

# VIRAL CONTENT FORMULA – AN ANALYSIS ON "ADEVĂRUL" NEWSPAPER

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*Abstract: The formula for viral content, according to one of the most cited studies, is emotionality. The higher the level of emotionality, the more distributed the content is. The purpose of this paper is to check to what extent this hypothesis is valid for the top shared Adevărul 2015 articles. By using an adapted list of Romanian emotional words, the emotionality premise of viral content is validated. The valence dimension of top ranked articles is also analyzed.*

*Keywords: viral content, number of shares, emotionality, valence.*

## Introduction

Countless articles, videos or blog posts are uploaded on the internet every day. Most of them remain obscure, but a few do become viral: they are accessed by hundreds of thousands or even millions of people in a short while. Given that online audience has become extremely important for press institutions and for all the domains that are focused on the relationship between a service provider and potential clients, finding an answer to the question: "How can one produce viral content?" has become very important for both practitioners and academics.

When one refers to online content as being viral, whether it's a movie, an image or a news article, one does not just refer to the fact that it is quickly accessed by many people, but also to the fact that it has gained popularity through a contagion process similar to that of a virus spreading mechanism (Goel, 2016). Thus, there are two important characteristics of a viral: a large number of views and a large number of distributions.

One of the reference studies in the related literature (Milkman et al, 2015) that won the 2017 William F. O'Dell Award which honors "the article that made the most significant, long-term contribution to marketing theory, methodology, and / or practice" concludes that *emotionality* is a main attribute of a viral content. After reviewing about 7000 articles in the New York Times online edition, the researchers sum up that those newspaper articles with a higher emotional load are the most viral. Starting from their findings, the purpose of this paper is to analyze whether these conclusions are verified for the Romanian press, more precisely regarding the articles in the Adevărul national daily broadsheet.

## Viral Articles' Recipe

Milkman et al (2015) examines how content traits affect its viral nature. American researchers have processed data from about 7000 articles published in the New York Times from the point of view of their virality. Their research was conducted in 2011, when the Facebook distribution of press articles did not have nowadays' importance so their research was about distributing articles via e-mail. Moreover, the articles' *valence* is analyzed - to what extent an article is positive or negative (an article is positive if the number of words with positive valence exceeds the number of words with negative valence) - and their *emotionality* (the percentage of words with emotional load, positive and negative, out of the total number of words). A list of words that evoke positive emotions (such as, for example, beauty, well-being, benefit, health) and negative emotions (ugly, evil, illness, shock, horror)

is used in this respect. An automatic method for counting valence (positive or negative) and emotionality (emotional loading) is used for scanning each article. A computer program (LIWC) analyzes the number of positive and negative words in each article using a list of 7630 words categorized as positive or negative by human readers (Pennebaker et al, 2007). Valence is expressed as the difference between the percentage of positive and negative words in an article. Emotionality is evaluated as the percentage of words that have been classified as positive or negative in the total number of words. Their results indicate that the more the content is loaded by words that evoke different emotions, regardless of valence, the more likely it is to reach the list of the most distributed newspaper articles. "This indicates that while the more positive or negative content is more viral than non-emotional content, the positive content is more viral than negative content," says Milkman et al (2015).

#### Adevarul top 10 articles' Analysis

The purpose of this paper is to determine to what extent the main findings of Milkman et al (2015) are valid for the top 10 articles published on the [www.adevarul.ro](http://www.adevarul.ro) site in 2015 from the point of view of the number of reads. Thus, the mostly accessed Adevarul articles were analyzed from the point of view of their emotionality and valence. Unlike the American researchers' measurements - which analyzed all the words of the articles – this paper only takes into account the title and the article summary, previous studies (Maksym, 2016 and Weinreich, 2008) showing that 59% of the links distributed on social networks have actually never been accessed. Some other recent studies in the field suggest that the decision to distribute an article often appears before one finishes reading the text and even without reading it. According to a new study conducted by scientists from Columbia University and the French National Institute, 59% of social media links have actually never been accessed (Maksym, 2016). In other words, most readers distribute the news without ever reading them. The survey made in 2016 covered all the views made on the top 5 top news portals in the world for a month. 2.8 million Twitter distributions of articles published by the 5 media institutions were analyzed. The researchers concluded: "People are more willing to distribute an article than to read it. This is typical for the modern consumption of information. People draw an opinion based on a summary or a summary of summaries without making the effort to go deeper "(Maksym, 2016). Another study, which examines 59573 views of some publicity websites, shows that users have time to read up to just 28% of an article during an average visit (Weinreich, 2008).

