



(Un)safe screen time? Critical theoretical-empirical analysis

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Abstract:

The fundamental source of the reflection make up the theoretical-empirical data referring to a phenomenon, which in the era of technological progress is of particular importance: the phenomenon of screen time. Besides defining the key term screen time refers to all activities done in front of a screen. This includes: using a computer, watching TV, playing video games (Kaneshiro, 2015), the paper provides an overview of research results concerning the opportunities and threats arising from the use of new media, as well as recommendations for education on the need for media literacy among the younger generation (Szkudlarek, 1999; Tanaś, 2010, 2011).

1. Introduction

Prevalence and usage of media

Media which relate to education and other humanities are increasingly the subject of studies and convey to numerous scientific reflection. The virtual world presented in the media is, in fact, a colourful, desirable and extremely attractive world, especially for a teenage audience (Andrzejewska, 2008). Young children have been growing up with all the new technologies and hand-devices. These inventions are encoded in child's daily routine as "the tools of culture at home. At school, at work, and in the community" (National Association for the Education of Young Children, & the Fred Rogers Centre, 2012). It is not surprising then, that the amount of time spent weekly on the use of various media have been increasing. As research indicates multi-screening is very common and 51% of young people will use smartphone and laptop simultaneously. One in three participants claimed that their smartphone is a 'lifesaver'. Smartphone also seems to be adolescent's most personal device (Iabuk.net, 2013).

Research shows that the most commonly used medium is television. In addition, there is an upward trend of popularity of computer games. About 10% of people between two and 18 years old spend more than an hour per day playing computer games, out of which eight to 13 year old boys spend on average more than 7.5h weekly (Rideout, Foehr, Roberts, Brodie, 1999). Recent results indicate that there is an increase in the amount of time spent by young people on playing in computer games.

The research evidence indicated that majority of middle school students have computer (95,5%) and play computer games (74,2%). Almost half of them play in computer games containing violence (42,2%), and one-fourth of them plays strategic games (25,8%). Overall, they sacrifice about two and a half hours (154 min) daily for playing computer games. Middle school students spend just over an hour (66 min) daily for playing computer games which contain violence, and almost half an hour (26 min) per day is spent on



playing strategic games (Mikolajewska, Mikolajewska, 2015). An adult with shaped character and personality manifests critical attitude to the content presented in the media. In the case of young people in particular, the lack of criticism and excessive openness entails difficult to predict personal and educational consequences (Juszczak, 2007, pp. 32-38). The beneficial potential in use of electronic media has been an issue of discussion and resulted in dividing researchers to their advocates, who think screen time is useful in child's development, and opponents, who show contradictory line of reasoning. The culture of possession and use of hand-devices, computers and TV, which are associated with the screen time, is so widespread that we cannot separate it from educational, communication and other purposes (Mikolajewska, Mikolajewska, 2015, pp. 61).

Therefore, if it is not possible to exclude them from our lives, we should be able to take the best advantage of them. In order to draw pros and cons of media use we need to explain what we actually mean by screen time. This term refers to all activities done in front of a screen. This includes: using a computer, watching TV, playing video games (Kaneshiro, 2015). However, now the scope of tools has expanded due to the very quick pace of technology advancement. Nowadays, 'screen time activities' involve iPods, iPads, smartphones, tables and the list continues!

2. Categories of impact

In terms of medias' impact on human, the three categories have been distinguished: (1) relative to the impact of the media device (on its own), (2) impact on the body's posture (physical consequences) and (3) the impact on the psyche (condition of one's mental state) e.g. addiction or psychophysical fatigue (Białokoz-Kalinowska, Piotrowska-Jastrzębska, 2005). The most frequently named, in the literature, determinants of impact of the new media on youngsters concern psychological and physical factors, and interactivity in the aspect of the immersion phenomenon. Griffiths draws attention to the threat of replacement of healthy leisure activities by the computer games, including those of recreation and outdoor sport (Griffiths, 2004, pp. 49). This creates peculiar health consequences e.g. obesity or overweight due to lack of movement (physical activity), development of carpal tunnel syndrome, or diseases of the skeletal system. On the other hand, the new media is an invaluable source of development potential of the young generation both in educational and therapeutic as well as in shaping pro-social attitudes. Active experience of the acquired content enhances consolidation of knowledge, transferability of skills and allows for quick and easy transition from passive to active (acceptance of) knowledge. It is also a useful tool in motivating to perform teaching, through operationalisation i.e. the practical application of theoretical knowledge in all kinds of situations.

