YOUNG ITALIANS' MEDIA USE AND ATTITUDE TOWARDS IMMIGRATION

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ABSTRACT

Misinformation, Filter Bubbles and Echo Chambers (Parisier 2011; Flaxman, Goel, Rao 2016) are phenomena that permeate the contemporary reality. These can influence the perception of social and scientific facts, even when they are supported through statistical data or professional studies. In this situation, where young people have an easy access to a large quantity of information through digital channels, it seemed particularly interesting to realize a study about them and their relation with these technologies. Many studies highlighted how our society is influenced by the overabundance of information and suffers the inability of analyzing and understanding the scientific "official" data (Quattrociocchi & Vicini 2016). Considering this scenario under the light of STS theories (Latour, 1988, 1986; Pinch & Bijker 1984; MacKenzie & Wajcman 1985), it results as a complex environment, where data and statistics about social phenomena are seen as controversial and where they are often questioned through irrational arguments. Facing these facts, it was possible to raise a specific question about the Italian scenario, useful to better understand how technologies and their development are modeling the way in which young people build their social representation of reality. This paper describes a study aimed to analyze whether and how certain technological practices can lead to the construction of different perceptions of social phenomena. Particularly, the study enquires how the way young people get informed can lead to different attitudes towards a complex phenomenon such as immigration. Overall, the objective of this research is to understand what kind of relationship exists between different media usages and (over)exposure to news – made possible by the web and social media in particular – and of how the presence of immigrants in Italy is perceived (in cognitive and evaluative terms). To answer these questions, an empirical research was conducted using a combination of qualitative and quantitative approaches. The essay will be focused on the quantitative study, conducted in the form of a survey based on a sample of 200 individuals. This methodological approach allows to demonstrate how the information system and new information technologies influence the way young Italian see the world, confirming a bias between their perception and what statistical data say about the environment in which they are living.

1. INTRODUCTION

Over the last decade, there has been a fast-paced and constant evolution of media and their related technologies. Online services, the web and social media continue to evolve side by side, as well as in an intersected way, with the development of people's sociality, habits and needs. The adoption and *domestication* practices of these technologies in people's daily lives did not spread in a uniform way among the population. However, this phenomenon led the scholars to talk about a real paradigm shift in the forms and patterns of human communication (Di Fraia 2011), causing significant implications on power relations associated with media usage. New relational processes, based on increasingly reticulated and peer-to-peer systems, spread over thus reformulating the "one to many" hierarchical model of mass media communication, in which large public or private institutions (newspapers, TV, radio, etc.) provided informative/seductive content via differentiated distribution systems, specific to each particular medium. Castells (2009) refers to "mass self-communication era" in order to highlight the dual status of the individual – both producer and consumer of content - made possible by the diffusion of the so-called social media. Mass-based self-communication is a form of communication characterized by the possibility that network technologies and social media offer to practically everyone to generate content potentially capable of reaching a global audience. In contemporary society, interpersonal

1 Di Fraia G.: sections 2-4; Risi E: section 1; Missaglia MC: section 5;

communication, mass communication, and mass self-communication, however, do not tend to replace each other, but they rather integrate and complement each other in a complex process of survival, hybridization and technologies developments, together with the social practices of appropriation and usage of the same. As a consequence, journalism and news-making become a *hybrid media system* (Chadwick 2011) where online and traditional media compete in the constant flow of news-making (Skogerbø and Krumsvik 2014), alongside a form of participatory production and distribution of news, made by a creative (Castells 2009) and engaged audience. The way in which people collect and analyze news has completely changed, leading to an unclear distinction between verified news and peer produced ones. It's the so-called *era of post-truth* in which online and offline lives mixed (Riva 2017). In this era, on the one hand people are facilitated in gathering information, but on the other the proliferation of information sources and the increasingly faster production of contents raise some important issues, such as reliability and authority of authors and news.

This paper describes a research aimed to analyze whether and how certain media usage practices can lead to the construction of different perceptions of social phenomena. In particular, the study enquires how the evolution in the way young people get informed, can lead to different attitudes towards immigration in Italy. The work intends to understand what kind of relationship exists between different media usage types and (over)exposure to the news – made possible by the web, particularly social media – and the perception (in cognitive and evaluative terms) of the presence of immigrants in Italy.

To answer these questions, an empirical research was conducted using both a qualitative and quantitative approach. This paper will be focused only on the quantitative method, consisting in a survey conducted on 200 subjects aged between 20 and 25 years (while the results of qualitative research are currently under development).