An important part of the analysis carried out by this paper is the fact that it uses a firstly translated and then adapted list of affectional words taken from the work of researchers at Illinois University in Chicago - Sentiment Analysis and Subjectivity (Liu, 2010). The author of the present study has had to make this adaptation, because there is no list of affectionate words in the Romanian literature. This is an originality characteristic of the present study.

#### Results

The title and the summary of each article in the top 10 accessed articles on [www.adevarul.ro](http://www.adevarul.ro) in 2015 were analyzed from the point of view of their valence and emotionality, defined above. The obtained data are synthesized in Table no. 1:

Table no. 1 Summary statistics for the top ranked 2015 Adevarul articles

Ad ev ar ul	Article title	Numbe r of views	Num ber of share s	To tal nu mb	Emotional words		Emotio nality percent age	Vale nce; nega tive
					Posi tive	Neg ativ		

2015 Article ranking				er of words	words	e words		(-), positive (+) or neutral (0)
1	6 White, 6 Black: The Worst Women by Zodiac Sign	263054	9493	63	2	4	9.53%	-
2	The Disturbing Testimony of the Student Raped by Seven Individuals in Vaslui: "They put me down on my knees and forced me to have oral and anal sex until I lost my consciousness"	170062	8763	99	3	15	18%	-
3	Maria Theresa's Erotic Passions. How Obsessed She Was of Sex and the Truth about the Legend that She died Crushed by an Aroused Stallion	149289	84	68	4	4	11.7%	0
4	At the Home in the Seven Brutals Who Raped a Student Till She Fainted: "She deserved that! I cried when they were arrested, the girl is to blame! " The Terrifying Story of the Village of the Depraved	115993	2167	95	1	16	17.8%	-
5	Arsenie Boca and the Deepest Lesson: "When life seems terrible, prepare a tea and drink it from the prettiest cup"	111285	2731	87	7	10	19.5%	-
6	The Guts of a Tax Enrolled Student during an Exam: "If it weren't for those like me, you would not get your salaries anymore." The Teacher's Response who gave him a Mark of 1	109027	1926	53	1	2	5.1%	-
7	Five Tremendous Prophecies of Arsenie Boca: "A people hat don't believe in the cross sign would arise from the East, and human flesh would be eaten, and human blood would be drunk"	108686	323	61	2	4	9.83%	-
8	The Revolt of a Girl of 10s in Marks: "Over. No more silence!" Details on the Cruelty that Crushes Souls and Ideals through the System of Acquaintances and	107799	8943	74	4	8	16.21%	-

	Relationships in Schools							
9	Thong Panties. How Do Women Get Sick from Wearing the Sexiest Underwear? Doctors Explain why They Should Be Seldom Worn	101140	198	46	4	3	15.2%	+
10	The Pearl of Botoșani Gypsies, a Genius Admitted to the Top 5 UK Universities. Left by Her Mother, Blamed by All, She Studied until She Conquered the World	99757	5376	73	10	5	20.5%	+

