

# THE IMPACT OF SNS (SOCIAL NETWORKING SYSTEMS) ON THE EMOTIONAL LIFE OF INDIVIDUALS

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## Abstract

*The aim of this preliminary research was to determine to what extent do social network users express negative and positive emotions when it comes to the current social issues (with main topics), by analysing the comments of three dominant issues in Croatia in 2016. Hypotheses are formed based on the research questions focusing on the extent to which users of Facebook (as a social network) express negative emotions in relation to an event, and whether men are more inclined to express negative emotions than women. Primary research data were collected by analysing user reviews (& comments) in Croatia on Facebook in the period between February 1 and February 10, 2017. Research results show that in 72% of comments negative emotion was expressed, while in 28% of comments positive emotion was expressed. Therefore, it can be concluded that our main hypothesis has been confirmed, i.e. that a greater number of Facebook users express their negative emotions in their comments than those who express positive emotions in relation to the event.*

**Keywords:** *Social networks, Social networks impact, Facebook, Emotions, Information society*

## Introduction, Emotions, people relations and emotions valuation

With the emergence of new media, an individual stop to be only a passive recipient of content and now became increasingly active and involved almost in everyday event, both in the immediate and on global level. Social networks and the Internet help in bridging spatial and temporal constraints, thus enabling an increasing involvement of an individual. In this research article, we will focus on attempt to preliminary determine

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how much the impact of social networks on the everyday life and emotions of an individual limits us to this kind of communication with others and whether we are still only passive observers of what is happening around us or social networks become a tool that can be changed society.

Mainly according to (Duck, 2014, pp. 93-95): Choosing individuals that will belong to our circle of people is not just the result of attractiveness and friendship or cognitive information management processes. Social status, age, gender, family relationships and previous friendships shape and direct our choice of individuals and restrict freedom in everyday life. Relations between people take place in the context that creates conversation, not just thoughts and feelings. Mainly according to (Duck, 2014, pp. 141-145): Each communication contains a certain amount of persuasion by introducing into the interaction of cultural and social influences that then bring certain consequences. Likewise, relationships affect us, creating a context for all forms of persuasion from those from parenting authority, through routines in relationships, to social networks that are intertwined with personal decisions. Mainly according to (Oatley, 2002, p. 98): Emotions are difficult to define, appear suddenly, they are usually caused by something and have consequences. Showing this process gives us: “Evaluation => Context-Based Evaluation => Readiness to Action => Physiological Change, Expression, Activity”. A good summary of the idea of estimation as important to the purpose was given by Lazarus (Oatley, 2002. pp. 100-101; Lazarus, 1991.), and he calls it “the primary estimate and believes that it has three main features: (a) Whether or not it is important to the goal - emotions will only occur if the event is important to the goal or interest; (b) Aggregation with a goal or disagreement with the goal of - bringing the goal to a positive emotion and distancing causes negative emotions; (c) The type of ego involvement in the event, its importance to the person; For example, if the event involves self-esteem, opportunities are pride or anger.“ Mainly according to (Oatley, 2002. pp. 100-102): The idea of self-assessment is subjective to the individual, so Oatley say that with the idea of assessment is associated with certain difficulties. As thoughts are crucial in our emotional experience, such mental activity stimulates our emotions. If we are anxious we stop thinking about what can happen, if we are angry our thoughts are focused on planning revenge. That is why emotional thoughts are necessary. If our adaptation depends on our understanding of the unexpected and the adoption of new plans, then the preoccupation with the emotions of great importance. So emotions suggest changes in our behaviour and help us focus on the problems and adapt my own behaviour when solving them. It is important, however, to note that readiness as well as plans generally relate to other people (Oatley, 2002. p. 103).

## **Information society: communication context and relationships**

Mainly according to (Uzelac, 2003, pp. 35-36): The time of globalization influenced the development of all segments of society. Communication, as one of its most important elements, is subject to the influence of these changes. So Uzelac states that when we communicate face to face we share the same physical space with some, we use common communication methods i.e. common language while modern telecommunication technology expands the common space into an electronic (virtual) space, which allows communication over large distances and in some way abolishes physical space dimension. Social networks, in turn, become a place where the activity of exchanging any information and data is intensified. It is clear, therefore, that no matter what means of communication we still use, there is a connection and the desire to help, even if only by sharing the published content, hoping to see it and someone who can really help.

According to (Barabasi, 2006, pp. 153-168): “Many factors have had an important impact on the development of information society, and one of them was certainly the cold war era. Paul Baran, within Rand Corporation, was given the task of developing a communications system that would survive a nuclear attack. In the sixties of the last century, this was a potential war scenario that came with justified fear. Baran then described the vulnerability of the existing communication infrastructure and suggested better - the Internet. An important role in the development of the Internet was also the Advanced Research Projects Agency (ARPA), which strictly supervised most of the advanced military research projects, and funded IT (Information Technology) research”. According to (Uzelac, 2003, p. 31): “Communication has always determined social paradigm, ie social institutions. Modern technology today extends such interaction to larger groups of people by creating global institutions and global culture. Today, global communications networks carry far more rapid and far-reaching impacts, thereby creating a global intellectual and cultural space and losing many local cultural differences”. According to (Uzelac, 2003, p. 13): “The complexity of social change that has affected today’s society is reflected in the frequent use of concepts such as information society and networks. The emphasis on interactivity, networking and individualism today is the determinant of development trends in the field of technology as well as society.” According to (Kirkpatrick, 2012, p. 78): “More and more people were familiar with electronic communication, initially through commenting on online groups and over the chat.”