The first part of the paper outlines the background of this research, which develops itself starting from some "classic communication" theories and moving onto their most recent elaborations, mainly applied to online information. The second part describes the study project and discusses the main key findings of the empirical research.

2. THE THEORETICAL FRAMEWORK

The background of this research involves several elements, in particular the Theory of Cultivation (Grebner 1980) and the Agenda Setting (Shaw 1979; McCombs, Shaw 1972; 1993). Both the theoretical approaches have been developed in order to analyze and understand the mass media-related phenomena and not for the new media characterizing the Information Age (Castells 2010). However, these theories are "fluid" and therefore they can be also applied, with due diligence, to the new media environment (Morgan, Shanahan, Signorielli 2015). In the Cultivation theory audience is considered as a set of people with a relative ability to choose the media messages they are subjected to. As a consequence, this model gives great importance to the exposure time to media and it takes into account also the environmental and social elements in which the audience is set: "people are born into a symbolic environment with television as its mainstream". Furthermore, the theory does not focus on the immediate effects of messages and media exposure, but rather on the long-term effects. This key element of the cultivation theory is strictly linked to the goals of this study. However, in order to adapt the theory of cultivation to the contemporary environment, it is important to look dynamically and longitudinally at the effects that media exposure may generate. Prior to the development and the propagation of digital media, content and stories were identifiable and broadcasted by a limited number of media. Some researches have shown different interpretations of social phenomena whenever they relate to narrated and constructed stories through a wider number of media and through fragmentary channels (Morgan, Shanahan, Signorielli 2015). Although this kind of contents mostly relate to personal narratives (Facebook posts, tweets, etc.), rather than public narratives or fictional material, they are still part of the stories that shape the vision of the world as a whole. Even protostories and fragmentary news may become an active part in building the collective imagination.

Another point of reference for this work is Agenda Setting (Shaw 1979; McCombs & Shaw 1993), in relation to the phenomenon of immigration, one of the most discussed topics of the Italian media agenda. According to this approach, it can be stated that the more certain topics are in the media spotlight, the more they become important to citizens and vice versa. What seems changing in the new media environment relates to the processes and logics that make specific news and topics emerge and become relevant compared to others.

Recent works have developed some elements which link to the two theories above mentioned - including the overabundance of communication, the difficulty in monitoring the authority of the sources, the scarcity of time

both in terms of getting informed and reducing the attention span - leading to a superficial approach towards news.

Furthermore, the role of the journalist and of news agencies appears to be no longer sufficient to fulfill the function of *professional gatekee*pers. While online newspapers represent the extension of mass media (Missaglia 2016), the online arena has become extremely wide and rich thanks to user-generated content. This new scenario offers people increased possibilities and options for gathering, verifying, and amplifying one's personal knowledge (Bright 2014), while search engines and aggregators assume the role of *gatekeeping* tools (Hindman 2009). It is, however, questionable whether the evolution of the news channels, the transformation of journalism into *citizen journalism* (Altheide 2013), as well as the need for different news outlets to produce content at an ever-increasing rate, have actually improved people's chances to get informed and consume in-depth news, and whether and how people have actually started building more complete and complex information usage.

This scenario also brings the problem of the Era of Post-Truth, declared by the Oxford dictionaries as the word of the year in 2016. This term is used to describe every situation of public life where objective facts have less influence in guiding individual and collective choices if compared to emotions and personal beliefs.

In a recent research conducted using the STS approach (Sismondo 2017) has been identified five themes based on their readings of the 60 most prominent distinct sites on Google on which commentators characterized the "post-truth" or the "post-truth era" (Sismondo 2017b). Some of these themes refer to: the emotional resonances and feelings generated by statements are coming to matter more than their factual basis; opinions, especially if they match what people already want to believe, are coming to matter more than facts; segments of the public display an inability to distinguish fact and fiction; and there has been a loss of power and trust in traditional media, leading to more fake news, news bubbles and do-it-yourself investigations.

A Twitter account alone does not make what we have been calling *knowledge*, but the emergence of a post-truth era starts by blowing up current knowledge structures. The *fact* as we know it is often a *modern* fact, arising out of particular configurations of practices, discourses, epistemic politics and institutions (variously understood and analyzed by, e.g., Dear 1985; Poovey 1998; Shapin 1994). But solid as those configurations now appear, it is not far-fetched to imagine them disrupted. The enormous attention to 'fake news', with much effort in distinguishing the real from the fake, shows that many people are concerned about entering in a post-truth era. As a consequence, also a communication technology as Twitter may be part of the dissolution of the modern fact (Sismondo 2017, editorial SSS).

