



# **COLLECTION OF THESIS**

of the Ph. D. dissertation written by

## Előd Veres

titled

"Mediatized" suicides – the sociological study on Werther-effect –

**Tutor:** 

**Nikosz Fokasz, Dr.** University professor

# **Institute of Sociology and Social Policy**

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#### I. RESEARCH ANTECEDENTS AND MOTIVATIONS OF THE THEME

I think it is a demand of our times that in Hungary powerful representatives of the profession and the media should sit down at a table and work out a press recommendation, which would serve as a directive to the "harmless" formulation of suicide news in terms of imitation and to the observance of content and formal elements of the presentation. Besides WHO, several countries have made or accepted such recommendations (e.g. Austria). The question of drafting and accepting a Hungarian press recommendation is not a new demand either: for example Sándor Fekete and his colleagues proposed this question in the 1990s several times (Fekete, S. et al. [1994]), but unfortunately the formulation keeps us still waiting.

In my study I would like to address the importance of formulating and accepting a Hungarian press recommendation through a comprehensive presentation of Werther-effect researches. I append the press recommendations of WHO and the English Samaritans to my work with the definite aim that if anybody – might on the basis of this work – the authenticity of Werther-effect accepts, two samples will find for elaborating the Hungarian press recommendations (see Appendix of the Dissertation).

#### II. APPLIED METHODES

#### II. 1. Scientific dissertation

In my dissertation I made a scientific academic, comparative and analytical study on intellectual inheritance of doctor-psychiatrists who gave an individual-psychic interpretation of imitative suicide (Part I); of Émile Durkheim, who elaborated the social interpretation of epidemic spread of suicides (Part II), and of Marquis Gabriel de Tarde who played a determinant role in Werther-effect studies (Part III). Similarly, I made a historical-theoretical study on the relevant mediatheoretical relations of Werther-effect (Part IV), the media effect researches on Werther-effect (Part V) and the fundamental assumptions of the "Social Constructivist" paradigm that offers a theoretical opportunity for transcending the media effect studies (Part VI).

## II. 2. Comparative content analysis

In **Part VII**, I made a comparative-analytical study for the period 2004-2006 on the results of the international comparative content analysis, which was launched by Sándor Fekete. I applied comparative content analysis as research method.

## II. 3. Empirical data analysis

In the final chapter (**Part VII**) I report on our joint research with Károly Bozsonyi, in which we studied the daily frequency trends of nearly 130.000 suicides registered during the period 1 January 1970 and 31 December 2000 through trend analysis methods (Exponential Smoothing, Seasonal Decomposition, ARIMA – AutoRegressive Moving Average, Hurst Analysis). (See the description, observations, hypothetical suggestions **K. Bozsonyi, E. Veres [2002]**).

#### III. SUMMARY AND RESULTS OF THE DISSERTATION

#### III. 1. Introduction

Goethe in his work The Sorrows of the Young Werther (published 1774) raised his protagonist in the eminence of never-fading tragic heroes with his suicide: after publishing the sentimental roman written in diary form, many young people committed suicide imitating Werther in a weirdly similar way. It has not lasted long till the "scientific" explanation of this strange "epidemic" broke out in Europe came up. In addition to Thomas Trotter's, Isaac Parrish's, Forbes Winslow's and EsQuirol's statements, many examples can be mentioned from the nineteenth century, which give an individual- psychic causal interpretation of suicide. On the basis of their work, the incident became more and more known in professional circles from the middle of the nineteenth century. (Of course, experts meant at that time doctors-psychiatrists scrutinizing the secrets of the human mind).

From the end of the 19th century, exactly after the publication of Durkheims's work about Suicide in 1897, these approaches slowly faded away from the specialized literature. I think, we will find the reason for this in the chapter of Durkheim's work published in 1897 which analyses the imitation.

#### III. 2. Durkheim's bases

#### III. 2. 1. Summary

Durkheim searches the reason for epidemic increase of suicides in social causes in his work about Suicide. By putting the question in the agenda, Durkheim aimed at deterring everybody from studying the sociology – the discipline that was just establishing its own independent identity – who would explain incidents of social nature with individual factors. The target of dissociation and critics was first of all Marquis Gabriel De Tarde, who expressed the principle in his work titled "The Laws of Imitation": "All resemblances of social origin in society are direct or indirect fruit of the various forms of imitation" (Tarde, G. [1962])

However, Durkheim is on the view that the social relevance of imitation can even not be verified in the field, where it could be expected: the field of suicides. Durkheim regards the imitation only as an individual-psychic causal explanation a real interpretation, because in his view the imitation itself can only be in this way the explanatory cause of the reproduction of imitative action. In every other case, the "imitation" refers to only the external appearance of the action and as a "pseudo-interpretation" tells nothing about the real cause of the action in fact.

#### III. 2. 2. Main statements

By studying the epidemic spread of suicides, Durkheim wanted to disprove the role of imitation, but it is not the stressed element in his work: "However, one of the main lessons of this chapter is, how unfounded the theory is, which regards imitation as vital source of all kinds of collective lives" – writes Durkheim, and hereby he builds the ramparts of the new science in fact.