## **Social networking systems (SNS): Facebook and virtual communities**

According to (Stanojević, 2011, p. 168): “The Internet, and then the social networks, have changed the human understanding of communication. Social Web, as we know today, has given new meaning to the notion of communication. Changes have been changed for people to go online. Sometimes that was because they wanted to be informed, wanted to see and experience, read, and learn. The reason people are leaving today is that they want to be part of communication, want to participate in it, want to be present, want to read them and want to read about others.” This is exactly the moment Osrečki (Osrečki, 2014) says when he says that social interests and interaction use technology simply because it also enables communication and presence and information and interactivity. Mainly according to (Kirkpatrick, 2012, 79): The basic features of a true SNS are that it is a service where users can create a public or semi-private profile, articulate a list of other users they are connected to, and view their list of links as well as lists created by other members of the system. The most popular Matching page that launched its services was launched in 1994 and was filled with personal information collected for a specific purpose. Classmates.com appeared in 1995 as a service that helped people find real communication names and communicate with their former school colleagues (Kirkpatrick, 2012, 71-79). Mainly according to (Kirkpatrick, 2012, 79-81): The era of modern social networks began in 1997 with the appearance of a sixdegrees.com web site based on real names. In 2003, there is also a virtual community of free, useful and fun services from college students called College Online. Yale University Student Council has launched a online dating site, Yalestation, just one week after launching the Facebook (Kirkpatrick, 2012, 89-91). Mainly according to (Milardović, 2010, 10): Regarding the history of social networks, it can be said that the story coincides with the development of ICT and the Internet. For the first time, from 1980 to 2002, there is a characteristic phenomenon of prototypes of social networks that we know today as Facebook, MySpace and others. The real rise of social networks emerges after the year 2002. The MySpace Social Network was founded in 2003 and was the most popular and most dominant. 2006. The LinkedIn Business Network was founded, while Twitter and Facebook are the most influential today, which will later be the talk. So, as the main features of social networks, we can state that it is a universal means of communication, and that people gather together on common interests.

Mainly according to (Uzelac, 2003, p. 57-65) each technology is the result of a social need and is necessarily based on the culture of that community

so that the Internet cannot be an exception. With the commercialization of the Internet, virtual communities have also changed. Although they did not replace or change existing social structures, their application gained ever greater popularity (Uzelac, 2003, p. 57-65). Mainly according to (Christakis, 2010, pp. 253-254): Unlike other online groups and communities (Wiki et al.), SNS are organized around people, not topics. SNS have become an integral part of the lives of millions of people, enabling us to maintain contact with people we would otherwise have been very poorly connected. The basic feature of social networks is to “enable public or semi-personal profile profiles in a restricted access environment, display a list of other users they share, and view and manage their own connections and other connections within the system”. Social networks are different in terms of privacy, who can join, what can be set up, and how others see network connections and how to move between them. What the social network differs from other websites is that on social networks our relationships are visible to us and to all who are connected with us.

Mainly according to (Milardović, 2010, str. 100-102): Technologies change social forms as they live in an information society now mediated by new information and communication technologies. Over time, different profiles or types of social networks were shaped. It is about the personalization process in line with the needs and interests of users that are grouped according to the needs, interests, social roles and social status criteria. This means that social networks are sorted by features, so we can share them on personalized and specialized social networks (Milardović, 2010, str. 100-102). Today there are different types of social networks, so they can be classified (classification of social networks according to (Milardović, 2010, p.102)) into those SNS that are oriented to: (a) Friendship and entertainment: Bebo, Facebook, FriendFeed, Friendster, Hi5, Jaiku, MySpace, Netlogu, Orkut, Tagged, Twitter, Whispurr ibibo; (b) Work: LinkedIn, Twitter, Viadeo; and Science: SixDegrees.com, Tribe.net; (c) Music and film: LastFM, Flixster iLike; and Hobi: ActionProfiles, FanIQ.

