

IS A NEW NON-DRUG ADDICTION EMERGING?

Exploring problematic mobile phone use and treatment suggestions based on the Cognitive – Behavioural model

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Abstract: *Mobile addiction, a relatively modern phenomenon that has been developed with the recent advancement of mobile technology, is discussed. The negative aspects of this addiction (financial, social etc.) are presented. The core of the paper focuses on the therapeutic programme based on Cognitive – Behavioural Therapy principles.*

Key words: *mobile telephones, psychological dependency, Cognitive – Behavioural Therapy.*

Mobile phone technology is becoming increasingly more widespread. The number of people owning mobile phones is increasing yearly and so is mobile use. It is estimated that in Australia there are about 18 million users, a percentage that comprises more than 80 % of the population which means that 8 in 10 people own mobile phone. Increase in the usage of mobiles is clearly indicated by an overall increase in the number of sms. Statistics indicate a 44 % increase in the number of messages from 2002 to 2003 (Allen Consulting Group, 2004). Another astonishing statistics by Vodafone shows an increase of sms from 200 billion in 2000 to 366 billion by 2002. These numbers show that mobiles and sms are more popular than one may think, and they are not restricted to adults. Various studies on mobiles are focused on young children because they are believed to be more affected by the radio waves and the low frequency magnetic fields. A similar study indicates that 6 % of 9 and 10 year – olds in Germany use mobile phones for making calls daily (Schuz, 2005).

Problematic use of mobile phones: link to abuse, dependency, compulsivity

Not much psychological research has been done to directly address the maladaptive and excessive use of mobiles; therefore the issue is very often approached in the

context of traditional substance dependence. A person who is **physiologically dependent** on a drug requires an increasing amount of the drug to have a desirable effect. Thus, it is said that the person develops tolerance and shows withdrawal symptoms if the substance is stopped (Barlow, Durand, 2005). Physiological dependence though is not always enough to maintain an addiction especially in non-drug addictions such as the case of mobile phones. Psychologists argue that there is something called **psychological dependence**. This is another definition of addiction, which allows psychologists to measure dependence on things other than drugs. Therefore we talk about addiction to chocolate, sex, mobiles etc. According to Barlow, Durand (2005, p. 381–382) psychological dependence measures the level of addiction of an individual based on their “drug-seeking” behaviours, the behaviours which they engage to acquire and use the “drug” or the object of their addiction. However, further research needs to be done in the area of non-drug addictions to formulate an accurate definition of dependence.

Mobile dependence has also been linked by some researchers to obsessive compulsive disorder although it is still uncertain how and if it is related.

Etiology

Unfortunately, there has not been extensive research in the etiology of mobile addiction since it is a new phenomenon. It is suspected that biological factors may play a role (Schuz, 2005), but research is not certain at this point. Unlike drug and food addiction, mobiles are not substances that directly cause a change in the chemicals of the brain. The psychological influence that mobile use has on people and their emotions though may have an effect on their neurobiology, but we cannot be certain at this point. It may be the case that non-drug addictions affect the brain’s “pleasure pathways” just as it happens with various drugs, thus positively reinforcing the person to continue engaging in the addictive behavior.

Psychological factors are perhaps one of the most important causes of mobile addiction. Positive and negative reinforcement are regarded a major factor, as they work just as they work for other forms of addictions. A cognitive factor discussed in the addiction literature is *expectancy effect*. If people think that mobiles will have a positive effect in their lives such as enhance their social life, they may be more likely to develop an addiction to it. In contrast, people who may view the use of mobiles as a waste of time and money are not prone to developing an addiction to it.

Social and cultural factors may also play a role, as peers, media and advertising in general influence our opinions and beliefs. Although research needs to be done to prove it, it seems that among the young generation mobiles are becoming the new fashion after cigarette smoking.

Negative effect of addictive mobile use

One of the primary concerns regarding the negative effects of addictive mobile use is definitely financial cost. Also, social relationships are bound to fail when the person constantly calls or sends sms to someone else. Addiction can be a work problem if the person spends hours on mobile. Psychologically, the person may also suffer from such an addiction, as the stress and the anxiety involved can make a person completely

dependent on it. The effects of excessive mobile use on health are not clear yet, but they cannot be positive. Another problem represents mobile use while driving as it is qualified as a risk-taking behaviour. British psychologists warn that texting messages impoverishes the English language. Clearly, there are many negative consequences from addictive mobile use and therefore psychologists will have to find ways to treat this new type of addiction.