In this approach, the contrast between Durkheim and Tarde seems to be attributed to psychologism often criticized by the methodological individualists (e.g. Popper), by the way, psycologism can also be broken into many trends and the methodological individualism has also several other, not definitely methodological distinctive features. Taking all these into consideration, I think describing the laws of imitation with "psychologism" is only a question of detail in a more general discussion that circulates around Durkheim's "methodological collectivism in broad sense", who represents the priority of macro-level incidents and Tarde's "methodological individualism of broad sense", who emphasizes the priority of micro-level incidents (the notions are from Orthmayr's work dealing with methodological individualism (Orthmayr I. [1997])).

Giving up the purpose of "jurisdiction", I studied in the next chapter how the life-work and intellectual inheritance of Marquis Tarde inspired the certain segments of the thinking of social sciences, among these the Werther-effect observations.

#### III. 3. The intellectual inheritance of Marguis Tarde

#### III. 3. 1. Summary

In this chapter I deal with Tarde's Laws of Imitation (Tarde, G. [1890ab]) and the criminological (Sutherland, E. [1939]), social psychological (Bandura, A. [1986]) and sociological (Marsden, P. [2000]) aspects of the Laws.

I explain that in Tarde's theory the social circles made by differential associations provide excellent environment for the elaboration, deepening and distribution of special knowledge of crime, apart from the fact, that the "syllabus" is given by personal acquaintances or celebrities considered to be personal acquaintances. Nevertheless, it is also important to see that in Tarde's theory these learning-theoretical or social-psychological processes have also very important sociological projections. Namely, according to the Laws of Imitation passing on the criminal knowledge does not stop at the borders of certain social circles, but by going beyond can become a crystallizing kernel of new spreading circles, and hereby a supporting factor of social changes and conflicts. Tarde attached particularly great importance to elite circles in the elaboration and

distribution of innovations (e.g. new criminal techniques), since in his opinion, elites can serve as a model, as a "template", so that reflections and attitudes can ripple in other social groups.

In this chapter I present parallels offered by genetic theory, namely the memetical approach (**Dawkins, R. [1976]**), which can help us in many respects to think on about the sociological aspects of the Laws in plastic images. At the same time I point out that opening of possible parallels reminds of strict discipline, because – as many historical examples show – the vulgar use of biological analogies (can) give rise to misinterpretations.

#### III. 3. 2. Main statements

Presenting the intellectual inheritance of Marquis Tarde I pointed out that a model character suitable for emotive identification, can produce a socialization impact in the long run and a direct, initiative "imitation" effect. In this chapter I showed emphasized while the classical studies on Werther-effect emerging from 1974 aimed fundamentally at demodulation of direct imitation effect of the model character and verification of the social significance of imitation effect, the recently developed studies based on content analysis searched the long-run socialization impact of Werther-effect. In my opinion, these two approaches complement each other organically, not only because of their common intellectual roots, but because of the fact that the mass media stands in the focus of both theories. I give the mediatheoretically relevant resemblances and differences of these two approaches by summing up the "Media-effect theory" of mediatheory and the "media effect studies" of Werther-effect. Thereafter, as an attempt to go beyond the effect tradition of mediatheory and the "media effect study" of Werther-effect, I give a summary of the mediathoretical paradigm called "Social constructivism" and of the content analytical studies by Sándor Fekete and his colleagues that form the socialization, culturalistic approach of Werther-effect.

#### III. 4. The "Media effect" theory

According to Stack, Tarde was on the extreme view that the media can unboundedly influence the human thinking: "most people are "mechanically molded" by the press, which "thinks and decides" for them,, (Stack, S. [1987]). This belief in the direct and unidirectional effect of the media lived in Tarde's time as a conventional conviction, although some researchers dealing with the general history of mediatheory are on the opinion that this idea was rather shaky at the time of early media effect studies too. David Gauntlet passed a severe judgment in his study "Ten things wrong with the 'effect model', listing 10 factors which undermine the genuineness of the effect model (Gauntlett, David [1998]).

In connection with our theme, the study on Werther-effect Pirks and Blood – after Tulloch and Lupton – show the points of "media effect" studies that provide "penetrability" between the studies following the effect tradition and their alternatives, the culturalistic approaches (**Pirkis J. & Blood R.W. [2001]**).

Béla Buda refers also a similar "penetrability" in his writing "New communication techniques in the approach of suicides crises" (published in an volume of essays and studies titled The Suicide (Buda Béla [2001])).

From the foregoing I come to the conclusion that it is reasonable to sum up the short history of the media theory's effect tradition, because it may help us with interpreting the media effect studies on Werther-effect and their outdoing attempts, the content analysis studies – which raise the spirit of the "social constructivism" paradigm – in a broader contextual unity.

In this chapter I deal wit the following models:

- 4.1. Hypodermic needle model, magic bullet or silver bullet model
- 4.2. Two Steps Flow Model
- 4.3. Cultivation analysis
- 4.4. Cognitive theories:
  - 4.4.1. Agenda-setting
  - 4.4.2. Priming
  - 4.4.3. Second Level of Agenda Setting

#### III. 5. The "media effect study" on Werther-effect

#### III. 5. 1. Summary

The question of epidemic spreading of suicides was raised again by David Phillips nearly 100 years after Durkheim in the American Sociological Review (**Phillips, D. P. [1974]**). David Phillips not only gave a name to the scrutinized incident, but also launched a program to rehabilitate Tarde's theory.

The symbolic program of Tarde's theory was continued by Wasserman 10 years later. He drafted his hypothesis referring to his proposition, which says "Elites in society (e.g., kings, nobiles) initiate patterns of behaviour which are emulated by the masses in such areas as fashion and family life" (Wasserman, I. M. [1984]). In Wasserman's approach of 1984, the media effect is not only transmitted by the intensity of publicity, but – though for the present only at the level of suggestion – by the socially determined nature of the model character (his celebrated person nature) as well.

