# CORVINUS UNIVERSITY OF BUDAPEST DOCTORAL SCHOOL OF SOCIAL COMMUNICATION

## THESIS SUMMARY

FOR THE PHD DISSERTATION ENTITLED

# EXAMINATION OF FACTORS DEFINING ONLINE NEWS SELECTION WITH SPECIAL REGARD TO SYMBOLS, IMAGERY AND VIDEO MATERIAL ATTACHED TO NEWS

BY ISTVÁN KÓSA

Advisor: Dr. Özséb Horányi, professor emeritus

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Some investigations are directly linked to my research because they have made use of illustrations, in particular, threat-depicting news illustrations. For example, Zillmann, Gibson and Sargent (1999) as well as Sargent (2007) examined the effects of photographs in news magazines showing that, regardless of whether the photos attached contained violence or not, consumers spent more time reading the texts that had photographs attached.

Layout effects were also revealed by using variations of the aided-recall method. Graber (1988) found that formal importance cues such as larger headlines and photo illustrations promoted selective reading. Rosenstiel and his team (2016) created a unique data set of more than 400,000 stories from publications and formulated emerging patterns of what people engaged with, and revealed powerful evidence of the influence of non-narrative online content such as photos, audio and video.

I carried out the two empirical researches belonging to my thesis within the framework of a theoretical and research paradigm – the so-called *selective exposure paradigm* – to which little attention was paid in the history of Hungarian media research. One of the basic assumptions of this paradigm is that the attention of researchers focuses on what happens *before* the media effect in the traditional sense,

namely, on the choice of media content. From the perspective of the selective exposure argument, the results of many correlational media effect researches become questionable (Knobloch-Westerwick 2015: 4).

Further on, the novelty of the present thesis consists in that

- it offers, on the one hand, a meta-analysis of the specialist literature on the cues that can be found next to the online news and that have an effect on the choice of news – symbols, images and video materials; on the other hand,
- I also offer a meta-analysis of mechanisms playing a role in the production, utilization and sharing of news such as agenda-setting, gatekeeping, media logic, news values and framing in legacy media and new media. In the case of all of these mechanisms I pay special attention to the topic of my thesis, that is, to all the new references in specialist literature referring to cues that have an effect on the choice of news;
- in the course of two quasi-experiments I analysed, with the help of the research group led by me, the utility effect of journalistic cues and camcorder symbols that can often be found next to the news and that of the information on the choice of news. To my knowledge, no research on the effect of the journalistic cues upon the choice of headlines has been carried out so far with the combined inclusion of these variables and with the utilization of the eye tracker. It is a particular merit of our

research, in my view, that in the selective exposure to visual materials it investigated the effect of visual materials on the choice of headlines in a way that it also surveyed the cognitive style and information processing mode of those involved in the experiment with the help of the IDQ test (Paivio and Harshman 1983).

# 2. Methodology Applied

In my thesis I compared the selective exposure paradigm with the usesand-gratifications approach in order to highlight the research methodological specificities used by me in the empirical research.

One direction of media effects theories is represented by Elihu Katz, Jay G. Blumler and Michael Gurevich's uses-and-gratifications approach (Katz et al. 1974/2007: 210). The approach is based on the premise that media users are self-aware of the motivations of their media use and they can also report on them. In accordance with this fundamental conviction, the representatives of this paradigm prefer the self-report data/methods from among the scientific data collection techniques. However, several researches carried out within the framework of the selective exposure paradigm demonstrated – Knobloch 2003, Zillmann 1985, 1988 – that media users *are not fully aware of the mechanisms guiding the choice of media contents and of* 

their own motivations either, this is why they are incapable of giving accurate answers in the course of surveys based on otherwise inaccurate scales. At the same time, the participants of the research *cannot accurately call up* why they have chosen the respective media content, in this way the factors enumerated here endanger the validity of the data collected through self-reports. Evidently, the desire to meet the expectations of researchers, to create a better image of themselves during the self-report may distort data recording (Knobloch-Westerwick 2015: 7-8).

From among the dominant data-collection methods for media choices, the selective exposure paradigm prefers *behavioral observation* to self-report; as regards the research design, it considers the *experiment* and the quasi-experiment as being reliable rather than the already mentioned survey.

