

INTERNET AND PSYCHOLOGY

EDITORIAL INTRODUCTION

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The internet has become an essential part of our lives. The internet has not only grown exponentially because it is technologically innovative and useful, but also because it is social in nature. Therefore, it has become commonly accepted that the internet is in the center of attention of the social sciences. This was not always the case. The social science community did not consider it a site of mass communication for a long time, primarily because it did not fit into classical definitions of mass media, and because it was seen as the hobby of university students with a technical interest, or at best as a new means of interpersonal communication, i.e. an efficient, comfortable, quick, and cheap way of sending letters, thus a narrow and limited subcultural phenomenon from the perspective of communication sciences. Studies started emerging in the 90s, when the social relevance of internet was beginning to be understood. We can safely say that explaining the social aspects of human behavior can no longer be done without taking the influence of internet into account.

Research on the internet appeared in Hungary with some delay. Sociology was the first of the social sciences to embrace the topic, and *Jel-Kép*, a communication studies journal started publishing relevant articles from the second half of the 90s. In 2001, a new journal was devoted to the topic, called *Információs Társadalom* (Information Society). Beside the journal's sociological focus, the internet was also analyzed within the framework of other disciplines, such as political science, law, history, or as a matter of fact, psychology. At first, these journals mainly aimed to present and summarize the international literature, but they also included a small number of empirical studies focused on sociological topics, such as the issue of social capital or the digital divide. The central goal of these studies was to understand the influence of the internet on social inequalities, namely whether this new technology increases or decreases social differences, or possibly creates new divides. Research attempted to grasp the similarities and differences between the American and Hungarian situation, and highlighted that the problem has different layers, i.e. differences can occur both in the quantity and the quality of internet use (Molnár, 2002; Szabó, 2003; Kiss, 2007).

The first psychological research projects connected to the internet in Hungary dealt with internet addiction, which remained a central topic for relatively long (Fábián, 2000; Treuer et al., 2001; Hoyer et al., 2004; Ritter et al., 2004). This is not at all surprising, given that a new and unknown phenomenon is often met with initial distrust, and the need to scientifically identify its dangers. The results of these studies reassured people that the danger is not as large as was presented in society and by the media (Ritter et al., 2004).

THE INTERNET AS A PECULIAR SITE OF RESEARCH WITHIN PSYCHOLOGY

Clearly, there are many more ways in which the internet and the field of psychology can be connected, considering that the internet has several features that distinguish it from the traditional sites of psychological studies and personal contact. One of the most fundamental differences is that communication is mediated by technology. This obvious fact bears some consequences that are less obvious, and are often disregarded, for example when psychological meanings are attributed to technical problems (e.g. a delayed response is interpreted as hesitation). The fact that much of online communication is *recordable* is also connected to technological mediation. Recordability means that a large proportion of conversations, comments, and even simple clicking can be traced back and collected, raising issues of data security, that in turn affect people's trust in technologies (Whitty & Joinson, 2009). Another general feature is *physical separation*, which refers to the fact that even in the midst of the liveliest or intimate online communication, the people involved tend to be physically alone in front of their computers away from their communication partners. This leads to changes in the concept of physical space and distance (Barak, Suler, 2008), namely that their significance diminishes; it is no longer a problem to chat with someone on the other side of the globe. At the same time the social world also gets expanded: it is feasible to be in contact with many people in a short time and be involved in parallel conversations.

Nevertheless, it is not so easy to detach ourselves from traditional concepts of space, as indicated by the terms used for communication that often refer to space, e.g. information superhighway, navigation, Back and Forward buttons, walls and message boards (for the significance of metaphors see Lakoff & Johnson, 1980). Furthermore, empirical studies underline that experiences connected to virtual reality are stored as spatial experiences in memory (Taylor, 1997).