Mark Zuckerberg, Harvard University's second year student, in September 2003, made an online program called Course Match. This program wanted students to help before choosing a course based on who had chosen them for more than a year. Encouraged by the unexpected success of the Course match, Zuckerberg decided to try out some more ideas. He started his next project a month later and called it Facemash. The purpose of the program was to determine who is most prominent at the university. The program compared two different faces of the same sex, and the students decided

which face was more appealing. Photos for Facemash are taken from the so-called Facebook, a database that stores photographs of all undergraduate students. Zuckerberg was delighted with the success of his program to continue programming. He wrote a six-step Harry Lewis program, in honour of his favourite computing professor. Using Harvard Crimson articles, he tried to figure out relationships between people and created a network of links to Lewis, based on these relationships. It could have typed any student name with Harvard, and the program would show how that person was associated with Professor Lewis. Zuckerberg registered the face at thefacebook.com in January next year. This page was used by ideas from Course match and Facemasha, as well as from the Friendster web pages of which Zuckerberg was a member. Zuckerberg wanted to make a reliable database of students with the true information that was the central concept of thefacebook. Unlike Friendster, which was intended for arranging the outings, thefacebook was a software solution to solving the simple problem of collecting college colleagues and what they did with them (Kirkpatrick, 2012, pp. 27-39). In February 2004, thefacebook became publicly available. Thefacebook could search people from their university, find out who goes to specific lectures, look for friends of their friends, and look at the visualization of their social network. Thefacebook, unlike others, has taken into account two important components: the first is social, given that the users of that network are mostly the younger population they used to search for partners, friends, and the like, and the other practical because it enabled the finding of groups for learning aids, organizing meetings of different clubs, and setting up party announcements (Kirkpatrick, 2012, pp. 39-42). Over time, the interest in the Zuckerberger network has been increasing, confirming that both of its managers from Google expressed interest in co-operation and even buying. Thefacebook is getting bigger and requires bigger investments. In a very short time, thefacebook had more than 200,000 users alongside plans to expand to another 70 universities (Kirkpatrick, 2012, pp. 43-76). Facebook is the site of social networks with more than 1.5 billion active users making it the world's largest social service and the largest online image sharing service. In September 2006, it is open to users since the age of 13, when its exponential growth begins. In August 2008, the number of users exceeded 100 million, and in January 2011, 600 million. That's when Facebook became the largest social network, leaving behind My Space (which was still run by the number of users) in 2008 and the other network (Čačić, 2012, pp. 58-59).

## **Advantages/Disadvantages/Influence of social networks**

One of the major problems of social networks is the problem of identity because the social networking problem is fit for manipulation and masking of identity. Computer technology has created the possibility of transforming the identity of social network users, which is the simulation and the construction of virtual identity. In a virtual community, identity is unclear because it lacks many of the basic features of personality and social roles we are accustomed to in the material world. So are the features of identity in cyber space transformation, masking, sex replacement, lying, hiding, beautifying, stealing and the problem of sustainable privacy (Milardović, 2010, pp. 102-104). Benefits of Social Networks according to (Milardović, 2010, p. 104): Restoring old friendships; Making new friendships; Promotion of a personal profile; Promotion of company profile; Network marketing; The possibility of digital business. Social networks today have a more prominent business or marketing role, so most social networks have their advertising value. Social networks in a friendly and business sense have advantages that cannot be socially denied (Milardović, 2010, pp. 103-105). Social network disadvantages according to (Milardović, 2010, pp. 105): Disclosure; Loss of privacy; Manipulation of private data for marketing purposes; Anonymity and virtual identity; Virtual friends or avatars; Second Life; Loneliness - Isolation - Social escapism; Alienation and the world of aliens / Cyborgs; Addiction; Social networking risks as the risks of a global information society. The disadvantages of social networks can be classified into several groups. The first group presents the deficiencies associated with social psychology and somehow personal psychopathology, the second group presents the deficiencies of philosophical or social philosophical nature, the third related to security issues or information society risk, and the fourth represent the disadvantages of the new media ethics. Dependence as a lack of social networks is certainly one of its biggest drawbacks, as it manifests itself in the over-occupation of life in the virtual world and the neglect of personal and social obligations, lack of sleep, seeking only sexual intercourse or experience, etc. (Milardović, 2010, pp. 105-114).

Osrečki states that “social interests and water interaction use technology, so those who are dissatisfied with their living conditions will express their dissatisfaction with collective action. In this context, new communication technologies do not cause unrest, but unhappy will use all means, including communication technologies, to achieve their goals (Osrečki, 2014, p. 104). Professor Stančić also states in his article “Principles of Digital

Communications” (Stančić, 2011, p. 63) that “before the digital era, media content consumers were passive and there was no way to actively engage in content creation, with the direct inclusion of viewers or listeners through a telephone connection”. With YouTube service today, everyone can produce and publish video content around the world, and video clips from that service can be tracked not only on computers but on mobile phones, TVs connected to Internet TV, etc. (Stančić, 2011, p. 63). Krolo (Krolo, 2015, 146) states that such communication, realized and maintained via the Internet, is considered less valuable than face-to-face communication which, according to him, raises the question of how much such friendships can be measured with those achieved and real life and whether the total number contacts is a credible indicator of belonging to a particular group.

