

Digitalization in the Role of Humanization or Dehumanization of Modern Society

Ivana Rašan

University of Zagreb Faculty of Electrical Engineering and Computing, Zagreb, Croatia
ivana.rasan@fer.hr

Abstract - Although digitalization has greatly facilitated many areas of life and life without it is almost unthinkable today, it should also be considered in which situations digitalization has made life more difficult for modern society. On the one hand, there is the availability of a wide variety of content, as well as the ability to communicate with anyone at any time, on the other hand, it is difficult to draw the line between healthy and unhealthy life of today's individual. There is also the question of the reality and unreality of life, given the values of life mediated by the media, from which there is a constant tendency to present one's life as ideal compared to others (which is also confirmed by the results of this research). This paper points to a kind of phenomenon of unconsciousness of the continuous impact of digitalization on people and emphasizes the need to raise awareness of the advantages and disadvantages of digitalization. It emphasizes the need to optimize the use of the opportunities provided by the digital age and the need to significantly rationalize the human being.

Keywords - digitalization; individual; media; modern society; reality

I. INTRODUCTION

Discord occurs in almost all segments of society, and the beginning of it may be sought precisely in the discord of the individual, who is evidently incapable of acting within the limits of the unlimited freedom represented. The freedom of choice today in fact becoming the tyranny of choice [1]. Imposed and media propagated needs and values (how to live healthy, how to look, what to eat, what places to visit, what clothes to buy, what hairstyle to have, what coffee to drink, what rights to fight for, which social network to prefer) simply do not fit the essential human needs (food, water, society), but require an adaptation to them. That adaptation is important so that an individual can survive in the society he wants to belong to and not live on the margins of it, regardless of these imposed values that create a dichotomy in the very essence of the human being. McLuhan claims, that confusion and unknowing of interpreting things that are happening around us can be transferred as characteristic of today's society [2]. His interpretation related to the theater of absurd implies that individuals are acting as some persons of actions, but the real situation is that they are standing beyond the action [2]. This points to inconsistency and an "inconsistent" individual is very suitable material for manipulation. The fact that the individual, or more precisely society, is unable to recognize how it is being

manipulated about essential changes in man as a true social being, favors the imposition of a kind of freedom propagated by the digital media and enabled digitally, which in fact becomes a prison for today's individual. That figuratively expressed prison, implies the appearance of an enormous burden, indicating a kind of dependence on the representation of one's life in a much better world relative to reality. It also raises the question of whether today's man can even distinguish between reality and virtual reality and realize that technology is just a tool that should be used by man to make his life easier. When today's society allows itself to be carried away by statements such as that of the former Microsoft CEO Steve Ballmer, who in his public appearances points out that today it is no longer man who must understand technology, but technology who must understand man [3], then one can speak of a total dehumanization of man. Why and where is freedom? Can man be free if he does not ask himself about meaning, if he does not understand himself and others around him, and if we only surrender to transience? If contemporary man no longer needs to use the brain and the power of thought, what is contemporary man for anyway? After all, isn't it man who should program the machine to work in the service of making man's life easier, and not the other way around? All these questions insinuate the now neglected role of philosophy, which emphasizes that "the modern social crisis is often felt by the citizen as the superiority of technology over man, as the enslavement of all humanity by the cold logic of the technical process" [4]. At the same time, existential philosophy points out that man should be free to lament his vulnerability and feel human in the painful spasm of self-consciousness [4]. Man lat. homo sapiens - intelligent man as such is destined to think and understand [5], and if this fact is denied in order to give priority to technology, society will lose its essence of existence. It can be concluded that man should have the intention and desire to understand the world around him, for only then can he retain his essence of humanity and struggle.

The goal of this paper is to point the changes in modern society that can lead to significant negative consequences if the pursuit of understanding is suppressed or cease to exist. One of these consequences refers to the research of the World Health Organization, which predicted depression as the second most important health problem of modern society in 2020 [6]. That fact is not consistent to the modern society that is presented like the society of total

freedom and in which today's modern individual has availability to almost everything that he can imagine. Technology is advancing day by day and today's modern individual is not capable to follow that significantly and rapid changes. If today's individual wants to compete with the technology, it is necessary to act like a machine.

This assumption can imply that technology brings today's society to the dehumanization of itself. Some authors pointed out the importance of modern media in the field of life and reality creation [7]. In this point, learning not only the methods which enabling the using of technology, but also learning how digital technology functioning and how to understand it should be recognized as an imperative in regard to stop dehumanization of a today's society.