The most exemplary episodes of post-truth behavior involve a narrow range of resources – almost entirely discursive – to establish widespread beliefs. They involve rumors with emotional appeal, spread via alt-right websites, Twitter campaigns, and commentaries on quasi-mainstream media. Although they can have durability and long-lasting effects, it is interesting to note that these rumors can collapse as quickly as they arise. For example, the citizenship conspiracy theory (claiming that Barack Obama was born in Kenya) became sidelined as soon as President Obama ceased to have real power: when media take the spotlight off an event, also public interest ceases. This is strictly linked to the previously mentioned *Theory of Agenda Setting*.

In this situation, media are not only sources of discursive production, but also fonts of opinions, surveys and believes with a high emotional value.

Whether in the echo chambers of social or older media, we might be just as concerned with the (truth-era) power to direct attention as we are with fake news. According STS's approach the epistemic competition is as much about choosing which truths can be considered salient and important as about which claims can be considered true and false, and these choices have important consequences (e.g. Sismondo 2015).

Also scientific theories are by nature temporary, and it is fundamental that this fallibility of scientific knowledge is clearly stated and explained to a larger public instead of scholars only.

Furthermore, in recent years, the matter of the so-called misinformation has come to light. This is a broad and generic term, which refers to the particular phenomenon occurring when non-verified news and information are considered real. The phenomenon of misinformation moves in parallel with the one of fake news and conspiracy theories. What happens is that scientific information is distorted by interpretations where the fear of hypothetical conspiracies lead to substitute scientific evidences with general believes (Mocanu et al. 2014; Sunstein CR, Vermeule A 2009). Some scholars are concerned about the consequence of the loosen boundaries between journalism and blogging, professionalism and amateur work, as much as reliability of news sources and credibility of scientific objectivity. All these phenomena are not born with the arrival of the web and social networks (one need only think, for example, of the conspiracy news about HIV diffusion, cfr. Bogart LM,

Thorburn S 2005; Kalichman SC 2009; Bates 1990; Cooper 1990) but the new situation seems to boost to these kinds of phenomena.

However, this scenario would require the user to be active when connected online: according to the theoretical strand of *uses and gratification* (Katz, Blumler, Gurevitch 1974), on one hand the *connected publics* (Boyd 2008) are oriented towards a purpose (interests, tastes, passions, etc.) they seek to achieve through the active and dynamic use of media; on other, the logics behind production, output and reception of news are increasingly mechanic/algorithmic and linked to the ability of profiling users through their data.

Another important element to be taken into account is that although the propagation of Internet has enabled individuals to have an easier access to more news, at the same time people have the tendency to choose to get informed via sources that simply confirm their opinions. Experiments focused on the construction of political opinions have in fact demonstrated this phenomenon (e.g. Garrett 2009; Iyengar and Hahnm 2009), which is by no means new. Many sociological and psychological theories have defined, though in different ways, phenomena of this nature. One of the interpretations, in this case taken from psychology, given to this phenomenon can be traced back to the *Theory of Cognitive Dissension* (Festinger 1973)².

Similarly, some sociological approaches have dealt with the topic of interpretation of reality and the construction of meaning, introducing concepts such as that of *suspending doubt* (Schutz 1962). Rather than constantly questioning events, actors tend to give sense to everyday reality according to interpretative schemes already acquired through individual experience and socialization processes. This necessity, defined by Schutz as "*epoché of the natural attitude*" derives, according to contemporary psychology, from the principles of "cognitive economy" that regulate the functioning of the human mind. Within the interpretative resources provided by *common-sense* (Jedlowski 2005), for example, many objects in the outside world appear to actors to be "*normal, known, and taken for granted*"(Schutz 1962; Berger & Luckman 1967) and do not require further information processing actions to be understood with a great cognitive benefit.