3. Is technology useful in the process of teaching?

The indicated benefits of the use of media in teaching process seems to be a truism. They are considered to be indispensable tools for collecting, processing, presentation of information and above all provide much needed interaction in the learning process. In addition, modern teaching tools have cognitive, educational and teaching functions in the teaching-learning process (Bednarek, 2012, pp. 14). Therefore, it is not surprising that the polarisation of opinions, regarding potential threats and benefits arising from the use of new technologies, occurs here.

Since television have assisted children in development for the longest period of time (in comparison to phones, computers etc.) we will start with TVs. In 1968 'Children's Television Workshop' was created to serve children at kindergarten age a support in their social and educational development. It resulted in a series of TV programmes such as Sesame Street, 3-2-1 Contact, The Best of Families. They were designed to combine educational aims (such as teaching alphabet or numbers) and entertainment with a target to reach children at preschool years (Singer, Singer, 2005). These research-driven projects turned out to be successful thanks to a good design of slow paced action, age-appropriate content to eventually have a positive effect on child social development and later school achievement (Education.stateuniversity.com, 2010). Nevertheless, child's own, natural development tends to be underestimated and the advances a toddlers makes on its own are considered to occur due to video exposure (DeLoache, Chiong, 2009). The American Association of Paediatrics (AAP) suggests that screen time should not be available to children under the age of two e.g. 'Baby Einstein' videos – there is no evidence they bring any benefits into child's cognitive development (Bower, 2010). However, it has



been supported that children under the age of two watching TV show problems with mastering speech and language. Also, recommendations stemming from research indicates that toddler's cognition is more efficient with the use of real life examples than from videos and that early overuse of technologies may be associated with poorer and slower cognition (Kirkorian, Wartella, Anderson, 2008). Children respond to and imitate parents' behaviour better when in social interaction with carer, which supports Vygotsky's assumption about the importance of social experiences to development of child's cognitive functions (Barr et al., 2008). At the same time, children older than two years old should not be exposed to television watching for more than two hours (Chonchaiya, Pruksananonda, 2008). Nowadays, as shown by Kaneshiro (2015) for the majority of American children three hours of TV watching is their daily routine which is obviously more than the recommended amount of time. Overall, the total for screen time ranges from five to seven hours a day. Also, 90% of children aged zero to eight use a computer at least once weekly, with the number of 29% of children who use a computer several times a week (Anonymous, 2011). The statistic is not favourable due to the sedentary nature of the activities (such as television watching or using a computer). Since it demands very little usage of energy it affects child's physical development by leading to obesity (Ashton, 2004) posture defects (Salter, 1983). Moreover, advertisements seen on screens may teach unhealthy eating habits i.e. advertising high in calorific value, full of fat fast foods and low-nutritive sweets and beverages. It has been suggested that the increase in TV watching time is associated with higher rates of obesity. It primarily affects children at the age of 12 who are most exposed to advertisements and are at the time of starting their own independence (looking for own taste, preferences and using pocket money on treats) (Kaiser Family Foundation, 2007).

As indicated by the UK Internet Advertising Bureau (IAB) 99% of 8-17 years olds have played video games within the time of the last six months (Stuart, 2014). Research reveals that both violent TV programmes (Wilson, 2008) and violent video games (Apa.org, 2015) do enhance child's aggressive behaviour. However an accurate comment was made that "It is not violence itself but the context in which it is portrayed that can make the difference between learning about violence and learning to be violent" (Wolfe, Jaffe, Crooks, 2008, p.70) which implies that parental supervision over the content seen and amount of time spent in front of the screen is necessary. Therefore, the importance of appropriateness of message sent to a child accordingly to child's age should not be underestimated (Hobbs, 2011), since the aggressive content may have profound influence on child's social development. Parents should be familiar with ratings systems and codes for video games were developed to help parents in controlling for what their child has got access to (Sweet, Singh, 1994). Although usefulness of these indicators is doubtful – age limits are set rather loosely and inconsistently – it is necessary to familiarise with a game and make a child aware why such and such behaviour is not appropriate (Mikolajewska, Mikolajewska, 2015). Although, some research indicates video games enhance multitasking, findings of a research conducted by IBA, which included 4 000 surveys and 20 interviews, revealed that playing games demands absolute attention from the person. Thus, the player is cut out from the rest of the world, unconcerned about external stimuli which does not allow for development of prosocial behaviour (Stuart, 2014).