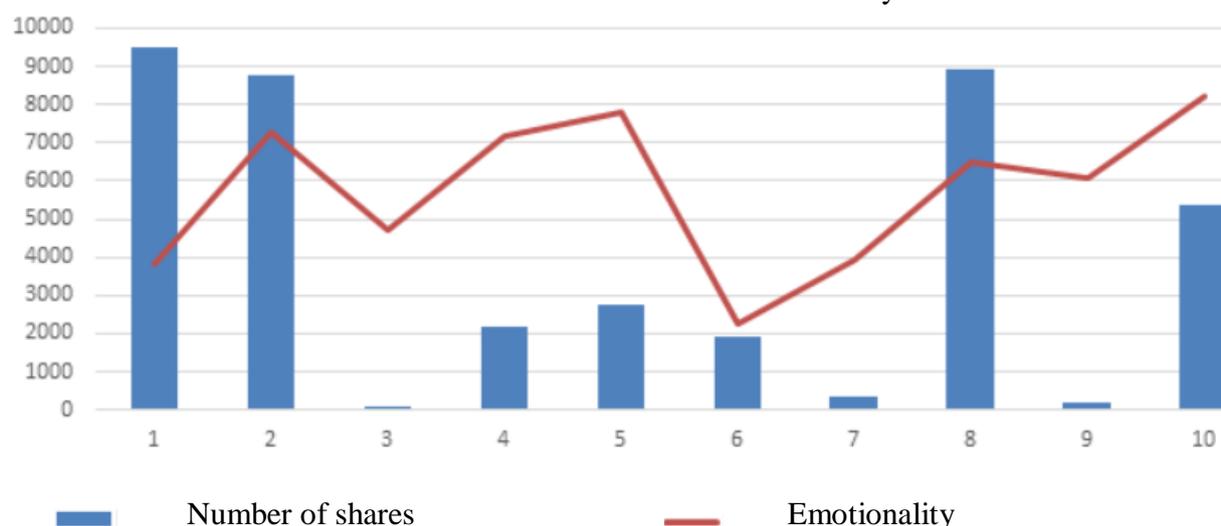
Source: Author’s processings in Excel

### Interpretations and Concluding Remarks

Based on the made encodings, this paper analyzes the relationship between the degree of emotionality / valence of articles and the number of Facebook shares they have.

Figure 1. The relationship between shares and emotionality

The Number of Shares versus Emotionality



Source: Author’s Processings in Excel

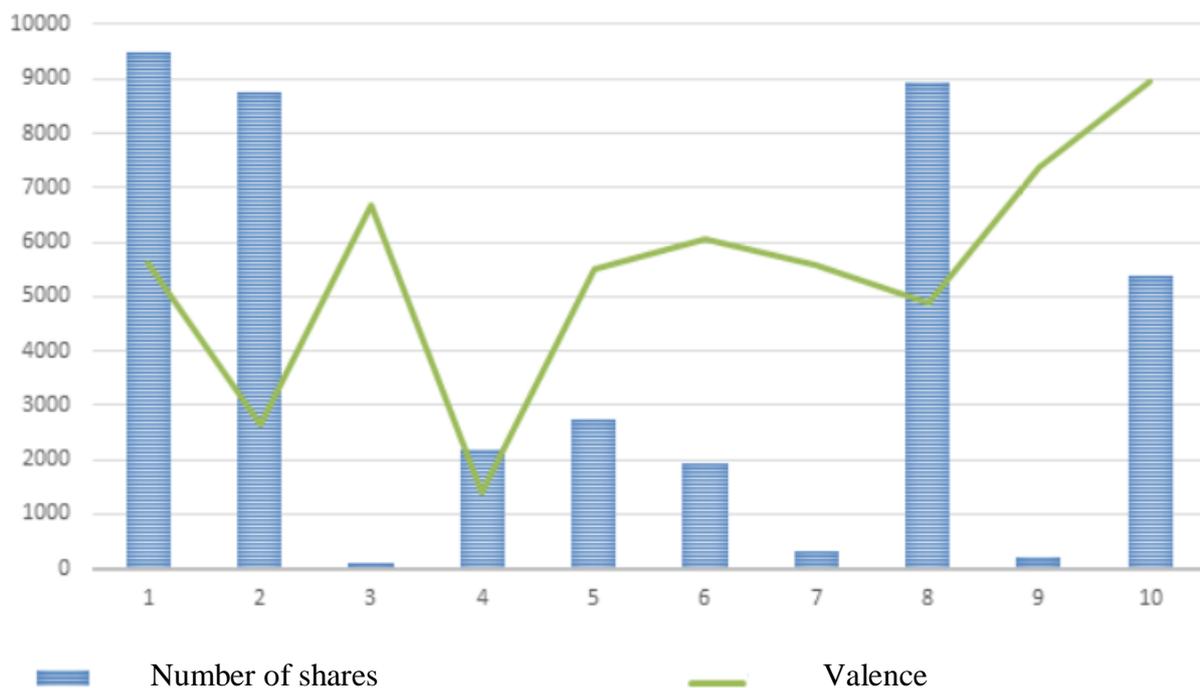
Regarding the relationship between the number of Facebook shares and emotionality (Figure 1), a study carried out by American researchers (Milkman et al, 2015) shows that chances for an article to become viral increase with its degree of emotionality.