II. AN INDIVIDUAL IN THE DIGITAL SOCIETY

Education on how to think and understand, must take place in everyday life in the context of digital technology and the possibilities that, on the one hand, can be a wonderful tool that can make life easier, but on the other hand, can also cause a high level of stress for today's individual. For example, social media and media in general impose in everyday life a kind of ideal image of who we have to be, what we have to look like, what kind of life we have to lead, and so on. Many adults are so busy creating ideal images of their lives for their social media profiles that they have forgotten how to live their real lives, they have forgotten how to relax, how to enjoy everyday things. Instead of enjoying, they are almost always stressed about how they will present their lives on their profiles. The content that people post on social networks is far from reality, everything is beautified, presented as ideal, often creating a false image of what is beautiful and what is imposed as a concept of beauty and various other ideals of life. It is important to realize that Facebook, as one of the largest social platforms on the Internet, in fact present the "illusion of the ideal" and that is worrisome [8].

When we talk about content on social medias - content enabled by digitalization, we should keep in mind the fact that physical appearance is now imposed as something that must be perfect. This overlooks the fact that someone who is perfect according to someone else's concept of beauty can be completely imperfect to others. The imposed notion of beauty, reinforced by the influence of today's visual media, can be especially fatal for young people, both, girls, and boys. Interestingly, the research from 1991 points out that a daughter born after 1960 sees more pictures of unattainably beautiful women in sexual poses every day than her mother saw during her entire adolescence [9]. Various studies suggest that media images of body ideals can indeed influence one's feelings about one's body [10]. In this regard, it is very important to point out that a body ideal exposed to the media is genetically unattainable for 95% of women [11]. So, it is very important to raise awareness of the possibilities of technology, digital society, and awareness of the intentions of the media in propagating certain ideals is for today's individual. When society is aware and understands, it can also more easily deal with various imposed ideals and create its own true ideals in every segment of life. Furthermore, awareness and understanding make it possible to resist the burden of

mapping one's life into some digitally false-perfect form and allow one to truly live life without the added burdens associated with the parallel mapping of the "other" life. It is fine to share nice thoughts with friends, it is fine to share photos from a trip, but spending half and more of your time while on vacation editing photos to present them as ideal on your social media profiles leads to a kind of oppression to a non-existent "online" life. When talking about these issues, it is interesting to go back to the interpretation of McLuhan's Theater of Absurdity, in which individuals pretend to be people of the action, but in reality, they are beyond the action [2]. The question is whether today's modern society is stuck in the digital network as a kind of prisoner or is it possible to realize that technology is a good thing, but with the condition of understanding it and having in mind that technology must serve society and not the opposite.

III. INTERPRETATION OF RESULTS

With the intention of testing people's awareness of the impact of digital technologies on their lives, a questionnaire was created consisting of 22 statements (for example: *I believe that the content people show on their social media profiles (Instagram, Facebook) is true, etc.*) and participants were asked to answer to what extent they agreed with each statement. A Likert scale of 1 to 5 was used (1 = strongly disagree, 2 = mostly disagree, 3 = neither agree nor disagree, 4 = mostly agree, 5 = strongly agree). The questionnaire also included 6 statements (for example: *I use my mobile phone before I go to bed, etc.*) and participants were asked to estimate the frequency of events related to the statements offered on a scale of 0 to 6 (0 = never, 1 = very rarely, 2 = rarely, 3 = sometimes yes, sometimes no, 4 = often, 5 = very often, 6 = always). The survey was distributed electronically to a wider population by using the snowball sampling technique and the sample is convenience (N = 317). The data were statistically processed. To obtain information about the existence of significant statistical differences between individual groups (age, gender), the data were processed in the IBM SPSS Statistics 21 [12] program package and the Mann-Whitney U test (with the extension of the Kruskal-Wallis H test) was used. The sample is suitable for the statistical methods of data processing used (nonparametric test). The limitation of the research relates to the honest or insincere responses of the respondents to certain questions (e. g. it was more appropriate for them to present themselves as person claiming *I do not cheque when the person was last online*) to present themselves in the desired light, although anonymity was guaranteed.

The basic premise of the research is that people are unaware of the impact of digital technology on their lives. The results obtained (Fig. 1) suggest that there is a significant percentage of people who are not aware of the embellished content shown on social networks, which can be burdensome for them (especially for the younger population) in the context of understanding other people's lives better than their own. It is therefore very important to make young people, but also society in general, aware of the various possibilities offered by digital technology when it comes to editing content.