This kind of rehabilitation of Tarde's theory was formed into a definite program by Steven Stack a few years later (Stack, S. [1987]).

Stack in his study published 1987 mentions that "Tarde's laws of imitation are not principally concerned with the effect of the media on behaviour. Tarde was more concerned with the endless repetition of behaviour in society's institutions." Nevertheless, he tried to establish a "media effect theory" from Tarde's propositions that he himself called "scattered".

From the "scattered" propositions he emphasize the under mentioned: (1) "First, imitation is largely a function of the inferior copying the superior", (2) "Second, in modern democratic societies, public opinion is a key form of superiority"; (3) "Third, the mass media are a key mechanism of public opinion", from which follows that (4) "Fourth, front page stories about suicide should trigger suicides in the real world (my corollary in this study)"; (5) "Fifth, the upper classes and/or elites in society are most apt to be imitated". From these stressed propositions Stack arrived at the hypothetical conclusion that (6) "Sixth, front-page stories about the suicides of elites should have the greatest impact on imitative suicides (my corollary)" (In: Stack, S. [1987] p. 402).

From the main points it can be seen that Stack formulated the spectacular imitation of the model character, so the research relevance of vicarious modelling of model character appears in the media, that is the "media effect theory" of Werther-effect from Tarde's Laws of Imitation.

In this part of my analysis I refer to the fact that from a practical aspect, the presented conceptualization of Tarde's theory point out the sociological variables that transmit the media effect between Agent and Host (Host/Agent Correspondence). This kind of adaptation of Tarde's Laws of Imitation gave Stack opportunity to study the imitation effect of the model character transmitted by his social quality (e.g. being a celebrity), gender, age, occupation, marital status, nationality, ideological-political orientation etc. in certain segments of the Host. This differentiated approach gave a new perspective to the study on Werther-effect and – as we can see subsequently – it had an inseminating effect on many further works.

I describe the proposition in the following points:

- Classification of Werther-effect studies and their presentation in notes
- Detailed analysis of David Phillips', Wassermann's and Stack's replications
- Description of replications built on the episode of East Enders (a very popular soap opera in the United Kingdom) broadcasted on 27 February 1986, with special regard to Platt's study in 1987 (Platt, S. [1987])).

#### III. 5. 2. Main statements

In the mirror of David Phillips', Wasserman's and Stack's studies, the intensity of publicity increases the newspaper publicity on "suggestible potential". In my view, all this agrees with mediatheoretical propositions of Agenda-setting news and their working up time, even if the direct and powerful effect of "suggestible potential" on suicides was doubted by them. However, remarkable is the approach that as an "ally" of the Agenda-setting mediatheoretical school, reminds of the significance of Priming approach. For instance, Weaver – referring to Willnat's perceptions (1997) – explained in the Journal of Communication (issue March 2007) that "the theoretical explanations for these correlations, especially between agenda setting and behaviour, have not been well developed, but the alliance of priming and agenda setting has strengthened the theoretical base of agenda-setting effects by providing "a better understanding of how the mass media not only tell us 'what to think about' but also 'what to think' " (Cohen, 1963)." (David H.

## Weaver [2007]).

By attributing "the big news" of the media a specific cognitive effect (Priming-effect) — as Stack's media study and Platt's study on the impact of television films show) —, this mediatheorical establishment supports at theoretical level the classical hypothesis of Werther-effect study that the suicides in the media can really suggest suicide, just by "putting a bee in our bonnet".

The study on the imitation effect transmitted by the specific quality of the model character in the media is another matter. In my view, Stack's thoughts can be competent in judging this question. According to him, the data are only suitable for previous studies definitely of experimental type. All these results and statements stress that the media effect studies should be completed by qualitative reception analysis as well.

As it will be presented later, the link between media and social culture merges into an organic unity in the "social constructivist" paradigm of media theory, and hereby not only brings together approaches that was conflicting before, but also reminds of the modern lines of Werther-effect studies.

#### III. 6. The "Social constructivism"

#### III. 6. 1. Summary

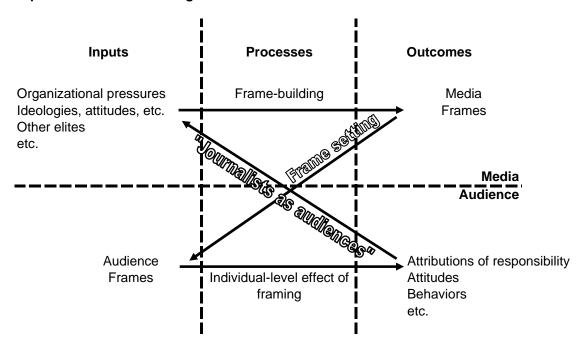
It is especially important for us to present the complicated link between the mass media and social culture, because it can help us with thinking on about the principles of Werther-effect studies.

The "Social Constructivism" gives the fourth, final passage of media theory in McQual's work titled The Theory of Mass Communication (2003): "The fourth and present stage, started in the early 1980s, is characterized by "social constructivism". The description of media and recipients in this stage combines elements of both strong and limited effects of mass media. On the one hand, mass media have a strong impact by constructing social reality ... On the other hand, media effects are limited by an interaction between mass media and recipients."

