

NEW ELECTRONIC MEDIA AND ADDICTIVE BEHAVIOUR



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Summary

- › The temporal, spatial and social proliferation of electronic media continues to accelerate. For adults, children and young people, media worlds are likely to become a central living space with a strong pull.
- › Addiction to or dependence on electronic media are discussed, in the context of being subject to culturally characterized patterns of interpretation and social constructs – not unlike the approach to addiction in general.
- › In studies, a distinguishing line is drawn between general Internet addiction and specific forms of addiction such as addiction to online gaming, to social networking, to online shopping, to online sex or to online gambling.
- › In reviews and articles on media addiction available for this study, the understanding of the terms which are used, the assessment of behaviours and the procedure for defining the study variables within the framework of empirical research differ considerably.
- › There is substantial need for further research in this comparatively young scientific field. This is particularly valid considering that intensive use of media is increasingly becoming a part of the population's normal behaviour – and even is expected for professional reasons.

addiction in the context of new electronic media. On the one hand, the media, and above all the Internet itself, the media contents and consequently the patterns of media use are subject to continuous change. On the other hand, the understanding of what constitutes »normal« media use in view of the advanced mediatization of society, differs among the generations and leads to intensive debates and conflicts e. g. in families, but also in educational institutions.

Scientific studies on media addiction depict a rather inconsistent state of knowledge, which is mainly due to the use of different terms. These terms imply different substantive opinions, are standing directly side by side and are characteristic for the current state of the discussion. For example, the **term of media addiction is a general term for a variety of possible social interpretations, but also of medical and psychological concepts of disease.** Finally, the term also reflects our – continuously changing – cultural values as well as existing societal challenges and issues of our time.

Interpreting media addiction as a model or understanding of disease is an essential prerequisite for determining which clinical department (medicine, psychology and psychiatry) is competent. Media addiction is not included in the standard medical diagnostic systems ICD (International Statistical Classification of Diseases and Related Health Problems) and DSM (Diagnostic and Statistical Manual of Mental Disorders). In the scientific and political discourses, however, the recognition of media addiction as an independent disease is a topical issue.

What is involved

In the context of increasing temporal, spatial and social proliferation of new electronic media and considering that users are getting younger and younger, the topic of »New electronic media and addictive behaviour« is increasingly in the focus of sociopolitical debates.

So far both, in the scientific and social discourse, there is no clear answer discernable to the question of what constitutes

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New electronic media and addictive behaviour

In recent years, the social interest in the phenomenon of »new electronic media and addictive behaviour« as well as the number of publications regarding this topic have increased significantly. On the one hand, scientific studies rather focus on the term of Internet addiction – a term more sophisticated than media addiction. On the other hand, they refer to various forms of specific Internet addiction:

- **General Internet addiction** focuses on a general and multidimensional use of the Internet without any clear preference for any specific Internet application. Using various measuring methods, the estimated prevalence rates range between 1.0 and 10.3% of respective samples.
- In recent years, **online gaming addiction** – also referred to as computer game addiction, screen gaming addiction or Internet gaming addiction – has been discussed intensively in the public and also in scientific publications, notably in the context of children or young people using games. The indicated prevalence rates range between 0.3 and approximately 15% of respective samples.
- Not least because of the strongly increasing use, more recent studies highlight the **addiction to social networks** as a separate variant of Internet addiction. There is only little scientific research on social networks and the prevalence rates determined are quite variable.
- **Online sex addiction** – also referred to as addiction to Internet sex or cyber sex or as excessive or compulsive consumption of pornography – comprises the excessive use of direct computer-mediated interaction for sexual arousal and satisfaction as well as problematic uses of online erotica and pornography. Here, estimated prevalence rates range between 1 and 8.3%. However due to ignorance, denial and feelings of guilt and also due to a sense of shame it is assumed that there is a high number of unreported cases.
- In contrast, **online shopping addiction** is supported by the social values of a consumer society. For Germany,

prevalence rates vary between 5 and 8 % of the population. In most studies, online shopping addiction is not explicitly specified but subsumed as a part of compulsive buying disorder in general.