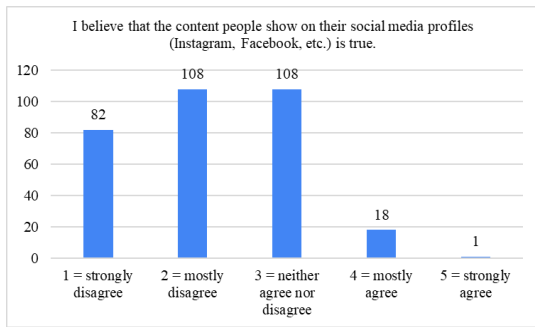


Figure 1. Rating the truthfulness of content posted on social media

It is interesting (Fig. 1) that although 60% of the respondents believe that the content that people display on their social networking profiles is untrue, still 34.1% of the people are not sure whether this content is true or not, while 6% of them believe that this content is almost true. It would also be interesting to study how much time different age groups spend editing content before it is available online. When it comes to awareness of the impact of digital technologies on children, the results show that people are aware of some negative aspects that digital technology brings (Fig. 2, Fig. 3).

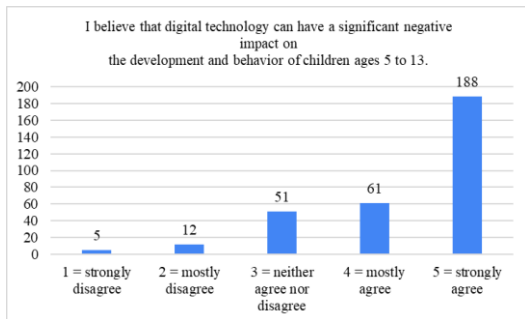


Figure 2. Estimation of digital technology as a negative factor in the development of children aged 5 to 13 years old

For example, 78.5% of respondents believe that digital technology has a detrimental effect on the development of children aged 5 to 13 (Fig. 2) and 92.8% of respondents believe that parents often give their children mobile phones for entertainment (Fig. 3). Previous research on this topic suggests that children who have more exposure to digital technologies and less control over the content they consume show signs of aggression and inappropriate behavior [13]. In addition, children's use of computers can lead to a range of negative effects, such as impaired creativity, social isolation, difficulties related to language development, etc. [14]. Considering the results presented in Figure 2 and Figure 3, it can be concluded that the respondents are aware of the harmful effects of digital technology on children. They also note that parents often give mobile phones to their children to entertain them (Fig. 3). What should be emphasized in any case is that the basics of a healthy childhood include a strong bond with adults who care for them and time to play, keeping in mind that accelerating a child's development is contrary to the natural pace of human development [14].

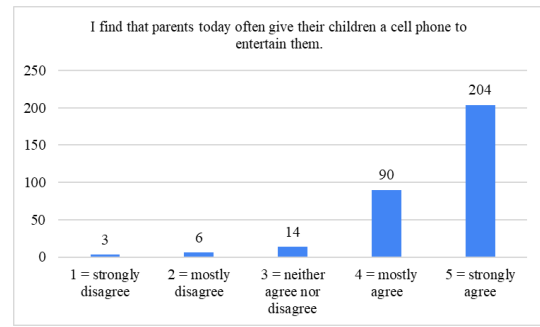


Figure 3. Perception that parents too often give their children mobile phones for entertainment

Interestingly, when it comes to awareness about the impact of digital technology on the respondents, it is found that 37.9% of the respondents believe that digital technology does not affect their mood and as much do not know whether it affects them or not, while 24.3% of them estimate that digital technology affects their mood significantly (Fig. 4).

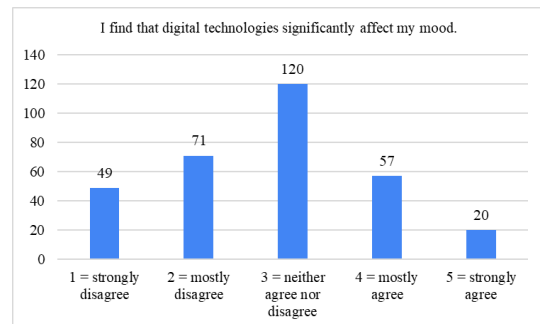


Figure 4. Self-assessment about the influence of digital technology on the respondent's mood

However, when it comes to assessing the influence of digital technology on other people's mood, the situation is fundamentally different. Here, 51.7% of the respondents believe that digital technology significantly influences other people's mood, while 39.1% of them cannot estimate and only 9.2% of respondents believe that it has no influence (Fig. 5).