### **Research: purpose, subject, objectives, questions, hypotheses, sample and methodology**

Today’s importance of social networks in everyday life is significant. The high speed of publishing various and even multimedia content and the ability to comment on them very fast and easy opened the ‘big’ door to a really new way of participating in social events. Not only ease and very speed, but ease and anonymity of that participation affect an individual who reacts on his own emotions which have completely new environment. It is precisely the subject of this research that will give answers to the extent to which Facebook social network users express their emotions at certain events, whether they are positive or negative, and respond more often to men or women. The scientific and professional literature available in the field of sociology, psychology and communication was used for this thesis. Other sources have been used, such as electronic databases with complete scientific texts and other online resources dealing with social networks, information society, mass media, digital culture, interpersonal relationships and emotions. The purpose of the research is to determine to what extent the social network Facebook affects the individual, whether they include commenting on current events and how they react. The subject of research is the response of individuals to the three dominant social themes published in the Social Network Facebook in 2016. The main purpose of this research is to analyse the emotional responses of individuals to dominant social issues during 2016 published on Facebook’s social network. To determine the extent to which a social network affects the emotional life of individuals, the following research questions are defined:

**RQ (1):** To what extent are social network users Facebook expressing negative emotions in relation to the event?

**RQ (2):** Who is more inclined to expressing negative emotions, men or women?

Along these lines, the research has the following hypotheses: **The general hypothesis** of this research is that users in relation to an event on the social network Facebook are, in a larger percentage, expressing negative emotions than positive ones. **H0:** The greater the number of Facebook social network users who express negative emotions in their comments than those who express positive emotions in relation to the event. In addition to the general hypothesis, there are two sub-hypotheses for each of these three 'social topics' or events (themes): **First event-theme ("Croatian curricular reform"):** **H1:** There is a smaller number of Facebook social network users who in their comments on curricular reform express negative emotions than those who express positive emotions. **H2:** Men are more inclined to express negative emotions than women. **Second event-theme ("Croatian Law definition of marriage"):** **H1:** Larger number of Facebook social network users who in their comments on the issue of referendum "Are you adopting a provision in which the marriage is a woman's and a man's life in the Constitution of the Republic of Croatia?", express negative emotions from those expressing positive emotions. **H2:** Men are more inclined to express negative emotions than women. **Third event-theme ("Saying "for a home ready" in Croatia"):** **H1:** The greater the number of Facebook social network users who express their negative emotions in their comments, saying "for a home ready", of those who express positive emotions. **H2:** Men are more inclined to express negative emotions than women.

For the purposes of this research, the method used to analyse the content of 3 social topics that were represented or commented on the Facebook social network. The sample of analysis is three topics and three publications with the largest number of reactions to each of these topics:

- **The first issue ("Croatian curricular reform")** is the curricular reform, that is, the media release on the dissolution of the expert group on May 25, 2016, which is why Croatia organized protests organized by the initiative 'Croatia can be better'.
- **The second issue ("Croatian Law definition of marriage")** is media reports on the issue of referendum 'Are you in the Constitution of the Republic of Croatia to make a provision by which marriage is a living

community of women and men?’ Launched by the association On behalf of the family.

- **The third issue (“Saying “for a home ready” in Croatia”)** is media coverage on the topic of ‘homecoming’ after the football match Croatia Island - Croatia in 2013, where football player Josip Šimunić grew up with that greeting.

**Table 1 - Categorizing emotions in relation to an event**

EMOTION IN RELATION TO THE EVENT 1:						
Publish #1 Link to publication:	Total number of comments:					
Types of emotions:	Number of comments in which emotion is expressed			Number of comments in which emotion is dominant		
<b>POSITIVE EMOTION</b>	<b>M</b>	<b>W</b>	<b>TOTAL</b>	<b>M</b>	<b>W</b>	<b>TOTAL</b>
Joy						
Love						
Surprise(*)						
<b>NEGATIVE EMOTION</b>	<b>M</b>	<b>W</b>	<b>TOTAL</b>	<b>M</b>	<b>W</b>	<b>TOTAL</b>
Anger						
Fear						
Jealousy						
Hatred						
Mourning						
Disgust						
Surprise(*)						
TOTAL:						

*(Notes: (\*) How the emotion of surprise can be positive and negative is placed in both groups and will be interpreted in the context of commentary. According to ‘Psychological dictionary’: joy, anger, surprise, fear, disgust, and sadness fall into primary (basic) emotions, while all the other derived or secondary.)*

Categorization of emotions were recorded, for each event and every publication as shown in Table 1. Independent variables are sex or gender, and depend on positive or negative emotional reactions to the event. The analysis was conducted from 1<sup>st</sup> to 10<sup>th</sup> February 2017 in a way that three issues with the largest number of comments were taken on each topic, and then categorized according to the type of emotion in relation to the event. Emotions are recorded in two categories for each comment, the first category include all the emotions that are expressed in the same comment,

and in the second category the emotion that were dominant in each individual comment are recorded. The first phase of the research is related to the reading of the comments and data collection, the data collected in the second phase were categorized according to the given criteria in the Table 1, while the third phase analyses the obtained results. After the research was carried out, the analysis determines the occurrence of certain emotions. The data obtained were numbered and graphically displayed individually at the level of each publication at the level of an event, and in bulk - including all three themes, which confirms or not confirms the main and auxiliary hypotheses.