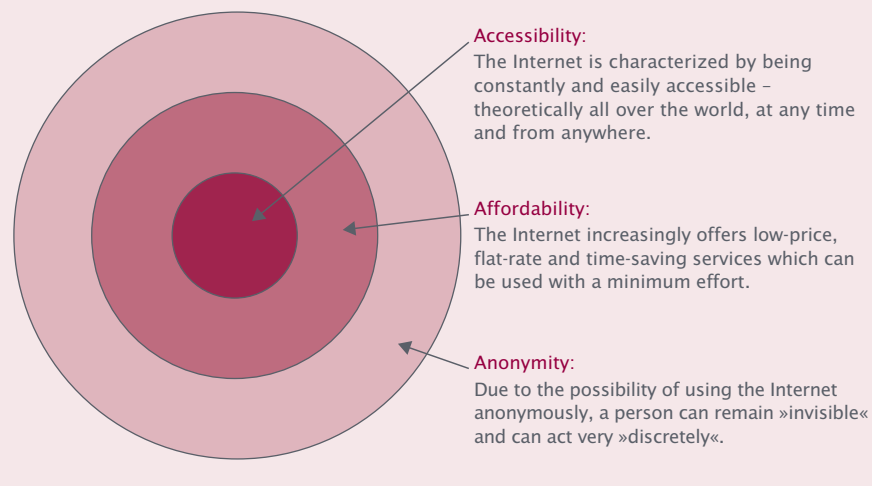
The Internet's potential for attraction and bonding is explained referring to the so-called »**triple A engine**«. »Triple A« refers to the three properties of Internet use: accessibility, affordability and anonymity. Furthermore, an increasingly attractive graphic design, a comprehensive integration of (animated) images and interactive elements boost the attractiveness of online offerings. The distribution of 3D or »augmented reality« (AR) applications generates new potentials regarding the attraction of and bonding to virtual worlds.

Moreover, virtual worlds are persistent: They are accessible, are being further developed and continue to exist even if the users are not using them at present. Anyone who leaves the virtual world and has interrupted the Internet connection

can be sure that it will continue to exist. For online games, this is shown by »lists of the best«. This corresponds to incoming e-mails in the working life. The persistence of virtual worlds is assumed to have a strong bonding-potential. This may facilitate the development of addiction, since a strong presence is expected from the users and a high level of immersion

is generated. Consequently the perception of oneself in the real world is reduced and the identification with a virtual character is increased at the same time.

»Triple A« of the Internet: accessibility, affordability, anonymity



Stakeholder Panel TA

Since 2013, TAB pursues the approach of »discourse analysis and dialogue with stakeholders« within the framework of its activities. To implement this approach, the Institute for Futures Studies and Technology Assessment (IZT) developed the »Stakeholder Panel TA« concept aiming at a systematic exchange of experiences and opinions with stakeholders regarding the challenges and impacts of science and technology.

The Stakeholder Panel TA has also been used with regard to the topic »New electronic media and addictive behaviour – risks, prevention and coping strategies«: Expert discussions with selected stakeholders have been conducted and an online survey with the title »New electronic media and the potential risks of excessive use« was carried out from May to July 2015.

The results of the empirical studies within the framework of the Stakeholder Panel TA confirm the social relevance of the topic »New electronic media and addictive behaviour«. They show that major stakeholders from (German) society are well aware of the issue. Not only in science, but in society as a whole, both, interpretation and conclusions, are discussed controversially. For example, the results of the online survey (sample size 2560 stakeholders) show that almost one third of the respondents (rather) confirms the assumption that the public discourse on the risks of excessive media use was exaggerated. At the same time, almost 70 % of the respondents – particularly employees of addiction counselling centers, psychologists and therapists – believe that media addiction should be **recognized as an independent disease**.

With regard to sociopolitical fields of action, 64 % of the respondents are in favour of establishing minimum standards for media competence training. Approximately 57 % support the idea that, in the future, educational personnell and experts shall be provided with **guidelines regarding the assessment of media consumption behaviour**. Almost 45 % of the stakeholders surveyed think that the protection of minors against addictive online offerings should be enforced.

Summary and outlook

The results of the present study on »New electronic media and addictive behaviour – risks, prevention and coping strategies« point to options for action which focus on different possibilities, needs and objectives regarding a societal, political and scientific design.

A key outcome is the requirement for *more research* in this comparatively young scientific field. A long-term, prospective research strategy is wanted which should be as comprehensive as possible. It should take into consideration the technical, social, political, ethical and anthropogenic dimensions of media use, including its discursive and process-like designing. This particularly applies insofar as intensive media use is increasingly becoming a part of the population's normal behaviour and – last but not least – is expected for professional reasons. Moreover, there are no studies evaluating therapies and intervention approaches for media addiction.

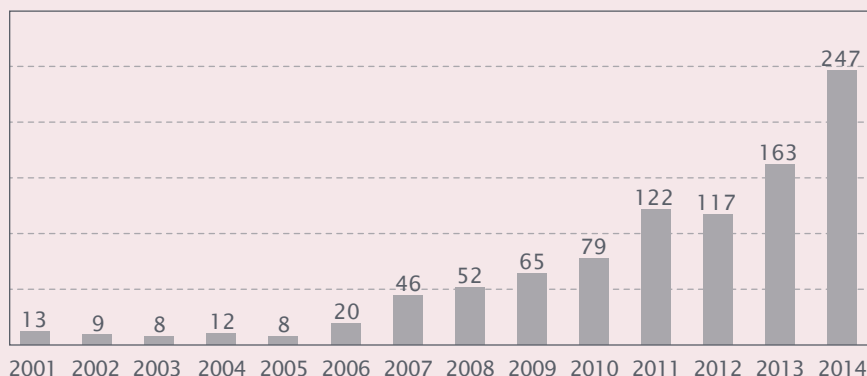
Furthermore, it seems to be necessary to **initiate a discourse in order to develop a socially and scientifically grounded basis of values** and to determine the thresholds between normal and addictive behaviour. Currently, socially undesirable behaviour often is declared as addiction without sufficient social and scientific reflection on the underlying understanding of the term