#### III. 6. 2. Main statements

In my opinion, the presented model of Scheufele (Scheufele, D. A. [1999]) stresses the points excellently that could make us think on about the Werther-effect study.

#### A process model of framing research



These points are the following:

- 1. Inputs of frame building: 1/ ideologies, attitudes and professional norms of journalists; 2/ type or political orientation of the media; 3/ external factors such as pressure of politicians, authorities or interest groups.
- 2. The product of Frame building is the Media Frame that presents events embedded in a specific story (In which frame do the journalists interpret the suicide incidents?). In my opinion, the experiences from empirical data could be excellently completed by a study that unties the latent "story string" of news, books, musical pieces and films relating to the tragic event. It seems that the international comparative study that proved the cultural patterns presenting suicides first of the Hungarian-German (Fekete, S. & Schmidtke, A.

[1995]; Fekete, S., & Schmidtke, A. [1996a]; Fekete, S. & Schmidtke, A. [1996b]), and then those of the Austrian-Latvian press by using the method of content analysis (Fekete, S. et al. [1998]), also verify this.

- 3. Individual-level effect of framing. In my view, such audience studies would be also necessary that would map the acceptance or rejection of media frames by the audience.
- 4. "Journalists as audiences" feedback, with that the journalists take their own culture (the media frame schemes must be par excellence implied) as inputs into the Frame building.

## III. 7. The Hungarian situation

#### III. 7. 1. Summary

Rudolf Andorka, László Cseh-Szombathy and Dr. Tibor Varró called attention already in 1968 to the "suicide climate" of the social culture and the significance of the suicidogenic "climatic conditions" in the columns of Statistical Review (Andorka Rudolf, Cseh-Szombathy László, Varró István [1968]).

A few years later, Béla Buda also pointed out in his writing titled The social-psychologistic key issues of suicide (published in 1986) that relating to the Hungarian population (but other nations as well) it can be said that "in the culture, so in the customs there must be some kind of suicidogenic factor". Which are these suicidogenic factors? "This is a complicated question, it can not be studied itself on the basis of statistical data, targeted researches are needed." – writes Béla Buda, and adds that most people "suspect the cultural basis of attitudes that promote suicide or suppose latent behavioural patterns or reaction schemes... According to studies and conclusions, besides the many predisposing social (e.g. of settlement structure) and cultural (customs, helping patterns) factors, the model effects of the occurring suicidical and experimental suicidical incidents give the essence of suicidal culture" (Buda Béla, [2001] p. 95-96).

In the middle of the 1990s, Sándor Fekete based the central hypothesis of his content analysis studies on the proposition that "the value judgments, qualifications, responses relating to the matter of life and death appear also in the news concerning individual and social incidents (suicides as well), in the depiction and judgment of the media" (Fekete S. et al. [2004] p. 34). He formulated the concrete program of studies: "It is important to study how the mass communication describes, represents and assesses suicide; what kind of relevant social attitudes the presentation reflects and whether the chronological change of these attitudes could be certificated; moreover, what kind of reaction the presentation of suicidium in the media has on the suicides and on the relevant attitudes." (Fekete S. et al. [2004] p. 34)

These series of researches that were also appreciated in the international specialized literature, with their questions and answers as well as with drafting the options of prevention went far beyond their age. However, it is unfortunate that the prevention aims formulated in the reports of researches has not been realized so far – writes Fekete in Psychiatria Hungarica (issue 1994/2) and at this point he misses a responsible discourse of decision makers in the media and experts (Fekete, S. et al. [1994] p. 127). Later, in his work "Sociocultural attitudes related to suicides" proposed a motion referring to the media recommendations of International Association for Suicide Prevention: "... the media should avoid the simplification of suicide incidents, but its glorification too; the media should make the character neither ridiculous, nor acknowledged, it should aspire to present the incident from many aspects, and the consequences and alternatives should be visible in the presentation. The media can do a lot by presenting the possibilities of help, therapy and prevention." Furthermore, he expressed his view that he misses such kind of media researches in Hungary that would give data and information about prevention. (Fekete S. et al. [2004] p. 39-40)

These thoughts are unfortunately timely up to this day. I refer to e.g. Beáta Temesváry's writing "Death corner: man of South part of the Great Plain is crueller to himself too" published in Magyar Nemzet, on 30 November 2002. She made a summary by emphasizing the media

recommendations of WHO.

#### III. 7. 2. The results of Hungarian content analysis studies

In this chapter I present the most important statements of Sándor Fekete's research series based on content analysis from the years 1981 and 1991-92 and of the data recorded from 1991-92. The principle of Fekete et al. (based on Phillips, D.P. [1990]) is that the crucial elements in the respect of imitation-identification are the following: "romantic, heroic or degrading presentation of the suicidium of authorities, prominent persons; emphasizing positive or negative consequences; qualifications; presenting alternatives of the suicidium; connecting it with other suicides; explicit, concrete or indirect addressing; a leading article on the first site with photo or a short article on an inner site, which avoids sensation" (Fekete, S. et al. [1994] p. 121).

I subjected the data resulted from this research and from the (international) study extended to Germany and made with the same method and the data of my own study to comparative content analysis. See the summary tables of the results: **Appendix 1 – 2.** 

I studied the news of suicide theme of two national daily papers published between 2004 and 2006. Both newspapers have a very wide circulation, but address a different reading public. There were 186 such articles, among them there were 131 that was about finished suicides.