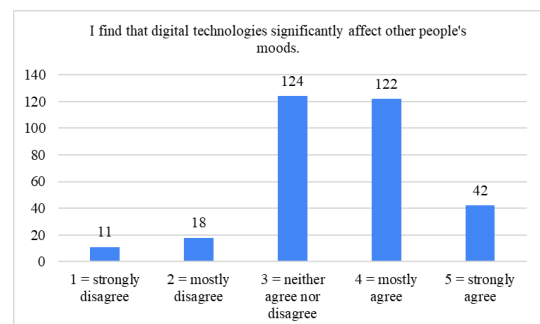


Figure 5. Respondents' perception of the influence of digital technology on others' moods

Whether the impact of digital technology is on adults or children, it is important to point out that awareness needs to be raised, as well as the recommendations of experts who say that the whole family should ensure at certain hours the parts of the day when they do not use technology, more specifically the "technology-free zone", and dedicate this time to talking to each other [15]. When it comes to awareness of the impact of digital technology on people, it is important to point out that as many as 69.7% of respondents said they almost always use their mobile phone before going to bed (Fig. 6).

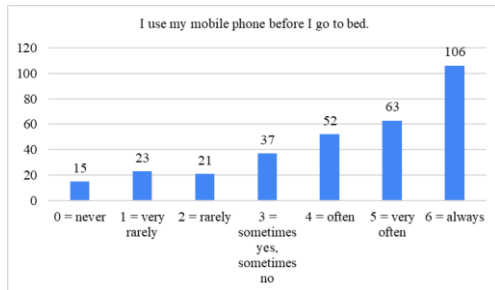


Figure 6. Use of the mobile phone before going to bed

In addition, 51.4% said that as soon as they wake up in the morning, they look at a mobile phone and check if they received any messages (Fig. 7).

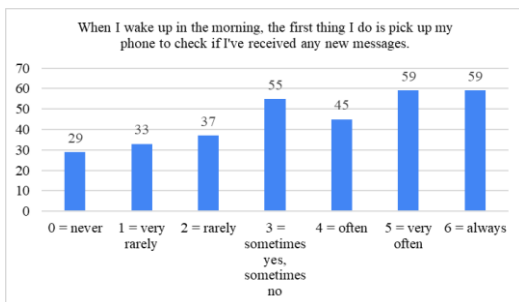


Figure 7. Use of mobile phone first thing in the morning

It should certainly be noted that various studies suggest the harmfulness of using mobile phones before bedtime (especially on health) [16]. These results (Fig. 6, Fig. 7) show that people are unaware of the impact of technology on their lives, and the results presented in Figure 8 and Figure 9 further support that unawareness.

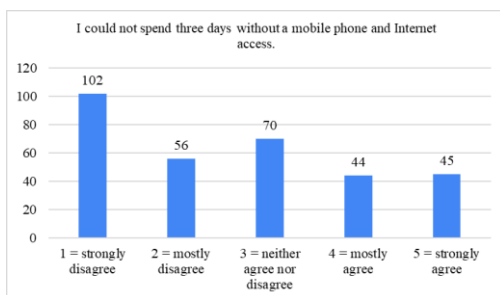


Figure 8. Ability to spend 3 days without mobile phone and Internet access

It is contradictory that 50% of respondents believe they could spend three days without a mobile phone and Internet access (Fig. 8), and 42.3% of respondents believe they are dependent on a mobile phone and the Internet (Fig. 9). This also indicates a certain level of unawareness regarding the dependency on digital technology.

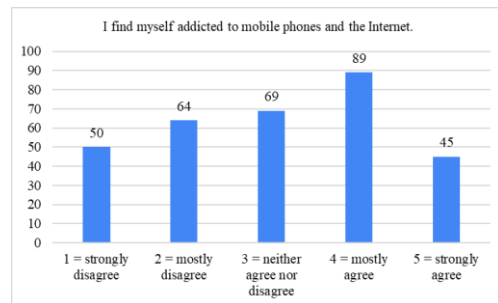


Figure 9. Expressing one's own dependence on mobile phones and the Internet

All the results obtained point to the need to raise awareness of the impact of digital technology on people.