In the course of the two quasi-experiments led by me we have followed the methodological principles outlined above.

#### 3. Thesis Results

Our research group led by me, including as members Assistant Professors dr. Blanka Bálint and dr. Andrea Sólyom, Professor Zoltán Ambrus and Assistant Lecturer Zsigmond Csilla-Dalma, carried out two empirical researches in 2015 and 2016. Our aim was to explore the

"oddities" experienced in the course of our two previous researches, that is the reason/reasons for inexplicable results. We published the results of the first research in the volume entitled Szociálpszichológiai tanulmányok [Studies on Social Psychology] (Ambrus, Kósa and Zsigmond) at Cluj University Press in 2011; we have not had the opportunity to publish the results of the second one in any of the prestigious scientific journals yet. This is due to our failure mentioned above, since we were repeatedly rejected because we could not give an explanation for the selection frequency of important news endowed with the camcorder depending on the models presented above. From among the processes unfolding in the "black box" of the two experiments under discussion, headlines associated with several camcorders were significantly selected in accordance with our expectations, however, we were surprised over and over again by the fact that the camcorder symbol suggesting the possibility of visualization did not increase the significance of the important news – we also faced this mystery in the course of the two quasi-experiments belonging to my thesis.

# 3.1. The First Quasi-Experiment

Hungarian-speaking undergraduate and masters students (N = 239) read online news at the Miercurea Ciuc campus of the Sapientia Hungarian University of Transylvania.

Research group 1 (*N*=60): Among the headlines, four belong to the useful news category and four to the less useful news category. Among the latter, in front of each of the two positive and two negative headlines there appears a camcorder symbol, indicating that in these cases video material is also associated with the news. In each group there were two pieces of tabloid news, utilized in order to hide the aim of the research.

Research group 2 (*N*=59): Among the headlines, four belong to the useful news category and four to the less useful news category. Among the useful ones, in the case of four – two positive and two negative – headlines there appears the camcorder symbol, indicating the possibility of visualization.

Research group 3 (N=59). The group members can select from among two useful and two less useful headlines associated with the camcorder symbol, as well as from among two useful and two less useful headlines not associated with the camcorder symbol. Among the news

with camcorder symbols, one is less useful positive, one is less useful negative, one is useful positive and one is useful negative.

Group 4: control group (N=61). The group members can also select from among four useful and four less useful headlines. No headlines are associated with camcorder symbols.

# 3.1.1. Hypotheses:

Taking into consideration the informational utility model, the elaboration likelihood model as well as the dual coding theory, we have formulated the following hypotheses:

Hypothesis 1 (H1). The higher the perceived usefulness of a headline is, the more frequently it is selected by the participants. Irrespective of whether there is or there isn't a camcorder symbol, the members of the three experimental groups – but also those of the control group – select more useful news than less useful news.

Hypothesis 2 (H2): Those who prefer visual information processing, will select more headlines with camcorder symbols.

Hypothesis 3 (H3): Those who prefer verbal information processing, will select more headlines without camcorder symbols.

Hypothesis 4 (H4). As long as the camcorder symbols are associated with less useful headlines and no camcorder symbols are associated with useful headlines (experimental group 1), the participants will

select more less useful headlines because of the camcorder symbol as compared to the same type of control group headlines, where no headlines are accociated with the camcorder symbol (group 4).

Hypothesis 5 (H5). The selection of useful headlines – which were associated with camcorder symbols without exception in group 2 – will be more frequent than the selection of the same type of news in the control group.

We conceptualized and pre-tested the usefulness of the news according to the four criteria of the informational utility model (Dillman Carpantier, et al. 2003; Knobloch, Patzig, et al., 2002):

- the *perceived magnitude of the importance* of the event;
- the perceived likelihood of the materialization of the event;
- the *perceived proximity in time or immediacy* of the event;
- the perceived efficacy to prevent threats or utilize opportunities related to the event.

A positive headline with a high perceived magnitude of importance ("useful") sounded like this: "The chances of employment of the fresh graduates are increasing also in Harghita county in the next semester – foreign language knowledge is an advantage." "The chances of employment of the fresh graduates are also increasing" met the first utility criterion: it refers to an event of high magnitude, which is very

likely to directly affect the students taking part in our experiment in the near future ("in the next semester"), and " foreign language knowledge" reflected the students' perceived efficacy to utilize opportunities related to the event.