The analyzed data show that in the top 10 of the most read articles from Adevărul.ro in 2015 we have an increased average emotionality of 14.4% which means that a word out of 7 is affective. For comparison purposes, the average emotionality of articles in Adevărul.ro as they appear in the "Top Articles" section of a random day (September 11th, 2017) is of only 6.8%, meaning that a word out of 15 is affective.

Regarding the relationship between distributions and emotionality, one may notice that 6 articles (rankings 2, 4, 5, 8, 9 and 10 respectively) have a higher emotionality than the average emotionality of the top 10 articles of Adevărul.ro in 2015 – i.e. 14.4 %, finding themselves above this average value. Nevertheless, if one takes as a reference point the average emotionality of 6.8% (calculated on a random day, based on its Top Articles’ section), one may notice that a single article (article 6) finds itself with an emotionality level below this average.

By considering the average number of distributions in the top 10 Adevărul 2015 articles (4000 shares), one notices that 4 articles exceed this average number of shares value (1, 2, 8 and 10). By considering the average number of shares on Adevărul.ro (made for the Top Articles section on September 11th, 2017), that is 2018 shares, one gets 6 articles that exceed this average (1, 2, 4, 5, 8, 10). Summing up and correlating these figures, we may conclude that 6 out of the 10 analyzed articles follow the research premise that a high degree of emotionality leads to a large number of Facebook shares. Nevertheless, low emotionality (5.6%) and small number of shares (1926) were registered for one article (article 6), so Milkman et al (2015) findings are mainly respected.

Figure 2. The relationship between the number of shares and the valence of articles  
The Number of Shares versus Valence



Source: Author's Processings in Excel

Previous literature (Milkman et al, 2015) confirms that unlike what was believed - positive news were not news - positive valence articles are more likely to be distributed than those with negative valence. By testing this hypothesis, only one article of the 10 analyzed from the www.adevarul.ro list respects this theory - it is the number 10 item that has the highest emotionality (20.5%) and a large number of distributions (5376). The most shared article (9493 shares) - Article 1 - "6 White, 6 Black: The Worst Women by Zodiac Sign" has a slightly negative valence (-3), while the second and third place items in terms of number of shares have more pronounced negative valences: "The Revolt of a Girl of 10s in Marks: "Over. No more silence!" Details on the Cruelty that Crushes Souls and Ideals through the System of Acquaintances and Relationships in Schools" (-5.4) and "The Disturbing Testimony of the Student Raped by Seven Individuals in Vaslui: "They put me down on my knees and forced me to have oral and anal sex until I lost my consciousness" (-12.12).

The explanation may reside in the specifics of the Romanian readers or of the articles that are promoted on the Adevărul.ro site. On the other hand, in the cited article (Milkman et al, 2015), it is also shown that when the emotion transmitted is a stimulus (anger, astonishment) - and this is the case for many of the articles analyzed by us - the

valence of the article (positive or negative) is of a secondary importance, right after emotionality.

Thus, we may conclude that for the analysis of Adevărul articles, the criterion of emotionality respects the rule discovered by American researchers according to which emotionality determines virality. As for the valence of articles, the analysis carried out on The New York Times reaches a different conclusion than what we find for Adevărul.

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