Research

In our research, we have looked at the addictive consumption of mobile technology. We examined the characteristics of dependent users, factors that increase mobile use as well as the negative effects of the maladaptive use. Subjects in the research were 35 university students who spend daily talking or messaging on their phones 1,5–5 hours.

In the first phase of the research all participants answered the **Self-report**, the focus of which laid in several areas. The first area mapped students' **attitudes** towards mobiles. All participants expressed the following attitudinal characteristics: a) the mobile was considered very important in their lives, b) the mobile was important for their self-identity, c) they worried that the peer group will exclude them if they did not use mobiles. The second area identified the **behavioural manifestation** of the previous attitudes. Several characteristics were typical for our participants: impulsiveness to use the mobile, tension prior to mobile use, withdrawal symptoms etc.

Our research confirmed the findings by Bianchi & Phillips (2005) showing an interesting pattern in linking high use of the mobile phone and low self-esteem and extraversion. In our research, these two characteristics were measured by The Rosenberg's Self-Esteem Test and Eysenck's EOD test. Students with low self-esteem and extroverted were more likely engaged in problematic mobile use. As extroverted students need more social contacts than introverted, it can be expected that they will saturate this need also by phoning and messaging others. We also hypothesize that students with low self-esteem would rather communicate over the phone or messaging that is not so anxiety – provoking as a direct contact face to face.

Cognitive-Behavioural Therapy

After this faze, the therapeutic faze has started. We worked in the frame of Cognitive – Behavioural Therapy (CBT) which is a comprehensive approach based on numerous techniques integrated into the conceptual model aimed to help a therapist in the work with a client (Dobson, 2001). As CBT is a hybrid of cognitive and behavioural strategies which aim to change behaviours and cognitions. It helps people to create constructive and adaptive attitude to problem solving, and to realize the meaning they give to situations and emotions. In other words, to reveal the meaning of their own cognitive processes.

The model focuses on the effect of cognitions on feelings and behaviours, the primary interventions tackle thoughts, and secondary emotions and behaviours.

There are numerous techniques that can be used to help people to control their mobile addiction. Various cognitive strategies identify the person's dysfunctional

beliefs that will be challenged and replaced by healthier, more logical beliefs. The new and more functional beliefs can be strengthened through various behavioral exercises.

Mobile use record

Many mobile users may not even realize that their use of mobile is problematic, others underestimate the extent of the problem. If a person is not convinced that there is a problem she/he will not be motivated to change. To start an effective treatment, the client needs to acknowledge and accept that he has a problem and express willingness to work towards changing the dysfunctional behaviour. Monitoring daily use of mobiles is important as it reflects the extent of the problem.

Changing mobile – related beliefs

After identifying and evaluating the addictive beliefs and thoughts, the work on more functional control beliefs starts. Among all techniques used, I will pick up only three:

1. **Cognitive model of control** focuses on the reality testing of a dysfunctional thoughts.
2. **Three-question technique** (Liese and Franz, 1996) uses questions to change maladaptive thoughts.
3. **Advantages – disadvantages analysis** points on positive as well as negative aspects of mobile use, and helps to find alternative strategies to achieve similar benefits.

Conclusion

Mobile addiction is a new phenomenon slowly penetrating into psychology literature. Research needs to be done to investigate the extent and the diversity of the problem in the world. Not all cultures face this problem. Those which “boycott” mobile use do not have to deal with this new type of addiction.

CBT represents a set of strategies that might be beneficial also in this area. In our programme, the set of various techniques was tested. In this stage, we are preparing suggestions how to develop a model for the effective treatment of mobile addiction.

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VYNÁRA SA NOVÁ NEDROGOVÁ ZÁVISLOSŤ?

Súhrn: Príspevok sa zaoberá novým fenoménom prenikajúcim do psychologickej literatúry, závislosťou na mobiloch. Poukazuje na negatívne aspekty tejto závislosti, ktoré sa prejavujú predovšetkým v rovine finančnej, sociálnej, zdravotnej. Ďalej predstavuje program zmeny závislosti na mobiloch, ktorý stavia na princípoch kognitívno-behaviorálnej terapie.

Kľúčové slová: mobilné telefóny, psychologická závislosť, kognitívno-behaviorálna terapia