We pre-tested the current news collected from the media and we used eight headlines selected from them in the experiment besides the two headlines that served to distract attention.

From among the theories modelling and standardizing information processing, we chose Paivio and Harshman's dual coding theory. Paivio (1986), who elaborated the first version of the theory, assumes that many situations and tasks can be conceptualized verbally or nonverbally, i.e. visually. There are people who prefer either verbal or visual information processing, although human thinking is a continuous interplay between these two. While the verbal system is specialized on abstract information processing, the visual system is responsible for the processing of concrete, perceived information – Révész, Bernáth and Séra write (1995).

In our researches we used Révész, Bernáth and Séra's abbreviated version, consisting of 56 true-false statements, of Paivio and Harshman' Individual Differences Questionnaire, IDQ, originally consisting of 86 statements, and we divided the participants into two groups in accordance with the preferred information processing strategy.

The pilot experiment took place at the Târgu Mureş/Marosvásárhely campus of the Sapientia Hungarian University of Transylvania; the quasi-experiment took place at the Miercurea Ciuc/Csíkszereda campus of the university. In each group the respondents had to select from among ten headlines the ones that they would like to read.

We managed to prove the first hypothesis. Similarly to our two previous researches, also investigating the effect of the camcorder symbol on the choice of news, a significant difference could be detected between the important and less important, as well as useful and less useful news with the help of the paired sample t-test.

The visual scores – although to a slight degree, in 3.1% – significantly determine the choice of news associated with camcorder symbols: as the visual scores increased with one unit, the participants chose .05 (unstandardised B) more news with camcorder symbols, independently of the experimental groups (5000 bootstrap: p=.01, 95% Confidence Interval .013-.10) We could not detect an interaction between verbal and visual scores with classical linear regression, however, with the help of the process macro – although it does not make weighting possible – we managed to prove its existence. We used the pick-a-point procedure to explore whether the groups differed, on average, from each other on the dependent variable, determined by 5 values of the moderator variable. The dependence of the choice of news

with the camcorder symbol on the verbal scores only started from the 50% threshold value up (at 50% t = 2.12, p = .03, at 75% t = 2.33, p = .02, at 90% t = 2.23, p = .02).

In order to test the third hypothesis, we also applied a hierarchical regression. We included the same predictors in the analysis as the ones when testing the first hypothesis, and we used the news without the camcorder symbol as a dependent variable. We were not able to detect a significant statistical relationship between the verbal scores and the dependent variable F(2, 315) = 1.17, p=.76).

The way in which we associated the camcorder symbol to various – useful and not useful – headlines in the four groups had a significant effect on the choice of news with the camcorder symbol (Adjusted R square .12), i.e. 12% of the variance can be ascribed to this manipulation (5000 bootstrap: p = .002, 95% Confidence Interval .27–1.07).

By trying to deepen our analysis we assumed that the useful headlines associated with the camcorder symbol are more often chosen by participants than the useful news without the camcorder symbol as well as the less useful headlines associated with the camcorder symbol. As we formulated it in our fourth hypothesis, the presence of the camcorder increases the choice of less useful news associated with the camcorder symbol in the first experimental group (M = 2.59, p = .001, 5000 bootstrap, 95% CI 2.3–2.84).

Our fifth hypothesis was refuted, because in the second experimental group the association of useful news with the camcorder symbol did not increase, on the contrary, it decreased their choice (M = 2.38, p = .001, 5000 bootstrap, 95% CI 2.13–2.63). Thus we faced the same problem as during our two previous researches, although then we worked with universally rather than individually useful news.

We compared the average choice of headlines with the camcorder symbol in the first group (M = 2.41, p = .001, 5000 bootstrap, 95% CI 2.13–2.67) with that of the third, mixed group (M = 2.49, p = .001, 5000 bootstrap, 95% CI 2.24–2.76) and we came to the conclusion that the least headlines with the camcorder symbol were chosen again in the second group (M = 2.38).