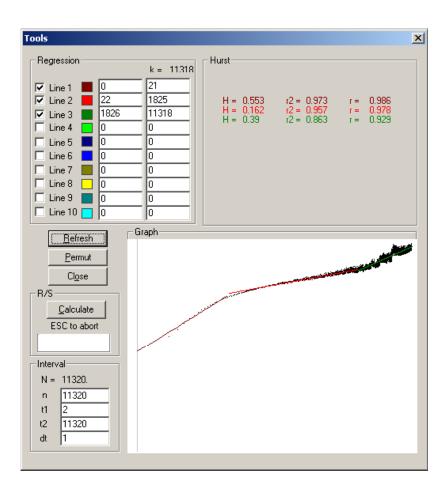
During the comparative analysis of the data, I approached the tendencies along the crucial elements of imitation and identification. The Appendix 1-2 contain the most important

comparative data. Summarizing the experiences of the study, I can state that although the tendencies seem to be undoubtedly favourable compared to the data of 1991-92, it is reasonable to elaborate a Hungarian media recommendation. A discussion between the responsible journalist circles and professional circles is indispensable for working out such a recommendation.

## III. 7. 3. The main results of the dynamic study

In this chapter I present the experiences of our study with Dr. Károly Bozsonyi that was published in the Magyar Tudomány (issue 2002/10) titled Nonlinear behaviour of suicide trends of broad decomposition. We studied the suicides – in contrast with the traditional approaches – embedding in social diffusive processes (Bozsonyi K., Veres E. [2002]) (see the study also in the volume of essays titled Chaos and fractals in the social sciences (Fokasz N. (ed) [2003])).

In this work we studied the external effects (even media exposition effects) on the system through suicide trends of broad definition. The above-mentioned characteristics of nonlinear dynamics observed in the 0-21, 22-1825, 1826-11318 day periods could also be noticed through the dialogue panel of the Hurst-program.



Dialogue panel of the Hurst-program

The Graph of the dialogue panel illustrates well that the elements of the system do not wander accidently, as the elements do not spread around a diagonal line in a greater and greater dispersion, but they sit on a line of 0.16 gradient in the 22-1825 day middle period that is particularly interesting for us. This system condition is signalled by the middle (red colored) regression line of the Graph; the regression characteristics demonstrate the borders of the period, and in the Hurst-field the value of Hurst-exponents and those confidency can be seen.

As implied above, the low Hurst-value refers to the presence of pink noise in this period, which means that the normally strong external effects are suppressed by the trend or seasonal cycles of the system. The relaxation time expresses the suppressing time of pink noise takes 21 days in this case what demonstrates the strength of external impacts on the one hand and the magnitude of suppressing power on the other hand. Of course, we can not suppose that these normally suppressed external effects demonstrate only the media effect (Werther-effect), but knowing Tarde's Laws of Imitation, those specific diffusion dynamics, the impact of Werther-effect and those mediatheoretical relevance, the significance of external effects can not be excluded at all.