In addition, it was examined whether there were significant statistical differences in responses related to gender and age for certain statements. For the following statements it was tested whether there were statistically significant differences between the groups in terms of gender (Mann-Whitney U test) and age (Kruskal-Wallis H test): A) I believe that digital technology contributes greatly to the quality of communication in society; B) When I meet with friends, I often look at my phone during conversations; C) I could not spend three days without a mobile phone and Internet access; D) I believe that if the Internet disappeared, I could use a paper road map to find my way to a place I have never been; E) When I send someone a message through an online communication tool (Viber, WhatsApp, etc.) and the person doesn't answer me right away, I check "last online" several times until I get a response; F) I find that the people around me are mostly happy and content. The results of Mann-Whitney U test for the tested statements (A-F) - mean rank and sum of ranks for two tested groups (male and female) are shown in Table 1 and Table 3, while Table 2 and Table 4 show the mean rank and sum of ranks for different age groups tested by Kruskal-Wallis H test.

The intention was to check whether there are statistically significant differences in responses in terms of gender and age when it comes to the view of whether digital technology contributes to the quality of communication. The results showed that 54.5% of the respondents agreed with the statement that digital technology contributes significantly to the quality of communication. Considering the obtained results of Mann-Whitney U test ($U=9694.500$, $z=-2.011$, $p<0,05$), it can be concluded that there are significant statistical differences related to gender when it comes to the respondents' assessment of the statement that digital technology contributes significantly to the quality of communication in society. More specifically, men agree with this statement at a higher percentage than women (Table 1).

TABLE I. MANN-WHITNEY U TEST RANKS FOR THE STATEMENTS (A-C) BY GENDER

	Gender	N	Mean Rank	Sum of Ranks
A) Digital technology contributes significantly to the quality of communication	M	106	173.04	18342.50
	F	211	151.95	32060.50
B) Watching mobile phones while hanging out over coffee	M	106	164.40	17426.00
	F	211	156.29	32977.00
C) 3 days without mobile phone and internet access are possible	M	106	145.31	15403.00
	F	211	165.88	35000.00

A Kruskal-Wallis H test showed that a statistically significant difference between the different age groups related to the perception that digital technology significantly contributes to the quality of communication does not exist ($\chi^2(5) = 1.699$, $p > 0,05$). Looking at the results in relation to whether respondents often look at their mobile phones while hanging out with friends over coffee, Mann-Whitney U test ($U=10.611000$, $z=-0.765$, $p > 0,05$) show that there are no statistically significant gender differences in terms of agreement with the above statement. A total of 24.7% of the respondents stated that they often look at their mobile phones during the conversation with others. Interestingly, as many as 26.5% of respondents cannot assess whether they do this or not. A Kruskal-Wallis H test showed that there was a statistically significant difference between the different age groups in looking at mobile phones while hanging out for coffee ($\chi^2(5) = 23.023$, $p < 0,05$). From the results presented in Table 2, it can be concluded that this is most often done by people aged 31-40 years, which is very surprising as it was expected that this is often done by respondents in the age group of 18-25 years.

TABLE II. KRUSKAL-WALLIS H TEST RANKS FOR THE STATEMENTS (A-C) BY AGE

Age	A) Digital technology contributes significantly to the quality of communication		B) Watching mobile phones while hanging out over coffee		C) 3 days without mobile phone and internet access are possible	
	N	Mean Rank	N	Mean Rank	N	Mean Rank
18-25	36	146.24	36	165.47	36	188.53
26-30	53	160.31	53	152.73	53	168.14
31-40	125	156.56	125	179.26	125	151.35
41-50	58	163.06	58	150.97	58	157.71
51-60	29	165.98	29	136.81	29	147.69
61 and more	16	175.06	16	76.25	16	147.25
Total	317		317		317	

Mann-Whitney U test ($U=9.732.000$, $z=-1.939$, $p > 0,05$) show that there is no statistically significant difference in terms of gender when considering the respondents'

estimation of whether they could spend 3 days without mobile phone and Internet access. Here, 28.1% of the respondents agreed with the statement that they would not be able to spend 3 days without mobile phone and Internet access. A Kruskal-Wallis H test showed that there was no statistically significant difference between the different age groups regarding the ability to spend 3 days without a mobile phone and Internet access ($\chi^2(5) = 6.192$, $p > 0,05$). Mann-Whitney U test ($U=8.704.500$, $z=-3.452$, $p < 0,05$) show that there are significant statistical differences in terms of gender when it was tested whether the respondents knew how to get around on a paper road map. More specifically, from the results obtained, it can be concluded that males believed to a greater extent that they could handle a paper road map (Table 3).