We were curious whether this phenomenon "haunting" our researches was explicable with the somehow contracted results obtained on the two scales of the IDQ test. Finally we managed to solve the mystery why the number of useful news decreased in the second group when they were associated with the camcorder symbol. We were able to detect that those who obtained high scores on the verbal scale chose an increasing number of less useful headlines as their scores obtained on the visual scale were increasing.

# 3.2. The Second Quasi-Experiment

We carried out our research at the Târgu Mureş/Marosvásárhely campus of the Sapientia Hungarian University of Transylvania; the pilot test was carried out at the Miercurea Ciuc/Csíkszereda campus of the university.

The second quasi-experiment was based on the same theoretical background as the first, with the determining difference that we reinforced, pre-tuned with priming the visual cognitive operating mode of both the participants characterized by visual dominance and those with verbal dominance.

The members of the experimental group (N=120) were shown 10 headlines. The camcorder symbols were associated to the news in the following way: one was associated to a useful negative headline, one to a useful positive headline, one to a less useful negative headline and one to a less useful positive headline.

The members of the control group (N=120) read the same pieces of news as the members of the experimental group, but they were not primed with visual material. The camcorder symbols were associated to the news, just like in the case of the experimental group, in the following way: one to a useful negative headline, one to a useful positive headline, one to a less useful negative headline and one to a less useful positive headline.

# 3.2.1. **Hypotheses**:

- 1. Due to the priming with visual material, respondents characterized by visual dominance choose significantly more headlines with the camcorder symbol in the experimental group than in the control group.
- 2. Although respondents with verbal dominance are influenced by priming, there will be no significant difference between their choice of headlines with the camcorder symbol and of those from the control group.

The members of the experimental group could see a camcorder symbol in the upper left corner of each photo, contrary to the respondents of the control group, who could see only photos without camcorder symbols. We carried out the priming before browsing, with the help of camcorder symbols placed at the upper left corner of eight nature photos, which also included the acronym of the portal created from the initials of the university news portal, the Youth Index TV. We carried out the priming with stimulation above threshold: the participants could see each photo for four seconds.

#### 3.3. Results

A significant difference could be detected between the useful and less useful headlines with the help of the paired sample t-test: on average, 1.73 were chosen from among the useful headlines, and the average choice of the less useful ones was .97, t=10,59, df=309, p=.001.

We proved the first hypothesis with the help of hierarchical regression analysis. The respondents characterized by visual dominance selected more headlines with the camcorder symbol than headlines without the camcorder symbol (Unst. Beta .14, p=.03). If the value of the visual scores increased with one unit in the experimental group, the participants chose .13 more headlines with the camcorder symbol.

Just like in the case of our first quasi-experiment, we were not able to detect interaction between the verbal and visual scores with classical linear regression, but we managed to prove its existence with the help of process macro, although it does not make weighting possible. We used the pick-a-point procedure to explore whether the groups differed, on average, from each other on the dependent variable, determined by 5 values of the moderator variable. The selection of headlines with the camcorder symbol depends on the verbal scores beginning only from 50%. At 75% the correlation is still significant; at 90% it reaches the threshold value of the non-significant correlation (5000 bootstrap, at 50% t = 2.14, p = .03, CI .0028-.0653, at 75% t = 1.0000

2.00, p = .04, CI .0007-.0888, at 90% t = 1.90, p = .05, CI -.0017-.0098).

After separating the database into an experimental group and a control group we obtained surprising results *also* as compared to our previous experiment. Then we were happy that we managed to find those respondents who avoided the important news with the camcorder symbol in our second experimental group,  $^1$  however, this time we had to admit that *priming with visual material, instead of significantly increasing the selection of news with the camcorder symbol in the experimental group, significantly decreased its degree.* In the experimental group primed with the camcorder symbol, from among the headlines associated with the camcorder symbol, 1.32 were selected on average, as opposed to the control group, where 1.49 were selected. Thus priming had a contrary effect to what was expected: the effect of our visual score variable rose much above the .05 value (p=.87, Unst. Beta=-.01, df. 1, 152).

In spite of the fact that there was no priming with the camcorder symbol in the control group, the selection ratio of the useful and less useful headlines with the camcorder symbol was significantly and positively determined by the visual score variable also on its own: p=.005, Unst. Beta=.33, df. 1, 145.