On a more general note, the study of cognitive processes has largely shown how the human mind is more likely to reconfirm any existing knowledge of reality rather than acquiring new patterns that might question the visions of the world already absorbed by the individual. Psychology refers to this kind of phenomena through specific mechanisms of thought. An example of this is meant by the *confirmation bias* (CIT). This is a mechanism, widely demonstrated at experimental level, through which people tend to search for, select and interpret information by paying more attention and giving greater credibility to those confirming their beliefs or hypotheses, while they tend to ignore or give less importance to information that contradicts them. A phenomenon working that way become more relevant as the topic give rise to strong emotions or touch upon deeply-rooted beliefs in the subject (Klayman and Young-Won Ha 1987; White et al 1993). Furthermore, according to the *backfire effect* theory, human brain tends to trick itself in order to maintain a calm condition. If a news or information collides with what the subject believes, different types of reactions may occur. However, the individual will be less willing to change his point of view on his believes when the topic is linked to emotional matters particularly significant for him (Kaplan, Gimbel, Harris 2016).

Therefore, if theoretical and empirical (sociological and psychological) elaborations have demonstrated how the human brain tends to seek coherence and consuetude - rather than dissonance - with the development of *machine-learning* technologies (Hannak et al. 2013; Agichtein, Brill, and Dumais 2006; Das et al. 2007) algorithmic models can be considered as a true technological outgrowth that overlaps with the cognitive economy mechanisms above described.

In fact, the risk is that the algorithms regulating the news flow to which citizens have access, are customized to the point of becoming *filter bubbles* (Parisier 2011; Pfeffer et al. 2016). These are information bubbles within which only certain topics or opinions can surface and acquire relevance. Connections between people function as a first-level filter, since they are mainly built by *homophily*. People with similar profiles, tastes and interests will be more inclined to create ties and connect with each other. Algorithms that regulate the news flow of social

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²It originates from an axiom according to which man tends, by nature, to remain coherent with himself in his way of thinking and acting. However, it is almost impossible for a human being to live fully coherently. For this reason, whenever a deviation from coherence in thoughts or actions is perceived, the subject will perceive what is called dissonance. This causes a feeling of discomfort in the human being who will therefore try to rationalize and normalize the situation, bringing it to a balanced situation.

networks know the user's preferences information-wise: these mechanisms of interpretation of the interests by social networks work as a second-level filter. For example, if a person is interested in political news, the algorithm will likely show him/her similar news in the future. Inside these information bubbles, generated through aggregation (especially online) of people who tend to connect with their own kind (thus creating *sympathy groups*, Zhou et al. 2005), ideas reinforcing previous knowledge and conceptions are generated and developed. As a consequence, this leads to an increase in the risk of ideological segregation and polarization. For this reason *Lack of diversity* is what characterizes *filter bubbles. Echo Chambers* (Sustein 2009) are also related to this concept. They are communicative environments within which the exchanged and exposed points of view are extremely conforming. It is acknowledged that the users themselves prefer to select content which is related and similar to their thinking, anytime they have the option to choose. (Garrett 2009; Iyengar and Hahn 2009; Munson and Resnick 2010).

3. EMPIRICAL RESEARCH METHODOLOGY AND REFERENCE SAMPLE

As previously introduced, in contemporary society the information and communication technologies have changed and so has the way of adopting and using them. While up to 20 years ago it was possible to reconstruct the composition of people's media consumption - as they were marked by precise timelines - today media pervasiveness means that they are omnipresent in people's lives and their usage appears to be continuous, making it complex to outline moments when individuals are not exposed to some media stimulus. With due consideration to these changes, this study will attempt to define how people's mix of media exposure and adoption can influence the perception of specific and measurable social phenomena.

A qualitative-quantitative research model was built in order to answer the questions posed by the study. In this article we will focus only on the quantitative phase, consisting of a *survey* conducted on 200 subjects aged between 20 and 25 years old. The tool used was a questionnaire composed by 20 closed questions, which served primarily to reconstruct the *media practices* of the participants, and secondly to investigate their *attitudes*, by taking into consideration their cognitive and evaluation components towards the phenomenon of *immigration*.

3.1 YOUNG ITALIANS: CHARACTERISTICS OF SAMPLE

Several researches have studied the relationship between the younger sections of the population and digital media (Lee 2016; Corecom Research 2016; Ocokoljic et al. 2012), investigating their information practices, particularly with regards to political and social issues (Poindexter 2012; Lenhart, Amanda, et al. 2010; Casero-Ripollés 2012; Lee 2016; Holman 2009).