### **Analysis, research results with interpretation**

The research analysed three social topics that were represented, that is, commented on the social network Facebook. For each topic, three publications with the largest number of comments were selected:

**Theme 1: Curricular Reform.** For the first topic, the curricular reform, the following announcements were selected:

**1. Tportal.hr:** Hrvatska može bolje: Vlada šumom, građani drumom, 2<sup>nd</sup> June 2016. The report was commented by 101 people, 54 men and 47 women. Positive emotions were expressed by a total of 38 persons, 14 men and 24 women, while negative emotions were expressed by 63 and 40 men and 23 women. The men expressed their emotions in the following way: their joy was 7%, pleasant surprise 2%, anger 53%, 1% frustration, 2% hate, 9% sadness, 5% disgust, and unpleasant surprise 21%. In the comments of men, 15% of positive emotions were expressed while the negative was 85%. Dominant emotions in men's comments were: joy 13%, pleasant surprise 2%, wrath 28%, fear 2%, hate 2%, sadness 15%, disgust 8% and unpleasant surprise 30%. Women expressed their emotions in the following way: their joy was 23%, pleasant surprise 21%, wrath 12%, sadness 21%, hate 6%, and unpleasant surprise 17%. Women reported 34% positive emotions and 66% negative. Dominant emotions in women's comments were as follows: joy 23%, pleasant surprise 11%, wrath 17%, sadness 23%, quake 9%, and unpleasant surprise 17%. The proportion of dominant emotions in men and women commentaries is shown in the following percentages: positive responses were expressed by men to 8% of comments, while the percentage for women was 15%. When it comes to negative emotions, men have expressed them in 49% of comments while women have done so in 28% of comments.

**2. Jutarnji:** We are living in protest Croatia can do better in Zagreb, 1<sup>st</sup> June, 2016. The report was commented on by 640 people, 415 men and 225 women. A total of 328 people, 197 men and 131 women expressed positive emotions, while negative emotions were expressed by 312, including 218 men and 94 women. The men expressed their emotions in the following way: joy was expressed by 41%, pleasant surprise 5%, anger 19%, hate 3%, sadness 11%, disgust 13%, and unpleasant surprise 9%. In male comments, 47% of positive emotions and 53% of negative (47) were negative. Dominant emotions in men's comments were: joy 45%, pleasant surprise 3%, anger 17%, hate 2%, sorrow 12%, disgust 14%, and unpleasant surprise 7%. Women expressed their emotions in the following way: joy was expressed by 47%, a pleasant surprise of 12%, wrath 13%, fear of 0%, although one person expressed this emotion, 1% hate, 9% mood, 11% discomfort and unpleasant surprise of them 7%. Women reported 59% positive emotions and 41% negative. The dominant emotions in the comments of women were: joy 56%, pleasant surprise 2%, anger 11%, hatred 0% although one person expressed this emotion, sadness 11%, disgust 12 and unpleasant surprise 8%. The proportion of dominant emotions in men and women commentaries is shown in the following percentages: positive responses were expressed by men to 8% of comments, while the percentage for women was 15%. When it comes to negative emotions, men have expressed them in 49% of comments while women have done so in 28% of comments.

**3. Government of the Republic of Croatia:** Curricular reform goes on, 25<sup>th</sup> May, 2016. The report was commented by 141 people, 94 men and 47 women. Positive emotions were expressed by 17 people, 13 men and 4 women, while negative emotions were expressed by 124 and 81 men and 43 women. The men expressed their emotions in the following way: 9% joy, pleasant surprise 4%, anger 49%, hatred 1%, sadness 13% disgust 8% and unpleasant surprise 16%. In men's comments, there was only 14% of positive emotions while the negative was 86%. Dominant emotions in men's comments were: joy 11%, pleasant surprise 3%, wrath 50%, hate 1%, sadness 11%, disgust 8% and unpleasant surprise 16%. Women expressed their emotions in the following way: joy was expressed by 11%, pleasant surprise 2%, wrath 41%, sadness 23%, disgust 12%, and unpleasant surprise 11%. Women reported 9% positive and 91% negative emotions. Dominant emotions in the comments of women were: joy 6%, pleasant surprise 2%, anger 40%, sadness 26%, disgust 13% and unpleasant surprise 13%. The proportion of dominant emotions in men and women commentaries is shown in the following percentages: positive responses were expressed by men in 9% of comments, while the percentage for women was 3%.

When it comes to negative emotions, men have expressed them in 57% of comments while women have done so in 31% of the comments. Overall, for all three reports related to curricular reform, 217 (60%) men expressed positive emotions, while 147 (40%) women likewise did it. When negative emotions were concerned, there were 339 (68%) men and 160 (32%) women. As regards the ratio of positive and negative comments to all three publications related to the subject of curricular reform, it is the following: 364 (42%) positive and 499 (58%) negative emotions were expressed.