<sup>1</sup> Those who obtained a high score on both the verbal and visual scales.

In the experimental group primed with the camcorder symbol – similarly to our first experiment – those who obtained a high score on both the verbal and visual scales chose less and less news with the camcorder symbol as the value of their scores on the visual scale was increasing (19 respondents, 12.3%, lower threshold value of strong correlation:  $r_=.507$ ).

However, in the control group these participants (17 respondents, 11%) chose more and more headlines with the camcorder symbol as the value of their scores on the visual scale was increasing (strong correlation: r=.47).

We also applied a regression analysis to the useful news with the camera symbol. In this case we identified an even stronger correlation than the one above (r= .56), which highlights the fact that priming in the experimental group decreased the choice of news with the camera symbol among those who obtained a high score on both scales.

After studying the Hungarian and international specialist literature of eye movement tracking, the processing of data collected by the eye movement tracker followed. We used a Tobii eye movement tracker in our research. We indicated the following areas of interest for the eye movement tracker to follow: the news, the camcorder symbols next to the news and the camcorder symbol containing the Youth Index TV acronym, ensuring priming. We also paid attention to extend the

areas of interest with 1-2 cm, so the eye movement tracker could also record the eye movement of the participant if it only fixated on the second part of the word in front of the camcorder symbol, but not on the symbol itself; in the case of the camcorder symbol containing the acronym we indicated an area equal to twice the symbol surface.

Although the respondents looked at the camcorder symbols relatively rarely, still, their significant effect – as we could see above – could be detected with the help of statistical tests. Thus the symbol under discussion also has an effect if the gaze is not fixated at it, but it is within the field of vision; in spite of this, as concerns priming, we managed to identify two typical modes of behaviour with the tracking of fixations.

1. Almost exclusively the participants with an average performance on both the visual and verbal scales (62 respondents) fixated on the camcorder symbols placed in the corner or the photos used for priming. Out of the 155 members of the experimental group only 26 fixated at the symbol, out of them 16 were participants with an average performance on both scales. The remaining 10 fixations were distributed among the five groups performing differently on the verbal-visual scales. Out of the nine groups, in two groups no member fixated on the priming camcorder symbol: however, the members of those two groups who in the control group were characterized by significant visual dominance avoided the camcorder symbols in the experimental

group. We speak here, on the one hand, about the group with high verbal-visual performance, often mentioned above, on the other hand, about the group with average verbal and low visual performance (15 respondents, 9.7%).<sup>2</sup>

- 2. We can also detect a pattern similar to the previous group, contrary to the expected, in the case of respondents with average verbal and low visual performance: while in the control group a very strong correlation (r=.82) indicates their interest in visual materials, in the experimental group this orientation becomes totally inoperative (r=.13). Supposedly this change can be ascribed to the avoiding attitude towards priming.
- 3. Further on, we have also examined, for instance, how many headlines associated with camcorder symbols were chosen by those with high verbal-visual performance who did not even look at the symbol in the experimental group. We can also assume the avoiding attitude based on the fact that, on the one hand, the 19 respondents chose only 12 useful headlines associated with the camcorder symbol. It is even more striking, on the other hand, that these respondents avoided the less useful headlines associated with the camcorder symbol even more, choosing only two less useful headlines associated with the camcorder symbol.

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<sup>&</sup>lt;sup>2</sup> We measured it with the time of the first fixation as well as with the fixation count. While the previous one indicates the time of the first fixation, the second one indicates how many times someone has looked at the area of interest.

## 4. Analysis of Results

The results of our two empirical researches are partly consistent with the specialist literature. The selection of news was clearly determined by their usefulness, that is the participants chose significantly more useful news than less useful news in each group – irrespective of whether camcorder symbols were associated with them or not. This phenomenon is explained by the informational utility model (Knobloch, Dillman Carpantier, et al. 2003; Knobloch, Patzig, et al., 2002; Knobloch, Zillmann, et al., 2002; Knobloch-Westerwick, Dillman Carpantier, et al. 2005).