The fragment of young Italians, object of this study, falls into that particular segment called Millennials, which includes the very first generations to experience technology as an integral and essential part of everyday life. Scholars have also defined these subjects as "digital natives" (Prensky 2001). Millennials are characterized by having a strong mistrust towards organizations (Lee 2016) and the media (Cillizza 2015). In particular, they consider media as extremely controlled by political powers in terms of news-making processes and therefore not reliable. Most of them admit that they are getting informed through Facebook on a regular basis, while 68 percent state to rely on social media to get most of the information and news (Millennials and News 2013) they need.

This results are in line with the international landscape: in 2017 edition of the Trust Barometer by Edelman, based on a survey conducted on more than 33.000 people in 28 countries, the concept of "trust in crisis" has been questioned. Within a single year, trust in mass media on a global level went from 48 to 43 on a scale of 1 to 100, highlighting a more consistent decline in the last few years. With a score of 48, Italy is totally in line with the global average. This fall of confidence involves social media (going from a score of 44 to 41) as much as traditional media (going from a score of 62 to 57). These data give a picture of disillusionment and skepticism towards the reliability of information and news provided by media. In most cases, this opinion is not referring to one specific source, but, on the contrary, it results as transverse and generalized: information as such, regardless of single circumstances, needs to be taken with a grain of salt. In social networks, the stigma related to the scandal of fake news, which characterized the political and public debate over the last few months, play a crucial role.

As reported by a Media Insight Project research (2015), the majority of young Italians, between the age of 18 and 35 years, are not interested in constantly searching for news although they get in contact with it nevertheless. What characterizes their media consumption is mainly social networks, which are usually enquired via mobile

devices in "always-on" usage mode. This practice of consumption could lead to a vision of the world shaped primarily by news that reach users through the algorithmic logic of the social web. By relating the issues mentioned in the first paragraph of this work (*filter bubbles, echo-chambers, misinformation*) with the media consumption habits of young people, it is possible to question how far their media exposure and the mix of news, with which young people come into contact, may lead to an image of reality partially or heavily distorted, as mostly constructed by opinions and news from non-authoritative and unofficial sources. A research by Stanford University (2016), developed on a sample of 7,804 young people (from middle school to university), has shown, for example, how confidence with digital media does not imply automatic recognition of more or less reliable news, or the ability to distinguish news from advertising content.

For this reason our study aims to understand, among other goals, how young Italians perceive a complex phenomenon such as immigration, based on their media usage. Specifically, it attempts to comprehend whether as the number and variety of media sources increases, the possibility of having a more positive and realistic vision of reality, on specific social phenomena, increases as well and becomes less affected by *filter* or *echo* effects.

By moving onto the research specifics, the sample of young people participating in the research has been built with a criterion of rational choice (*theoretical sampling*) for a total of 200 responding subjects with an average age of 22 years old. A total of 192 completed questionnaires were considered valid, while the reference sample was composed by 47% male and 53% female; 52% of the respondents indicated to be university students, of whom 35% represented by full time students and 17% by student-workers; the average age of this part of the sample is 20.5 years. The remaining 48% of the sample is composed of young workers or full-time interns, with an average age of 23 years.

4. MAIN RESULTS OF THE STUDY

The quantitative data analysis aimed at exploring how different typologies of media and information technologies uses can lead to building attitudes and perceptions of phenomena, specifically that of immigration.

The following paragraph will firstly describe the media consumption habits of the youth sample in terms of quantity (how many channels are used, what are the favorite media, how many subscriptions to social networks, etc.) and usage quality (purpose of use, types of news accessed, approach to content production/sharing). Secondly, a *clustering* of profiles will be illustrated with regards to the propensity to information, to media usage, and media content, analyzing the relationship towards the construction of attitudes related to the issue of immigration and the perception of the dimensions of the migratory phenomenon.

4.1 MEDIA USAGE OF YOUNG ITALIANS

Young Italians' media exposure and usage have been investigated, on the one hand in the attempt to trying to understand which media were mostly adopted in the daily lives of the subjects, and on the other by putting these data in relation to the type of content of interest and concern to them. Following *Uses and Gratifications* logic (CIT) we want to understand which media can respond to specific people's needs, purposes, interest, and then *how* and *in which way* different media are used and *domesticated* in their daily life.

An additive scale (with items related to the various possible topics of information, with ordinal modes ranging from "multiple times a day" to "never"; therefore, the variables were considered as quasi-cardinal, with score range 7) was built in order to measure the frequency with which media are used and the type of content experienced more frequently.