**Theme 2: The referendum question ‘Are you in the Constitution of the Republic of Croatia to make a provision by which marriage is a living community of women and men?’** For the second topic, the referendum question is ‘Are you in the Constitution of the Republic of Croatia to make a provision by which marriage is a living community of women and men?’, the following announcements were selected:

**1. On behalf of the family:** 19<sup>th</sup> May, 2016. The report was commented on by 222 people, 79 men and 143 women. Positive emotions were expressed by 20 persons, 5 men and 15 women, while negative emotions were expressed by 202 and 74 men and 128 women. The men expressed their emotions in the following way: joy was expressed by 7%, pleasant surprise 1%, anger 17%, hate 2%, sadness 40%, 13% disgust, and unpleasant surprise 20%. Only 6% of positive emotions were expressed in men’s comments, while negative was 94%. Dominant emotions in men’s comments were: joy 5%, pleasant surprise 1%, wrath 12%, hate 4%, sadness 44%, 4% disgust and unpleasant surprise 30%. Women expressed their emotions in the following way: joy was expressed by 7%, love 1%, pleasant surprise 3%, wrath 12%, sadness 39%, disgust 8%, and unpleasant surprise 30%. Women expressed 10% positive emotions and 90% negative. The proportion of dominant emotions in men and women commentaries is shown in the following percentages: positive responses were expressed by men in 2% of comments, while the percentage of women was 7%. When it comes to negative emotions, men have expressed them in 33% of comments while women have done so in 58% of the comments.

**2. On behalf of the family:** Marko Perković Thompson: Marriage is a fortune, 15<sup>th</sup> May, 2013. The comment was commented by 341 people, 246 men and 95 women. A total of 73 persons, 53 men and 20 women expressed positive emotions, while negative emotions were expressed by 268, including 193 men and 75 women. The men expressed their emotions in the following way: joy was expressed by 15%, pleasant surprise 4%, wrath 28%, fear 6%, hate 2%, sorrow 13%, disgust 10% and unpleasant surprise 22%. Only 22% of positive emotions were expressed in men’s comments, while negative

was 78%. Dominant emotions in men's comments were: joy 16%, pleasant surprise 5%, wrath 27%, fear 1%, hatred 1%, sadness 16%, disgust 12%, and unpleasant surprise 22%. Women expressed their emotions in the following way: joy was expressed by 16%, a pleasant surprise of 3%, wrath 18%, fear of 1%, hate 2%, sadness 18%, disgust 12%, and unpleasant surprise 30%. Women reported 21% positive emotions and 79% negative. Dominant emotions in women's comments were: joy 20%, pleasant surprise 1%, wrath 17%, hate 2%, sadness 15%, disgust 11% and unpleasant surprise 34%. The proportion of dominant emotions in men and women commentaries is shown in the following percentages: positive responses were expressed by men to 15% of comments, while the percentage for women was 6%. When it comes to negative emotions, men have expressed them in 57% of comments while women have done so in 22% of the comments.

**3. Index.hr:** Udruga "U ime obitelji": Prikupili smo dovoljno potpisa za referendum!, 22th May, 2013. The comment was commented on by 242 people, 124 men and 118 women. A total of 61 people, 28 men and 33 women expressed positive emotions, while negative emotions were expressed by 181, including 96 men and 85 women. The men expressed their emotions in the following way: joy was expressed by 41%, pleasant surprise 5%, anger 19%, hate 2%, sadness 11%, disgust 13%, and unpleasant surprise 9%. In comments by men, there were 45% positive and 55% negative emotions arose. The main emotions in men's comments were: joy 41%, pleasant surprise 5%, anger 19%, hate 2%, sadness 11%, disgust 13% and unpleasant surprise 9% (40). They expressed their emotions in the following way: joy was expressed by 47%, pleasant surprise 12%, anger 13%, fear 0% although one person expressed this emotion, hate 1%, sadness 9%, 11% disgust and an unpleasant surprise 7%. Women reported 59% positive emotions and 41% negative. Dominant emotions in the comments of women were: joy 47%, pleasant surprise 12%, wrath 13%, fear 0% although one person expressed this emotion, hatred 1%, sadness 9%, disgust 11% and unpleasant surprise 7%. The proportion of dominant emotions in men and women commentaries is shown in the following percentages: positive responses were expressed by men in 29% of comments, while this percentage was 21% for women. When it comes to negative emotions, men have expressed them in 35% of comments while women have done so in 15% of comments. In total, for all three publications related to the referendum question, are you saying that the Constitution of the Republic of Croatia imposes a provision in which marriage is a living community of women and men? 86 (56%) of men expressed positive emotions while doing so 68 (44%) of women. When negative emotions were concerned, 363 (56%) men and 288 (44%)

women expressed this. Regarding the proportion of positive and negative comments on all three issues related to the issue of referendum issue, is it because of the fact that the Constitution of the Republic of Croatia imposes a provision in which marriage is a living community of women and men? Positive 154 (19%) and 651 (81%) negative emotions.