In both researches the participants characterized by visual dominance chose more headlines with camcorder symbols than without camcorder symbols. However, the camcorder symbol, when it was associated with the news as peripheral signs attracting attention – in the sense of the ELM –, it did not increase but rather decreased their selection. We could not interpret the result exclusively according to the dominant information processing style, based on Paivio-Harshman's (1983) IDQ test, this is why we included in our analysis both the verbal and visual scores. Thus in both quasi-experiments we managed to identify those who avoided the camcorder symbols: they obtained high scores on both scales. This avoiding attitude became even stronger when we primed the members of the experimental group – at such

times they chose even fewer headlines with the camera symbol. It is true, though, that we could identify only in our second research – thanks to the use of the eye movement tracker – another group of those who avoided the camcorder symbol; supposedly, the typical behaviour of those belonging to this group can be observed in similar conditions. Those belonging to the group under discussion performed moderately on the verbal test and poorly on the visual one.

Our research series referring to the effect of the camcorder symbol made it clear to us that the choice of online headlines is determined by the usefulness of the news, the specificities of the symbols, the cognitive style of the reader and – perhaps we managed to prove it – the level of performance on the two scales of information processing.

Gunter in his 2015 book reports on a supposedly related phenomenon, albeit in connection with the news memory and the visual material rather than focusing on the selection of content. When measuring the news memory researchers encountered a similar phenomenon several times (see Katz et al., 1977, Booth, 1970). In the case of television news, if visual material was associated to less important news, they remembered better than when visual material was associated to news more important for them. In the course of our researches several times we faced the situation that the selection of less important or useful news is significantly increased by the camcorder

symbol, but the selection of important ones isn't. According to Gunter (2015), it must be taken into consideration by all means when interpreting this phenomenon under what circumstances the viewers were exposed to the television programmes.

From the point of view of the evaluation – and especially the further elaboration – of our results István Síklaki's experiment based on eye movement tracking, which he presented under the title *Gender Preferences in Perception* within the framework of the Researchers' Night in 2012, may prove to be especially important. The research focused on whether there is a difference between the website reading strategies of men and women; the most pronounced difference of the investigation carried out by using various websites as well as involving 30 men and 30 women lies in the fact that the attention of men was rather attracted by the graphic elements of websites, while the attention of women was predominantly attracted by the verbal material.

Among the results obtained by Síklaki, those referring to visual-verbal thinking are consistent with the results obtained at the validation in Hungary of Paivio-Harshman's IDQ-test (Révész, Bernáth and Séra, 1995), a relevant conclusion of which is that women are more verbal than men.

It is a fundamental question for me at this point to what extent the gendered eye movement patterns and preferences are congruent with the news selection patterns. Fully, partly or not at all? The data of news selection – the number and time of clicks, the time of entrance and exit – were recorded by our computer background program, and even so it hardly made possible the statistical analysis due to the small – although weighted – number of elements.

As regards the possible reasons for the camcorder symbol avoiding attitude, I again refer to Síklaki, who emphasizes the explicative force of the cognitive or adaptive unconscious in connection with the understanding of the attitude of the Internet generation to knowledge (2011). The focus of conscious, concentrated attention is extremely limited, narrow as compared to the almost unfathomable complexity and comprehensive nature of all those unconscious processes unfolding in parallel under, behind, around the conscious operation (Wilson, 2002/2010)

Wilson (2002) calls adaptive unconscious the unconscious part of the brain that exceeds the performance of any computer that has ever been made. It is an extremely sophisticated and efficient means which can quickly, unconsciously analyse, then react to, a large volume of incoming information.

Even when the conscious part of our brain is preoccupied with other things, we are capable of analysing, evaluating and selecting information that is consistent with our aims. (32-33)

It is also conceivable – if we approach the results of our second research from the direction of the characteristics of the adaptive unconscious presented above – that only the primed participants avoided the symbol, Síklaki states (2017). Supposedly the processings and decisions primarily take place in the cognitive/adaptive unconscious, and with the participants avoiding the camcorder symbol, perhaps under the influence of priming, the adaptive unconscious valued that in the given situation and in the case of a headline the symbol was not relevant, and this mattered at selection. In the control group, where there was no priming, this prior unconscious evaluation did not take place, thus it was a result of primary curiosity that the symbol had an effect (Síklaki 2017).