Most of the interpersonal communication on the internet is (still) *text-based*, which means that non-verbal communication is hindered, making conversations more difficult. Messages seem more formal and less friendly, which sometimes leads to frustration, aggression and worse performance (Joinson, 2007). As a result of *reduced sensation* (i.e. the lack of or limited access to visual, audio, and tactile stimulus), one can experience a lower level of social presence that can lead to a decrease in trust toward other people, toward the social context in general, and toward the internet (Short, et al., 1976).

Although communication on the internet looks like written communication, its correct definition is more complex when we take a closer look. „Online language” combines the individualistic and abstract nature of written communication that is independent of time and space with the more informal and interpersonal style of verbal communication. Ong (1982)¹ referred to this double nature as secondary orality, or written verbal language as it is called in

¹ Ong does not refer to the Internet, but connects this phenomenon to the birth of telephones, radio, and the phonograph. He identifies the end of secondary orality in the 1980s, because he believed that the television will bring the dominance of visuality. However, on the Internet they are arguably both present.

Hungarian by Balázs (2004). A detailed linguistic analysis of this peculiar phenomenon can be found in the works of Zoltán Bódi (2004a, 2004b). Different levels of *synchronicity* are realized on the internet that ensure a kind of flexibility in communication never experienced before (Joinson, 2003). Synchronous (real time) communication resembles traditional and personal conversations, while the delays typical of asynchronous communication have significant psychological consequences: firstly, the entire situation is more controlled and more designed, and an immediate answer is not expected, which reduces social anxiety and makes the entire process of self-presentation more controlled and conscious. Secondly, and equally important from the perspective of self-presentation: one does not expect an immediate response from the counterparty either. Asynchronicity makes communication slower and more condensed: relationships develop and cease faster than in the physical reality. Furthermore, this flexibility of timing also makes parallel communication, so-called multitasking possible.

COMMUNICATION RESEARCH AND THE PSYCHOLOGY OF THE INTERNET

Internet cannot only be compared with personal encounters, but also with other, more traditional forms of media. All content is reduced to a binary code, which means that all information is coded (digitized) in an identical way. Digitization makes multimodality possible, i.e. the convergence of different media and the presentation of different types of content (texts, pictures, sounds and moving images). Therefore, the internet is not a homogenous entity, as it consists of (con)texts that differ from technical, psychological, and communication perspectives. Active chatting, simply reading of a blog, looking alone at a webpage, and participating in a multiplayer online game, are very different activities (Wallace, 2006). Internet activities comprise a wide range of behaviors, such as online shopping, online dating, or even online psychotherapy. The most important difference between traditional media and the internet is its interactivity. This dimension became even more significant with the birth of *web 2.0*, or to use more recent terminology, *social media*. The expression *web 2.0* refers to the fact that these applications represent the second „generation” of the internet, the main feature of which is that content is produced by its users, leading to a complete diversification of news content and democratization of content publication. This change can entail a significant shift in power relations that increasingly occur in a communicational space (Castells, 2005). Beyond its obvious political significance, *web 2.0* also affected the divide between lay and scientific knowledge, and influenced the way public opinion is formulated. Social media affected people’s lives on an interpersonal level as well, making oversharing, social networks, and cyberbullying new keywords in the study of interpersonal relationships.

However, focusing too much on the unique characteristics of the internet may result in technological determination, disregarding the fact that people, groups and society as a whole also influence technology and the way it is used. For example, in a study on the internet use of adolescents, Valkenburg and Peter (2009) found that different age-groups use technology rather differently, and different apps are popular among different generations, which reflects back on technological development patterns. This gave rise to misunderstandings on the part

of researchers; e.g. the Reduction hypothesis, which emphasizes social isolation brought about by the internet, was a popular idea in the 90s, but later proven wrong by other studies. The contradictory results came about because young people at the time used platforms that offered the opportunity to communicate with strangers (e.g. chatting or online games like Multi-User Dungeons), while the most popular apps today are social network sites that reflect people's offline social world.

