. The existence of these phantasies can give rise to what is known as serotonergic-dopaminergic asynchronicity (SDA). This is where a person being placed in an environment where they re-experience stimuli that is similar to that they experienced at the time a bleasure led to the creation of a phantasy. Having that phantasy brought to the forefront of their mind, then results in the brain generating serotonin at the same time that focus on the unwanted memory increases dopamine levels, which together cause psychotic symptoms. A representation of these processes that occur between a person with SDA perceiving a stimulus and responding to it is in Figure 1.

The diagram in Figure 1 is based on a combination of the ecological cognition framework (Bishop, 2007a) and the model of cognitive abnormalities and symptoms of schizophrenia (Hemsley, 1994; Nuechterlein & Subotnik, 1998). As can be seen, there is a clear process that is caused by the observation of a stimulus that as a result of its ambiguities leads to the activation of a phantasy based on a bleasure and thus disrupts the normal social context of the person observing it. Social context is limited by a person’s capabilities (Mantovani, 1996a; Mantovani, 1996b), including their ability to deal with the activation of phantasies. Online environments are certainly not immune from providing stimuli that results in a reactivation of bleasure induced phantasies, and can in fact be the cause of them. As can be deduced from Figure 1, a stimulus such seeing the name of a cyberbully in one’s email box, although irrelevant to a person can lead to them experiencing a desire to open it as if it were persuasive text (Bishop, 2007b), if the bully in question caused someone to experience a bleasure resulting in a phantasy. Even though they regard this desire to be an intrusion of their actual wishes (i.e. causing impetus) they are not able to see