Tamás Bokor, the opponent of my thesis project, drew my attention to the fact that the news reader "may be guided by several practical viewpoints when s/he decides to avoid the headline with the camcorder symbol". For instance, that watching the video material takes more time than reading the headline, it requires higher data traffic or the reader momentarily does not have a device suitable for playing it. Finally, I consider that the reason, or one reason, for avoiding the camcorder symbol:

1. can also be found in the news reading strategy, but

- 2. can also be searched in the degree of belief in the authenticity of news. It can happen that those who perform the best are the most sceptical regarding the authenticity of the source, and the presence of the camcorder symbol decreases the authenticity of the news this is the reason why they avoid the headlines with the camcorder symbol, and/or
- 3. it can also be searched in the degree of media awareness. It can happen that those who perform well on both scales are simultaneously characterized by a high degree of media awareness, and they are afraid of the manipulation through the visual material, this is the reason why they avoid the headlines with the camcorder symbol this may be the reason why priming even increased the attitude avoiding the camcorder symbol.

## 5. Key references

- Aczél P. (2015). Médiakultúra. In P. Aczél, *Műveljük a médiát!*, Budapest, Wolters Kluwer, pp. 133-175.
- Andok, M. (2015). Médiahatások. In. In P. Aczél, *Műveljük a médiát!*, Budapest, Wolters Kluwer, pp. 97–133.
- Barta, J. (2015). Az algoritmusok mint hibridek hatása az online újságírásra, *Médiakutató*, Vol. 16, No. 4, pp. 83-92.
- Császi, L. (2008). Médiakutatás a kulturális fordulat után, *Médiakutató*, nyár, pp. 93-108.

- Fehér, K. (2016). *Digitalizáció és új média Trendek, stratégiák, illusztrációk*. Akadémiai Kiadó.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Früh, W. and Schönbach, K. (1982). Der dynamisch-transaktionale Ansatz. Ein neues Paradigma der Medienwirkungen [The dynamictransactional model: A new paradigm of media effects], *Publizistik*, Vol. 27 No. 1–2, pp. 74–88.
- Gálik, M. (2012, nyár). A közmédia (PSM) határai, formái jelentősége, *Médiakutató*, Budapest. Letöltve

  http://mediakutato.hu/cikk/2012\_02\_nyar/07\_kozmedia\_hatarai/?q

  =galik#galik (2017.06.08.)
- Gálik, M. (2018). A hírmédia változásai egy áttekintés. *Magyar Tudomány*, Digitális kiadás, Budapest, Akadémiai Kiadó. Letöltve. https://mersz.hu/?xmlazonosito=matud\_131\_p12#matud\_131\_p1 2 (2018.02.09.)
- Gunter, B. (2015). *The Cognitive Impact of Television News. Production Attributes and Information Reception*, Palgrave Macmillan.
- Horányi, Ö. (2007). *A kommunikáció mint participáció*, Budapest, AKTI-Typotex Kiadó.
- Jenei, Á. (2001): Miből lesz a hír? A televíziós hírgyártás szervezetszociológiai vizsgálata. *Médiakutató*, nyár. Letöltve. http://mediakutato.hu/cikk/2001\_02\_nyar/02\_mibol\_lesz\_a\_hir/?q=mib%C5%91l+lesz+a+h%C3%ADr#mib%C5%91l+lesz+a+h%C3%ADr (2017. 05. 04.)

- Klapper, J. T. (1960). *The effects of mass communication*, Glenco, IL., The Free Press.
- Knobloch-Westerwick, S. (2015). Choice and Preference in Media Use.