Opportunities for anonymous communication (confessions, anonymous reporting to the police, radio call-in shows) used to be few and far between, but the internet offers endless opportunities for such communication. Many empirical studies have shown the negative psychological consequences of anonymity, such as a decreased level of responsibility and self-control, disinhibition, and an increase in aggression (Christopherson, 2007). Furthermore, without non-verbal signs, social information is poor, it is easier to misinterpret situations and other people, and communication is less personal, which can lead to conflicts (Short et al., 1976; Donath, 1999). However, the model developed by Lea and Spears (1991) called the Social Identity Model of Deindividuation (SIDE) tells a different story. According to this theory, in an online context individual aspects of the identity are less available, and therefore people become more sensitive to social norms, so that anonymity leads to depersonalization. However, as personal signs of identity are more complex and more difficult to communicate and perceive, perception of individual differences is diminished, more attention is given to similarities than to differences, and therefore information about the social context becomes more important. The social aspect of self-categorization becomes salient for social identity that helps identification with the group, making the role of group norms more significant as well. The SIDE model changed the negative perception of not only online anonymity, but also the concept of anonymity in connection with collective actions, and showed that particular group norms rather than anonymity determine whether the relative increase in collective identity in comparison with personal identity leads to positive or negative changes in behavior (Lea & Spears, 1991).

We can conclude from the above that the online world can be conceptualized as an alternative social space, so it is particularly suitable for testing current concepts, theories, and techniques of psychology. But research on the internet is not without challenges, mainly due to its ever-changing nature. For example, by the time an initial theoretical framework of anonymous online communication was developed, anonymous social networking sites started to dominate the online world.

Psychological research of the internet can be organized along several dimensions. First of all, there are studies that attempt to compare online and offline reality. In the understanding of this line of work, cross cultural psychology can serve as an obvious analogy, as the primary task for this discipline is the mapping of similarities and differences between cultures. The first type of internet studies also try to explicitly compare the two spheres, revealing their interconnectedness and mutual influence. The other type is more similar to cultural psychology, as it concentrates on specific online social phenomena. Although this approach also contains some comparisons, the focus of research is on revealing the unique features of the online social context. Another aspect of classification can be whether the phenomena are studied on the individual, interpersonal, (inter)group, or societal level.

INTERNET AS A RESEARCH TOOL

Apart from being the target of research, the internet can also serve as a research tool. It can renew the methodology of social psychological research by making every step of a research project easier: data collection, data recording, and publishing. It provides access to larger and more diverse samples and makes the whole process faster and cheaper. The new methodology also gives ground for emerging issues such as methodological problems or specific ethical considerations. For instance, the results of online surveys are not necessarily representative of the general population, and because of the anonymity of the context the parameters of the participants cannot be controlled. There are also technical constraints and a high rate of non-response. One of the most important challenges is the formulation of new ethical codes to address emerging problems: difficulties in asking for informed consent, the cost of debriefing, or ensuring complete privacy. It is such an important problem that the *Journal of Information Society* dedicated a special issue to the subject in 1996. It was followed by several thematic workshops, meetings, and articles (Michalak & Szabo, 1998). Due to the ever-changing nature of the medium new ethical concerns still continue to emerge. Most recently the following books discussed these concerns: Hoerger & Currell (2012) authored *Ethical Issues in Internet Research*, a chapter in the *APA Handbook of Ethics in Psychology*; and Fisher & Vacanti-Shova (2011) published *The Responsible Conduct of Psychological Research: An overview of ethical principles, APA ethics code standard and federal regulations*.

INTERNET AND PSYCHOLOGY: THE THEMATIC ISSUE

The timing of the current issue is justified by the fact that in Hungary no psychology journal has dedicated a special issue to this topic until now, while a growing number of psychological studies are related to the internet in one way or another. Furthermore, by now we have a sufficiently large body of methodologically well-founded research which is worthy of presentation. We firmly believe that this issue will contribute to a better psychological understanding of the internet, and hope to inform current and future researchers about the potential within this field.