or on the underlying values. Discourse cannot dissolve the different views, responsibilities, competencies or the balance of power between stakeholders involved. But it can support a certain understanding between stakeholders. These stakeholders particularly include children and young people, parents, educational experts, profession-

al institutions in the context of media and addiction, but also physicians (paediatricians), psychotherapists and social workers as well as those carrying economic and political responsibility.

In recent years, changes in the field of medical diagnosis have repeatedly led to lively discussions. In the context of **media addiction**, mainly experts from psychiatry-related disciplines are in favour of including media addiction as well as some individual typological characteristics **in the diagnostic classification systems as independent disease(s)**. The hope is to achieve more flexibility in everyday clinical practice and an **increased significance of preventive therapeutic interventions**. Objections are raised in particular by youth researchers, paediatricians and developmental psychologists. They

Number of publications per year on the issue of »Internet addiction«



Results of a meta search in the medical-psychological database for evidence-based research literature (PubMed)

Source: Based on Wöfling et al. 2015, S. 6

call for first gaining more scientific knowledge on whether and to what extent addictive media consumption particularly during puberty and adolescence simply represents a developmental issue. It may be **medically treated and stigmatized at a too early stage** due to excessive psychiatric diagnoses. Another topic to consider is that a diagnosis of media addiction which is exclusively based on symptoms falls short of the individual and social significance of media use. Recognizing media addiction as an independent disease in the conventional classification systems therefore has to be reflected in good time as well as in an interdisciplinary and transdisciplinary way, particularly in view of the expected revision of ICD/ICD-11.

Companies should assume increased responsibility. It is necessary to scientifically examine media formats with regard to their (long-term) bonding effect and their potential risks of respectively developing and maintaining addictive behaviour. Moreover, it has to be considered how age-appropriate restrictions to on accessing addictive media services can be implemented and better enforced.

In terms of **improving prevention**, measures of primary prevention for preventing the general development of media addiction should be consolidated. Secondary prevention should focus on risk groups and early diagnosis. Furthermore, tertiary prevention for coping with media addiction should be supported. Prevention requires **instruments for evaluation and diagnosis** on the one hand and an involvement of relevant actors in the prevention processes on the other hand. In this context, multiple target groups and disseminators such as educational experts and social workers in education and leisure facilities as well as in general practitioners' and paediatricians' practices should be addressed. Furthermore, it is of major significance to promote possibilities of self-protection for adults, children and young people alike.

In terms of access to available **counselling and treatment facilities, the structure of health and social services should be easier accessible.** The available services are difficult to access and are not used by all relevant (susceptible)

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Neue elektronische Medien und Suchtverhalten

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target and risk groups. This applies, for example, to girls as a target group. The structure of the services and the services themselves should offer a lower threshold of access. Mobile support and treatment services on site – including innovative online services through which Internet use can be »normalized« in a (self-)reflective manner – might help to break down existing inhibition thresholds of use. They might balance the turning away from conventional »come and get help« structures. Current research gaps also involve a lack of standards and uniform guidelines for anamnesis, counselling and treatment of media addiction in the context of electronic media. It is particularly important in this regard to **continuously improve the supply structure reflecting new findings** and to adapt it to the actual needs. Moreover, interdisciplinary networking between supply and counselling facilities should be improved. Interfaces between educational and drug counselling services or between youth welfare services, family assistance and schools should be developed systematically.

Altogether, it is highly relevant to intensify dealing with the implications of intensive and addictive media use in the sociopolitical context. Dealing more intensively with the issue should be further promoted in view of the identification and implementation of normative design objectives.

The Office of Technology Assessment at the German Bundestag (TAB) is an independent scientific institution which advises the German Bundestag and its committees on questions of scientific and technological change. TAB has been operated by the Institute for Technology Assessment and Systems Analysis (ITAS) of the Karlsruhe Institute of Technology (KIT) since 1990. It has been cooperating with the Helmholtz Centre for Environmental Research – UFZ, the IZT – Institute for Futures Studies and Technology Assessment and VDI/VDE Innovation + Technik GmbH since September 2013. The Committee for Education, Research and Technology Assessment decides on TAB's work programme, which also includes subjects proposed by other parliamentary committees. The standing »TA Rapporteur Group« consists of one member from each of the parliamentary parties: Dr. Philipp Lengsfeld (CDU/CSU), René Rösper (SPD), Ralph Lenkert (Die Linke), and Harald Ebner (Bündnis 90/Die Grünen) and the Chairwoman of the Committee, Praticia Lips (CDU/CSU).