  Advances in Selective Exposure Theory and Research, Routledge –
  Taylor and Francis Group, New York and London.
- Merkovity, N. (2014). A politikusok médialogikája a közösségi oldalakon: Facebook és Twitter kutatás. In N. Merkovity, *Politikai kommunikáció-kutatások a közösségi média korában*. Szeged, Primaware, pp. 165-192.
- McQuail, D. (2010). *McQuail's mass communication theory*. Sage publications.
- Petty, R. E. and Cacioppo, J. T. (1984). The effects of involvement on responses to argument quantity and quality: Central and peripheral routes to persuasion, *Journal of Personality and Social Psychology*, Vol. 46, No. 1, pp. 69–81.
- Rétfalvi,Gy. (2012). Új média. In I. Bernát, I., K. Pais, Gy. Rétfalvi, E. Szilágyi és L. Turi (szerk.), *Média, kultúra, kommunikáció*, Budapest, Libri Kiadó.
- Slater, M. D. (2007). Reinforcing spirals. The mutual influence of media selectivity and media effects and their impact on individual behavior and social identity, *Communication theory*, Vol. 17, No. 3, pp. 281-303.
- Stoycheff, E., Pingree, R. J., Peifer, J. T. and Sui, M. (2017): Agenda Cueing Effects of News and Social Media. *Media Psychology*, pp. 1–20.

- Sundar, S. S., Jia, H, Waddell, T. F. and Huang, Y. (2015). Toward a Theory of Interactive Media Effects (TIME) Four Models for Explaining How Interface Features Affect User Psychology. The Handbook of the Psychology of Communication Technology, John Willey & Sons.
- Valkenburg, P. M. and Peter, J. (2013). The differential susceptibility to media effects model, *Journal of Communication*, Vol. 63, No. 2, pp. 221-243.
- Vargo, Chris & Lei, Guo (2016): Networks, Big Data, and Intermedia Agenda Setting. An Analysis of Traditional, Partisan, and Emerging Online U.S. News, *Journalism & Mass Communication Quarterly*, 1 December 2016, http://journals.sagepub.com/doi/abs/10.1177/1077699016679976 (letöltés: 2017. IX. 3.)

# 6. List of publications about the topic

- Kósa István (2017): A napirend-kijelölés új jelenségei (New phenomena of agenda-setting). Médiakutató, Vol. 18, No. 4, pp. 81-91.
- Zoltán Ambrus, István Kósa, Csilla Zsigmond, Influenţa simbolului video asupra preferinţei ştirilor online (a videokamera-szimbólum hatása az online hírpreferenciára). In: Iluţ P. (coord.), "Studii de sociopsihologie", Kolozsvári Egyetemi Kiadó, Kolozsvár, 2011, pp. 131-144.

- István Kósa, Csilla Zsigmond, Zoltán Ambrus (2012), Social Comparison with Groups Portrayed in Online News. *Journal of Media Research*, Vol. 1, No. 12, 2012, pp. 27–44. Nemzetközi adatbázisok: EBSCO és CEOL.
- 4. István Kósa, Zoltán Ambrus, Csilla Zsigmond (2009). The Comprehension of Announced and Written Tv News. Revista de Ştiinţe Politice Revue des Sciences Politiques, No. 24, pp. 147– 163. Nemzetközi adatbázisok: Proquest, Index Copernicus, Georgetown University Library, DOAJ, Elektronische Zeitschriftenbibliothek EZB, Journal Seek, Intute Social Sciences.
- 5. Zoltán Ambrus, István Kósa, Csilla Zsigmond (2010). The Influence of Sequence of Tv-News on Comprehension. Revista de Ştiinţe Politice Revue des Sciences Politiques, Vol. 7, No. 27, pp. 112-126. Nemzetközi adatbázisok: Proquest, Index Copernicus, Georgetown University Library, DOAJ, Elektronische Zeitschriftenbibliothek EZB, Journal Seek, Institute Social Sciences.
- 6. Ambrus Zoltán Kósa István Zsigmond Csilla, Internetes hírpreferencia kísérleti vizsgálata fiatalok körében. (news preferences among students, conference proceedings). In: "Kultúra Kommunikáció Innováció", a Kolozsvári Akadémiai

- Bizottság konferenciája, Csíkszereda, 2009. október 29., Státus Kiadó, pp. 151–161.
- Kósa István (2000). Az internet ideológiai legitimációja, Korunk, Vol.
   No. 4, 8 oldal.
- 8. Kósa, István: The Effect of the Camcorder Symbol on the Selective Exposure to Online Headlines, *Acta Universitatis Sapientiae Communicatio* accepted for publication, 17 oldal. Nemzetközi adatbázis: De Gruyter Open.
- Kósa, István (2017): Hírérték a hagyományos és az újmédiában.
   (News values in legacy and new media), Médiakutató under review, 20 pages.