The first section of the issue focuses on the internet. *Smohai and Vargha* have chosen a topic that has always been in the forefront of research: the psychology of video games. The article attempted to identify a few potential predictors of problematic video game use. Among the 13 predictors, motivations proved to be the most influential ones, especially those related to escaping and fantasy. *Mihalik et al.* overviewed one important aspect of children's computer and internet use: the practice and theory of parental mediation and control. The half-structured interviews with parents revealed that parents do not really regulate their children's internet use: the sparse existing practices are mainly time- and not content-based. Nevertheless, the internet has become a central issue in parenting: depriving children from internet use is a common form of punishment. *Domonkos* in her summary about electronic harassment (cyberbullying) reviews definitional difficulties, and describes the main types, while comparing it to more

traditional forms of bullying. The author also found it important to present the practical implications of empirical results, especially the possibilities of school prevention programs, highlighting that only sound pedagogical and psychological work can lead to positive results.

The next two articles approach the internet from a methodological point of view. The study of *Somogyi and Bernáth* is related to an innovative international study called Project Implicit, which aims to explore implicit preferences in different areas such as political attitudes or self-esteem. This publication compared international results of the Race Implicit Association Test (IAT) with Hungarian data. The analysis of the responses of more than 4700 participants showed that Hungarians prefer white, European faces. These preferences were not really influenced by age and religion, but political identity did have a great impact. Besides the actual data analysis, the article also discusses general methodological issues related to online research, for example the ethical benefits deriving from the absence of the researcher, data security problems in communication and data storage, and improved possibilities for sampling. *Nagybányai* analyzed a specific psychometric question, the so-called response style characteristics in online testing. Correlations of response-extremism indicators with the online Facet5 personality questionnaire revealed that a general, global factor influences the evolution of test scores, creating a bias in responses that should be a serious cause for concern among researchers, but the author formulated some suggestions in order to measure and control this bias.

The articles of the third section focus on a specific part of the online world, namely social media. The first one (*Ujhelyi*) is a literature review on internet research that can be relevant from a social psychological point of view. The review organizes the relatively large literature around five basic questions: Who, what, how, why, and with what effect? The following article (*Tóth and Mirnics*) approaches the internet at the level of the individual: it explores the relationship between Facebook use, self-worth, and attachment styles. The results revealed that people with high public-sphere contingencies and an ambivalent/resistant attachment style are more intensive Facebook users. The objective of the work of *Rómer and Fekete* was to shed light on an interpersonal social phenomenon, namely Facebook-triggered jealousy in connection with self-esteem, anxiety, and attachment styles. They confirmed and supplemented previous research by finding that lower self-esteem and preoccupied attachment style correlates with Facebook jealousy. In the last study, *Kende et al.* have taken a societal-level phenomenon into the limelight: the role and effect of social media in political protests. Does clicking substitute for participating in real-life events, or to the contrary: does social media have a mobilizing effect? Analysis of the University Occupation in Budapest in 2013 confirmed the latter, but enriched the picture by stating that not social media itself but its specific use can play a crucial role.

While the articles show a great variety in focus, the methods are less diverse: beside the predominant questionnaires, we find only semi-structured interviews and reaction time measurement-based IAT. Future research will hopefully make better use of the methodological palette, and rely on more recent techniques that are also more closely connected to the nature of internet, such as network analysis.

DISCUSSION

The internet is not an easy phenomenon to ‘capture’. It can be conceptualized as a technology, an agent of communication, a cultural context, or an autonomous organism (Ropolyi, 2006). This complexity is reflected in the disciplinary diversity of the studies: researchers approach it from sociology, pedagogy, politics, law and media, etc. Psychology is just one of these disciplines, but its contribution can be valuable as deep analysis of the human element can shed light on otherwise invisible mechanisms. However, the picture is not one-sided; not only the internet can benefit from the connection of the two fields, the digital ‘virtual’ reality also creates a new social context with such unique characteristics that it gives an opportunity for testing existing theories and concepts of psychology, in order to identify new variables or introduce new mediating factors.

We, the editors hope that this thematic issue will be an important step toward boosting internet-related psychological research in Hungary.