IV. APPENDIX

# Comparative data of the Hungarian content analysis studies, 1980, 1991-1992, 2004-2006

|   |                           |               |                 |                    | _                     |                 |                           |                       |                  |           |                 |                               |
|---|---------------------------|---------------|-----------------|--------------------|-----------------------|-----------------|---------------------------|-----------------------|------------------|-----------|-----------------|-------------------------------|
|   | Total number of articles: |               |                 |                    |                       |                 |                           |                       |                  |           |                 |                               |
|   | 60<br>1981 19             | 184<br>191 20 | 187<br>004-2006 | 1981               | 1991                  | P-chi Sq        | Sig 🗸                     | 2004-2006             | P-chi Sq         | Sig 🗸     | P-chi Sq        | Sig 🗸                         |
| Suicide                                     | 48                        | 164           | 131             | 80.0%              | 89.1%                 | 3.310           | 0.069                     | 70.1%                 | 20.721           | 0.000 * ₽ | 2.253           | 0.133                         |
| Attempted suicide                           | 12                        | 20            | 48              | 20.0%              | 10.9%                 | 3.310           | 0.069                     | 25.7%                 | 13.569           | 0.000 *♠  | 0.794           | 0.373                         |
| Prominent's name                            | 10                        | 30            | 25              | 16.7%              | 16.3%                 | 0.004           | 0.948                     | 13.4%                 | 0.633            |           | 0.406           | 0.524                         |
| Prominent's profession Prominent's positive | 3<br>5                    | 11<br>3       | 23<br>15        | 5.0%<br>8.3%       | 6.0%<br>1.6%          | 0.080<br>6.410  | 0.777<br>0.011 * <b>.</b> | 12.3%<br>8.0%         | 4.425<br>8.206   | •         | 2.570<br>0.006  | 0.109<br>0.939                |
| Prominent's negative                        | 1                         | 6             | 3               | 1.7%               | 3.3%                  | 0.410           | 0.521                     | 1.6%                  | 1.075            |           | 0.000           | 0.933                         |
| Positive consequence                        | 7                         | 35            | 8               | 11.7%              | 19.0%                 | 1.718           | 0.190                     | 4.3%                  | 19.674           | 0.000 *♣  | 4.347           | 0.037 *                       |
| Namativa aanaamuuna                         | 14                        | 26            | 40              | 23.3%              | 14.1%                 | 2.796           | 0.095                     | 21.4%                 | 3.342            | 0.068     | 0.100           | 0.754                         |
| Negative consequence                        | 14                        | 20            | 40              | 23.3%              | 14.1%                 | 2.790           | 0.095                     | 21.4%                 | 3.342            | 0.000     | 0.100           | 0.751                         |
| Labeling<br>No labeling                     | 20                        | 101           | 29              | 33.3%              | 54.9%                 | 8.412           | 0.004 *                   | 15.5%                 | 63.197           | 0.000 *   | 9.076           | 0.003 *                       |
| Psychiatrization                            | 2                         | 4             | 18              | 3.3%               | 2.2%                  | 0.254           | 0.615                     | 9.6%                  | 9.232            |           | 2.417           | 0.120                         |
| Criminalization                             | 5                         | 15            | 34              | 8.3%               | 8.2%                  | 0.002           | 0.965                     | 18.2%                 | 8.139            | _         | 3.314           | 0.069                         |
| Moralization                                | 3                         | 13            | 6               | 5.0%               | 7.1%                  | 0.315           | 0.575                     | 3.2%                  | 2.839            |           | 0.415           | 0.519                         |
| Belittlement                                | 3                         | 6             | 2               | 5.0%               | 3.3%                  | 0.385           | 0.535                     | 1.1%                  | 2.111            |           | 3.538           | 0.060                         |
| Self-punishment<br>Bilanz-Suicide           | 1                         | 4<br>6        | 8<br>27.        | 1.7%               | 2.2%<br>3.3%          | 0.058<br>2.006  | 0.810<br>0.157            | 4.3%<br>14.4%         | 1.312<br>14.299  |           | 0.882<br>9.726  | 0.348<br>0.002 *              |
| Political-protest                           | 23                        | 9             | 10              | 38.3%              | 4.9%                  | 44.408          | 0.000 *                   | 5.3%                  | 0.040            |           | 42.699          | 0.000 *                       |
| Tragedy                                     | 3                         | 20            | 17              | 5.0%               | 10.9%                 | 1.826           | 0.177                     | 9.1%                  | 0.327            |           | 1.022           | 0.312                         |
| Denial                                      |                           | 6             | 36 .            |                    | 3.3%                  | 2.000           | 0.157                     | 19.3%                 | 23.622           |           | 13.522          | 0.000 *♠                      |
| Method of Suicide                           | 47                        | 96            | 160             | 78.3%              | 52.2%                 | 11.157          | 0.001 * 4                 | 81.8%                 | 48.335           | 0.000 *♠  | 2.596           | 0.107                         |
| Poison                                      | 1                         | 6             | 9               | 1.7%               | 3.3%                  | 0.413           | 0.521                     | 4.8%                  | 0.576            | -         | 1.157           | 0.282                         |
| Hanging                                     | 3                         | 8             | 34              | 5.0%               | 4.3%                  | 0.045           | 0.833                     | 18.2%                 | 17.680           |           | 6.198           | 0.013 *♠                      |
| Gun   | 1                         | 15            | 26              | 1.7%               | 8.2%                  | 3.106           | 0.078                     | 13.9%                 | 3.121            |           | 6.986           | 0.008 *                       |
| Drowning                                    |                           | 4             | 12 .            |                    | 2.2%                  | 1.326           | 0.250                     | 6.4%                  | 4.046            | 0.044 * ♠ | 4.047           | 0.044 *                       |
| Self-burning                                | 8                         | 35            | 10              | 13.3%              | 19.0%                 | 1.008           | 0.315                     | 5.3%                  | 16.271           | 0.000 *↓  | 4.288           | 0.038 *                       |