**Theme 3: Hello ‘for a home ready’.** For the third topic, Hello ‘for a home ready’, the following postings were selected:

**1. Sports News:** Šimunić answers what he would have done to bring him back to time: ‘I would still shout vigorously ‘For Home - Ready!’’, 23<sup>rd</sup> October, 2015. The report was commented by 341 people, 329 men and 12 women. Positive emotions were expressed in 90 persons, 85 men and 5 women, while negative emotions were expressed by 251 and 244 men and 7 women. The men expressed their emotions in the following way: joy was expressed by 20%, love 1%, pleasant surprise 1%, anger 18%, jealousy 0% although one person expressed this emotion, hate 9%, sadness 11% 25% disgust and an unpleasant surprise 16%. 26% positive and 74% negative emotions were reported in men’s comments. Dominant emotions in men’s comments were as follows: joy 23%, love 2%, pleasant surprise 2%, wrath 14%, jealousy 0% although one person expressed this emotion, hatred 6%, sadness 16%, disgust 22% and uncomfortable surprise 15%. Women expressed their emotions in the following way: 41%, 4% love, 14% wrath, 4% hate, 14% mood, 9% discomfort and 14% unpleasant surprise. Women expressed 42% positive emotions and 58% negative. Dominant emotions in women’s comments were: joy 34%, love 8%, hatred 8%, sadness 25% and unpleasant surprise 25%. The proportion of dominant emotions in men and women commentaries is shown in the following percentages: positive responses were expressed by men in 2% of comments, while the percentage of women was 7%. When it comes to negative emotions, men have expressed them in 33% of comments while women have done so in 58% of the comments.

**2. Jutarnji:** BUSINESS PETITION SIGNED AND SIMPLE From the president, they are looking for a greeting “For a home ready” in the Armed Forces!, 24<sup>th</sup> August, 2015. The report was commented by 360 people, 295 men and 65 women. A total of 76 people, 59 men and 17 women expressed positive emotions, while negative emotions were expressed by 284, including 236 men and 48 women. The men expressed their emotions in the following way: 19% joy, 1% love, pleasant surprise 0% although one person expressed this emotion, wrath 23%, hate 1%, sadness 24%, hate 16%, and an unpleasant surprise of 16%. In men’s comments, 20% positive and 80% negative emotions were expressed. Dominant

emotions in men's comments were: joy 20%, love 0% though one person expressed this emotion, wrath 22%, hate 1%, sadness 25%, disgust 17%, and unpleasant surprise 15%. Women expressed their emotions in the following way: joy was expressed by 22%, love 1%, pleasant surprise 1%, wrath 17%, sadness 31%, disgust 8% and unpleasant surprise 20%. Women reported 26% positive and 74% negative emotions. Dominant emotions in women's comments were: joy 25%, pleasant surprise 1%, wrath 8%, sadness 37%, disgust 8% and unpleasant surprise 21%. The proportion of dominant emotions in men and women commentaries is shown in the following percentages: positive responses were expressed by men to 16% of comments, while the percentage for women was 5%. When it comes to negative emotions, men have expressed them in 66% of comments while women have done so in 13% of comments.

**3. Jutarnji:** MARATHONIAN TRIAL Šimunić defended himself to the dark, Slovenian assures CAS that 'for the home is ready' Ustasha crap, 9<sup>th</sup> May, 2015. The report was commented by 373 people, 311 men and 62 women. A total of 74 people, 61 men and 13 women expressed positive emotions, while negative emotions were expressed by 299 and 250 men and 49 women. The men expressed their emotions in the following way: joy was expressed by 20%, love 0% although two people expressed this emotion, pleasant surprise 1%, anger 28%, hate 11%, sadness 18%, disgust 11% Annoying surprise 12%. In male comments, 20% positive and 80% negative emotions were expressed. Dominant emotions in men's comments were: joy 20%, wrath 26%, hatred 10%, sadness 16%, disgust 11%, and unpleasant surprise 17%. Women expressed their emotions in the following way: their joy was 16%, wrath 37%, hate 4%, sadness 35%, disgust 7%, and unpleasant surprise 1%. Women reported 21% positive and 79% negative emotions. Dominant emotions in women's comments were: joy 21%, wrath 27%, hate 2%, sadness 29%, disgust 8% and unpleasant surprise 13%. The proportion of dominant emotions in men and women commentaries is shown in the following percentages: positive responses were expressed by men in 16% of comments, while the percentage of women was 4%. When it comes to negative emotions, men have expressed them in 67% of comments while women have done so in 13% of comments. Overall, for all three announcements regarding "home-ready" greeting, 205 (85%) men expressed positive emotions while 35 (15%) women likewise did. When negative emotions were concerned, 729 (88%) men and 104 (12%) women expressed. As for the positive and negative commentary for all three postings related to the topic of 'home for the home', it is the following: 240 (22%) positive and 834 (78%) negative emotions were expressed.