TABLE III. MANN-WHITNEY U TEST RANKS FOR THE STATEMENTS (D-F) BY GENDER

	Gender	N	Mean Rank	Sum of Ranks
D) Finding the right way with the help of a paper road map	M	106	182.38	19332.50
	F	211	147.25	31070.50
E) Check if the person was online and did not reply to my message	M	106	133.95	14199.00
	F	211	171.58	36204.00
F) Perceiving happiness in the environment	M	106	175.36	18588.00
	F	211	150.78	31815.00

A Kruskal-Wallis H test showed that a statistically significant difference between the different age groups related to capability of finding the right way with the help of a paper road map exist ($\chi^2(5) = 42.771$, $p < 0,05$). As expected, the results show that the paper road map could be used by the respondents in the age group 61 and above and the respondents in the age group 41-50 (Table 4).

TABLE IV. KRUSKAL-WALLIS H TEST RANKS FOR THE STATEMENTS (D-F) BY AGE

Age	D) Finding the right way with the help of a paper road map		E) Check if the person was online and did not reply to my message		F) Perceiving happiness in the environment	
	N	Mean Rank	N	Mean Rank	N	Mean Rank
18-25	36	101.90	36	178.03	36	162.83
26-30	53	140.41	53	181.65	53	199.04
31-40	125	152.90	125	155.17	125	161.50
41-50	58	204.14	58	163.08	58	145.28
51-60	29	168.69	29	139.53	29	126.33
61 and more	16	215.56	16	91.59	16	107.13
Total	317		317		317	

Interestingly, according to the Mann-Whitney U test ($U=8.528.000$, $z=-3.500$, $p < 0,05$), there are statistically significant differences between the gender which points out that women check more often the "last online" status of someone to whom they send a message on a mobile phone

if that person does not respond immediately (Table 3). A Kruskal-Wallis H test showed that there was a statistically significant difference between the different age groups regarding checking when the person was "last online" ($\chi^2(5) = 15.622$, $p < 0,05$). Although it was expected that respondents in the 18-25 age group would do this most often, the results show that respondents in the 26-30 age group most often check the status of the person to whom they sent the message (Table 4). Respondents over the age of 61 rarely do so (Table 4). Mann-Whitney U test ($U=9.449.000$, $z=-2.425$, $p < 0,05$) show that statistically significant difference by gender exist, and men are more likely to think that people around them are happy and satisfied. Since the results showed that 47% of the respondents think that people around them are happy, but as many as 87.4% think that people are overwhelmed with the content they show on social media, the question arises whether people are truly happy, if they constantly want to present themselves in a better light in virtual environment. Kruskal-Wallis H test showed that there is a statistically significant difference between the different age groups in terms of perceiving happiness ($\chi^2(5) = 23.620$, $p < 0,05$), and age group 26-30 are most likely to think that people around them are happy (Table 4).

IV. CONCLUSION

The results of the research suggest that respondents are partially aware of the extent of the impact of technology on them and their lives. It is interesting to note that only 24% of the respondents believe that digital technologies have a significant impact on themselves, but on the other hand, 52% of the respondents believe that digital technologies have a significant impact on the people around them. Insufficient awareness about the impact of digital technologies on respondents' lives is also indicated by contradictory answers (e. g. 42% of respondents believe that they are addicted to mobile phones and Internet, but on the other hand 50% of respondents believe that they could spend 3 days without mobile phones and Internet). At the same time, addiction to digital technology could be indicated by the fact that almost 70% of respondents use mobile devices before going to bed, while 51% of them do so as soon as they wake up. These findings also indicate that respondents are not aware of how harmful certain behaviors could be for them in terms of health and how much it can actually affect the quality of their life. Therefore, rising the awareness in regard to minimize certain behaviors (e. g. using mobile phones before bedtime) is really necessary. It would be interesting to explore what people would do before going to bed if they

were banned from using mobile phones. It is important to point out that digital technology now plays a very significant role in everyone's life. However, it is overlooked that there is a lack of educational activities on digital technology to create public awareness about its positive and negative effects. Therefore, it is important to educate the society and emphasize that technology exists to serve man and not that man would be an unconscious slave to the opportunities it offers.

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