| Jumping down from a high place              | 6                         | 10            | 17              | 10.0%              | 5.4%                  | 1.539           | 0.215                     | 9.1%                  | 1.837            |           | 0.044           | 0.833                         |
| Being run-over                              | 3                         | 4             | 13              | 5.0%               | 2.2%                  | 1.297           | 0.255                     | 7.0%                  | 4.842            | •         | 0.286           | 0.593                         |
| Gas<br>Other                                | 25                        | 4<br>10       | 11 .<br>21      | 41.7%              | 2.2%<br>5.4%          | 1.326<br>48.342 | 0.250<br>0.000 *          | 5.9%<br>11.2%         | 3.288<br>4.067   |           | 3.694<br>27.767 | 0.055<br>0.000 * <sub>₹</sub> |
| Concrete managemble site                    | 24                        | E-7           | 426             | 25.00/             | 24.00/                | 0.226           | 0.562                     | 70.70/                | 64.766           | 0.000 * . | 27.046          | 0.000 * .                     |
| Concrete geographic site                    | <b>21</b><br>35           | 57            | 136             | <b>35.0%</b> 58.3% | <b>31.0%</b><br>67.4% | 0.336           | 0.562                     | <b>72.7%</b><br>20.3% | 64.766           |           | 27.916          | 0.000 *                       |
| No mentioned place<br>Contry or town        | 35<br>18                  | 124<br>42     | 38<br>75        | 30.0%              | 22.8%                 | 1.635<br>1.256  | 0.201<br>0.262            | 20.3%<br>40.1%        | 83.535<br>12.828 | •         | 31.526<br>1.977 | 0.000 * <b>4</b><br>0.160     |
| General place                               | 4                         | 3             | 13              | 6.7%               | 1.6%                  | 4.118           | 0.262                     | 7.0%                  | 6.364            | _         | 0.006           | 0.160                         |
| Concrete place                              | 3                         | 15            | 61              | 5.0%               | 8.2%                  | 0.658           | 0.417                     | 32.6%                 | 34.088           | _         | 18.052          | 0.000 * <b>↑</b>              |
| Mention of a motive                         | 16                        | 49            | 121             | 26.7%              | 26.6%                 | 0.000           | 0.996                     | 64.7%                 | 54.160           | 0.000     | 26.610          | 0.000 *                       |
| Seperation                                  |                           | 1             | 3.              |                    | 0.5%                  | 0.327           | 0.567                     | 1.6%                  | 0.979            |           | 0.974           | 0.324                         |
| Alcohol<br>Drog                             | 2                         | 1             | 1<br>2.         | 3.3%               | 0.5%                  | 2.900           | 0.089                     | 0.5%<br>1.1%          | 0.000<br>1.979   |           | 2.965<br>0.647  | 0.085<br>0.421                |
| Loneliness                                  |                           | 2             | ۷.              | ľ                  | 1.1%                  | 0.658           | 0.417                     | . 1.170               | 2.044            |           | - 0.047         | - 0.421                       |
| Love  | 2                         | 3             | 15              | 3.3%               | 1.6%                  | 0.654           | 0.419                     | 8.0%                  | 8.206            |           | 1.558           | 0.212                         |
| Self-insufficient                           |                           |               | 3.              | Į.                 |                       |                 |                           | 1.6%                  | 2.976            |           | 0.974           | 0.324                         |
| Unsuccessful                                | •                         | •             | 6.              | F 00/              | 4.004                 | 0.045           | 0.000                     | 3.2%                  | 6.001            | •         | 1.973           | 0.160                         |
| Conflict                                    | 3                         | 8             | 23              | 5.0%               | 4.3%                  | 0.045           | 0.833                     | 12.3%                 | 7.658            | _         | 2.570           | 0.109                         |
| Search for motivation                       | 3                         | 13<br>3       | 36<br>7.        | 5.0%               | 7.1%                  | 0.315<br>0.990  | 0.575<br>0.320            | 19.3%<br>3.7%         | 12.015<br>1.579  |           | 6.939<br>2.311  | 0.008 * <b>★</b><br>0.128     |
| Cry for help'<br>Illness                    | 2                         | 6             | 12              | 3.3%               | 1.6%<br>3.3%          | 0.990           | 0.320                     | 3.7%<br>6.4%          | 2.001            |           | 0.808           | 0.128                         |
| Financial problems                          | 1                         | 8             | 12              | 1.7%               | 4.3%                  | 0.916           | 0.339                     | 6.4%                  | 0.779            | 0.378     | 2.056           | 0.152                         |
| Other                                       | 4                         | 4             | 55              | 6.7%               | 2.2%                  | 2.880           | 0.090                     | 29.4%                 | 51.448           | 0.000 *♠  | 12.926          | 0.000 *♠                      |
| Prevention, alternatives                    | 2                         | 7             | 14              | 3.3%               | 3.8%                  | 0.028           | 0.867                     | 7.5%                  | 2.355            | 0.125     | 1.293           | 0.255                         |
| Murder-suicide                              | 3                         | 12            | 22              | 5.0%               | 6.5%                  | 0.182           | 0.670                     | 11.8%                 | 3.063            | 0.080     | 2.285           | 0.131                         |
| Extended suicide                            | 2                         | 3             | 20              | 3.3%               | 1.6%                  | 0.654           | 0.419                     | 10.7%                 | 13.105           | 0.000 *♠  | 3.034           | 0.082                         |
| Used expression of suicide only by method   | 38                        | 73            | 8               | 63.3%              | 39.7%                 | 10.214          | 0.001 * 4                 | 4.3%                  | 68.086           | 0.000 * 4 | 104.533         | 0.000 *                       |
| Ambiguous headline                          | 11                        | 52            | 80              | 18.3%              | 28.3%                 | 2.328           | 0.001                     | 42.8%                 | 8.531            | 0.003 *   | 11.668          | 0.000 <b>\$</b>               |
| Ambiguous neaulille                         |                           | 52            | 00              | 10.3%              | 20.3%                 | 2.328           | 0.127                     | 42.0%                 | 0.331            | 0.003     | 11.008          | 0.001                         |