There were 3920 emotions in total, of which 999 (25%) were positive and 2921 (75%) were negative. Of the 999 positive emotions recorded, 666 (67%) were male and 333 (33%) women. Out of the reported 2921 negative emotions, 2125 (73%) were men and 796 (27%) women. A total of 2741 commentaries were commented, of which 1939 were men and 802 women. Positive emotions were given by 508 (67%) men and 250 (33%) women. Negative emotional comments gave 1431 (72%) men and 552 (28%) women. Of the total number of comments, 2741, with positive or negative emotions expressed, 758 (28%) people expressed their positive emotion, while their negative emotion was expressed in 1983 (72%). By analysing all the announcements for all three topics covered a total of 2741 comments, 1939 men and 802 women. The first issue, related to curricular reform and the departure of the expert group on 25<sup>th</sup> of May, 2016, why Croatia organized protests organized by the initiative “Croatia can better”, commented 556 men and 307 women. The second issue, referring to the referendum question, is ‘whether you have a provision in which the marriage is a woman’s and a male’s life in the Constitution of the United States?’, 449 men and 356 women commented on while the third theme, ‘For home ready’, updated after the match of Croatia - Island 2013, commented on 934 men and 139 women. **H0:** The results of the research show that in 72% of the comments negative emotion is expressed, while in 28% of the comments the positive emotion is expressed and it can be concluded that the main hypothesis is confirmed, or that a greater number of Facebook social network users express their negative emotions in their comments than those who express positive emotions in relation to the event. In addition to the general hypothesis, there are three hypotheses for each theme (or event): **First theme: H1:** The obtained results show that on the topic of curricular reform, 58% of comments express negative emotion, while 42% of them express positive emotions, so it can be concluded that the first hypothesis has not been confirmed, about claiming that the smaller number of Facebook social network users in their comments, on the subject of curricular reform, express negative emotions from those who express positive emotions. **H2:** About 68% of men and 32% of women expressed negative emotion, suggesting that the second hypothesis has been confirmed, which claims men are more inclined to express negative emotions than women. **Second theme: H1:** The results obtained have been ascertained that on the topic of referendum on marriage as a living community of women and men, 81% of comments are one of the negative emotions and only 19% positive, so it can be concluded that the first hypothesis is confirmed, about that the greater number Facebook social network users who in their comments on the issue of referendum

‘Are you in the Constitution of the Republic of Croatia to make a provision by which a marriage is a living community of women and men?’, express negative emotions from those who express positive emotions. **H2:** Research results suggest that 56% of men in their comments expressed some of the negative emotions, while 44% of women did so, so it can be concluded that the second hypothesis that men are more inclined to express negative emotions than women is confirmed. **Third theme: H1:** Based on the research conducted it was found that 78% of the comments on “home are ready” in 78% commented on some of the negative emotions, while the invocation of emotions contained only 22% of the comment, so it can be concluded that the first hypothesis is confirmed, that there was the greater the number of Facebook social network users who express their negative emotions from those expressing positive emotions in their comments on the topic of ‘home ready’. **H2:** Results obtained by research indicate that negative emotion was expressed by 88% of men and 12% of women, and another hypothesis is confirmed, that men are more inclined to express negative emotions than women.

## Conclusion

The conducted research confirmed the main hypothesis that a greater number of Facebook social network users’ express negative emotions in their comments than those who express positive emotions in relation to an event. Likewise, the research found that, irrespective of topics, a greater number of comments with negative emotions than positive ones, and how men are more inclined to express such emotions. The only hypothesis that has not been confirmed is a hypothesis related to the publication of curricular reform claiming that there are fewer Facebook social network users who in their comments express negative emotions than those who express positive emotions. For further research it is very important to make adequate semantic context of review on the results of this preliminary research:

The results of the research show that in 72% of the comments negative emotion is expressed, while in 28% of the comments the positive emotion is expressed and it can be concluded that the main hypothesis is confirmed, or that a greater number of Facebook social network users express their negative emotions in their comments than those who express positive emotions in relation to the event.

Overall, for all three reports related to curricular reform, 217 (60%) men expressed positive emotions, while 147 (40%) women likewise did it. When negative emotions were concerned, there were 339 (68%) men and 160 (32%) women. As regards the ratio of positive and negative comments to all three publications related to the subject of curricular reform, it is the following: 364 (42%) positive and 499 (58%) negative emotions were expressed.

In total, for all three publications related to the referendum question, are you saying that the Constitution of the Republic of Croatia imposes a provision in which marriage is a living community of women and men? 86 (56%) of men expressed positive emotions while doing so 68 (44%) of women. When negative emotions were concerned, 363 (56%) men and 288 (44%) women expressed this. Regarding the proportion of positive and negative comments on all three issues related to the issue of referendum issue, is it because of the fact that the Constitution of the Republic of Croatia imposes a provision in which marriage is a living community of women and men? Positive 154 (19%) and 651 (81%) negative emotions.

Overall, for all three announcements regarding “home-ready” greeting, 205 (85%) men expressed positive emotions while 35 (15%) women likewise did. When negative emotions were concerned, 729 (88%) men and 104 (12%) women expressed. As for the positive and negative commentary for all three postings related to the topic of ‘home for the home’, it is the following: 240 (22%) positive and 834 (78%) negative emotions were expressed.

Overall results: There were 3920 emotions in total, of which 999 (25%) were positive and 2921 (75%) were negative. Of the 999 positive emotions recorded, 666 (67%) were male and 333 (33%) women. Out of the reported 2921 negative emotions, 2125 (73%) were men and 796 (27%) women. A total of 2741 commentaries were commented, of which 1939 were men and 802 women. Positive emotions were given by 508 (67%) men and 250 (33%) women. Negative emotional comments gave 1431 (72%) men and 552 (28%) women. Of the total number of comments, 2741, with positive or negative emotions expressed, 758 (28%) people expressed their positive emotion, while their negative emotion was expressed in 1983 (72%).

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