Although the never-ending debate on whether the screen time has a detrimental effect on child's development some conclusions may be drawn. Neither of the extremes should definitely supported since there is no vivid consistence in one trend. Therefore, it would be so untrue to say that exposure to screen media has only and exclusively negative impact on child's development. As Barbara Wilson stresses "media influence on children depends more on type of content that children find attractive than on sheer amount of time they spend in front of the screen" (Wilson, 2008). Therefore, the focus should be located on the quality of screen media that we have access to. Some cross-cultural pattern and differences can be noted. Research seems to be consistent in one aspect – that parental monitoring is key to beneficial use of screen media by children. Children need to be taught what violence is and why it is wrong, instead of how to be violent. In this way, we can avoid media illiteracy, so children, especially adolescents can critically evaluate the content of given information. The most important point is that any technology should never be an equivalent of parental or carer's supervision. Stimuli offered to a child from a living person, enhancing to interaction is the best environment a child could ever ask for. The final point is the primary emphasis in research needs to shift from hitherto television to newer technologies.

4. Recommendations for education

In summary, the new media/technologies are an invaluable source of development opportunities of young people in terms of education and training (learning foreign languages, history etc.), therapeutic (improving social deficits), as well as in shaping social skills e.g. cooperation, logical or divergent thinking. On the other hand, unconscious use of the media can be a source of threats, both in terms of addictions, ease of access to an inappropriate content (erotic, sexual content) or being exposed to negative behaviour models, which takes on a new significance, especially in view of the phenomenon of interactivity and immersion. However, as this has been indicated in the introduction, each of these options require a separate inspection of pedagogical (Tanaś, 2010).

These considerations prompt to reflect on the role of schools, teachers and parents in the context of teaching, with regard to the use of media. They also draw attention to the need for media education (media literacy) among not only children, youths and teachers but also parents. The necessity of media education is a topic often touched on in scientific and political discourses. Pointing out the need for media education in the modern world seems to be a truism. European Parliament resolution of 16th December 2008 on media literacy in the digital environment (2008/2129) (INI) indicates clearly that media education is crucial for all citizens: children, adolescents, adults, elderly and disabled people. In addition, the act stresses that media education should be a part of formal education and an integral part of the curriculum at every level (UE, 2008, s. 13).

Therefore, it is even more surprising that media education has not secured a right place in education systems yet. It is true that Polish education system paves the path of teachers work, which applies to the field of implementation of media education. However, it only generally indicates the need to use media or encourages to reflection on the use of technology, leaving teachers to freely interpret the recommendations as well as to take an independent decision as to the possible scope of use of the guidelines. Procedures regarding ways of evaluation of the implementation of the curriculum have not been placed yet (Stunża, 2012).

Pedagogy still faces respectable challenge with the need to find suitable place for media education (Tanaś, 2010, 2011). Although “school medialisation” is written in the core curriculum, it is just entering a path of change as an educational institution. The target is still far away from current point (Stunża, 2012). Words spoken over twenty years ago by Szkudlarek Tomasz (1999) are still alive and valid. Szkudlarek suggests that we are only reaching the point at which ‘mediality’ of the contemporary culture will be transported onto the ground of the educational practise.

“However, for this to happen it is necessary to realise what threats and benefits come with medialisation. Once we are familiarised with this knowledge we will stop being afraid of them and begin to actively use <(no longer new)> technologies in the process of production (and not only reproduction of) knowledge. The current state of affairs – the state of isolation, separation of school from the most fruitful areas of culture, harboring the most significant content for the understanding of the present – in the long run it is impossible to maintain” (Szkudlarek 1999, p.11).

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