<sup>\* 7</sup> news were multiple in the outcome of the suicidium (suicide and attempted suicide) \*\* 7 news were multiple in the mentioned method

# Comparison of the two press data derived from the Hungarian content analysis study, 2004-2006

|                                    | 81<br>Népsz. | 106<br>Blikk | 187<br>SUM | Népsz.        | Blikk  | _        |                  |
|------------------------------------|--------------|--------------|------------|---------------|--------|----------|------------------|
|                                    |              |              |            | NCP32.        | DIIKK  | P-chi Sq | Sig              |
|                                    |              |              |            | •             |        | •        | -                |
| Suicide                            | 79           | 52           | 131        | 97.5%         | 49.1%  | 51.428   | 0.000 *          |
| Attempted suicide                  | 5            | 43           | 48         | 6.2%          | 40.6%  | 28.466   | 0.000 *          |
| Prominent's name                   | 7            | 18           | 25         | 8.6%          | 17.0%  | 2.757    | 0.097            |
| Prominent's profession             | 6            | 17           | 23         | 7.4%          |        |          | 0.075            |
| Prominent's positive               | 3            |              | 15         | 3.7%          |        |          | 0.057            |
| Prominent's negative               | 2            | 1            | 3          | 2.5%          | 0.9%   | 0.677    | 0.411            |
| Positive consequence               | 0            | 8            | 8          | 0.0%          | 7.5%   | 0.386    | 0.011 *          |
| Negative consequence               | 11           | 29           | 40         | 13.6%         | 27.4%  | 5.184    | 0.023 *          |
| Labeling                           |              |              |            |               |        |          |                  |
| No labeling                        | 17           | 12           | 29         | 14.8%         | 16.0%  | 3.275    | 0.070            |
| Psychiatrization                   | 13           | 5            | 18         | 16.0%         | 4.7%   | 6.778    | 0.009 *          |
| Criminalization                    | 14           |              | 34         | 17.3%         |        |          | 0.781            |
| Moralization                       | 2            |              | 6          | 2.5%          |        |          | 0.616            |
| Belittlement                       | 0            | 2            | 2          | 0.0%          |        |          | 0.214            |
| Self-punishment                    | 0            |              | 8          | 0.0%          |        |          | 0.011 *          |
| Bilanz-Suicide                     | 14           |              | 27         | 17.3%         |        |          | 0.333            |
| Political-protest Tragedy          | 10<br>5      | 12           | 10<br>17   | 12.3%<br>6.2% |        |          | 0.000 *<br>0.225 |
| Denial                             | 6            | 30           | 36         | 7.4%          |        |          | 0.000 *          |
| Domai                              | ·            | 50           | 00         | 7.470         | 20.070 | 12.000   | 0.000            |
| Method of Suicide                  | 55           | 105          | 160        | 67.9%         | 99.1%  | 36.076   | 0.000 *          |
| Poison                             | 1            | 8            | 9          | 1.2%          |        |          | 0.046 *          |
| Hanging                            | 16           | 18           | 34         | 19.8%         |        |          | 0.626            |
| Gun                                | 14           |              | 26         | 17.3%         |        | l e      | 0.243            |
| Drowning                           | 2            | 10           | 12         | 2.5%          | 9.4%   | 3.709    | 0.054            |
| Self-burning                       | 6            | 4            | 10         | 7.4%          | 3.8%   | 1.198    | 0.274            |
| Jumping down from a high place     | 4            |              | 17         | 4.9%          |        |          | 0.084            |
| Being run-over                     | 2            |              | 13         | 2.5%          |        |          | 0.035 *          |
| Gas                                | 7            | 4            | 11         | 8.6%          |        |          | 0.161            |
| Other                              | 3            | 18           | 21         | 3.7%          | 17.0%  | 8.120    | 0.004 *          |
| Concrete geographic site           | 51           | 85           | 136        | 63.0%         | 80.2%  | 6.869    | 0.009 *          |
| No mentioned place                 | 24           |              | 38         | 29.6%         |        |          | 0.006 *          |
| Contry or town                     | 31           | 44           | 75         | 38.3%         |        |          | 0.654            |
| General place                      | 6            | 7            | 13         | 7.4%          |        |          | 0.830            |
| Concrete place                     | 20           | 41           | 61         | 24.7%         | 38.7%  | 4.087    | 0.043 *          |
| Mention of a motive                | 52           | 69           | 121        | 64.2%         | 65.1%  | 0.016    | 0.899            |
| Seperation                         | 1            | 2            | 3          | 1.2%          |        |          | 0.725            |
| Alcohol                            | 0            | 1            | 1          | 0.0%          |        | 0.768    | 0.381            |
| Drog                               | 1            | 1            | 2          | 1.2%          | 0.9%   | 0.037    | 0.849            |
| Loneliness                         | 0            | 0            | 0          | 0.0%          |        |          |                  |
| Love                               | 1            | 41           | 15         | 1.2%          |        |          | 0.003 *          |
| Self-insufficient                  | 1            | 2            | 3          | 1.2%          |        |          | 0.725            |
| Unsuccessful<br>Conflict           | 1<br>2       | 5<br>21      | 6<br>23    | 1.2%<br>2.5%  |        |          | 0.181<br>0.000 * |
| Search for motivation              | 21           | 15           | 36         | 25.9%         |        |          | 0.000            |
| Cry for help'                      | 1            | 6            | 7          | 1.2%          |        |          | 0.114            |
| Illness                            | 3            |              | 12         | 3.7%          |        |          | 0.186            |
| Financial problems                 | 3            |              | 12         | 3.7%          |        |          | 0.186            |
| Other                              | 45           | 10           | 55         | 55.6%         | 9.4%   | 47.044   | 0.000 *          |
| Prevention, alternatives           | 9            | 5            | 14         | 11.1%         | 4.7%   | 2.710    | 0.100            |
| Murder-suicide                     | 10           | 12           | 22         | 12.3%         | 11.3%  | 0.046    | 0.829            |
| Extended suicide                   | 9            | 11           | 20         | 11.1%         | 10.4%  | 0.023    | 0.872            |
| Used expression of suicide only by | ι 7          | 1            | 8          | 8.6%          | 0.9%   | 6.645    | 0.010 *          |
| Ambiguous headline                 | 31           | 49           | 80         | 38.3%         | 46.2%  | 1.187    | 0.276            |

 $<sup>^{\</sup>star}$  7 news were multiple in the outcome of the suicidium (suicide and attempted suicide)  $^{\star\star}$  7 news were multiple in the mentioned method

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