Regardless of the topic of interest, the majority of the sample searches for information "at least once a week" (range 7 pts., 3 pts. av., Std 1.6). As shown in the chart below, the themes most likely to be inquired ("at least once a day") are those related to (national and local) news, movies and TV series, (national and local) politics and events (concerts, exhibitions, etc.).

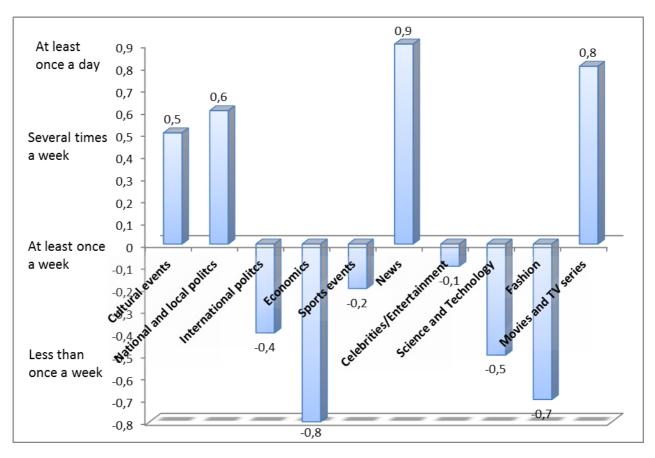


Fig. 1 Higher vs. lower frequency of information research with reference to the different topics

This data is interesting because, on the one hand, the practices of fruition reflect the same logic than the news life cycle of the related media channel, and on the other hand it emerges that young people demonstrate to have basically a similar interest both in news and entertainment content. The differences between students/student-workers and workers in relation to the propensity to information on the different topics were not statistically significant.

The young Italians' section of the population (and the Italian population in general) seem characterized by a fruition mode where different *devices* and content are used with diverse frequency and purposes, therefore reflecting the evolution of the media system in which hybridization and multimedia/multichannel represent the digital landscape of today. The results show in fact that *mainstream* media (TV and Radio) have a preponderant role in news-related media consumption. 53.4 percent of respondents claim to use those media to get informed. Online channels, though present, are the main information media for just about 30 percent of the sample, a lower percentage than expected from a group composed only by young people. Facebook is considered the most useful for this purpose - as 22 percent of the respondents declared - followed by online news outlets used by about 6 percent. Other social media are not mentioned among the "most used media" by the respondents.

The study, therefore, outlines an *hyperconnected* use of media by young people, mirroring the increase in content supply and the ever-greater overlap between digital platforms: young Italians, in relation to the broad and varied media system, build their own media *egosystem* for entertainment and information content consumption purposes. The results of media use by young people in the sample are aligned with what other researches, conducted by national institutes and observatories, have found out with regards to the Italian population in general and young people in particular. National statistics sources show that Italians still satisfy their information needs via the television, especially through news programs and 24hr news channels. One fourth of the population (24.7%) who have indicated the type of medium used to acquire information "in the last week", according the *Thirteenth Report on Communication* (Censis 2016), declares to use the radio news programs regularly, although there is a significant share of people using Facebook (35.5%) and searching for information and news on the web (19.4%). The latter are, if observing a cluster of people under age 30, together with YouTube channels, those that show the highest usage practices among the information tools used.

Based on the use of media for information purposes declared by our respondents, a statistical indicator was built to delineate different subject profiles (the indicator has been created on the basis of a weighting of position indexes that considered the first, the second and the third average with reference to the media used to inquire). The typologies built were those of:

- 1) radio-television type: corresponding to 61 percent of the sample. Those are individuals who indicate radio and TV as the main means used to get informed. However, they are also willing to use social media to acquire information. More than 40 percent in this group uses more than two social media to get informed. They are also open in terms of topics of interest, ranging from news to pure entertainment.
- 2) paper type: representing only 7 percent of the sample. They indicate print media as the main channel for information and result to have a lukewarm use of social media for information purposes (around 50 percent indicates to use one social media for this purpose). Their interest in news shows a propensity for factual reporting and for economic-political and scientific themes.
- 3) *digital*: representing 32 percent of the sample. They claim to get informed mostly through digital channels and are mainly interested in entertainment topics.

These results show a scenario where certain kind of technologies allow – and rather amplify and incentivize – the sharing of knowledge among peers, considerably reducing access barriers to information. However, this situation does not seem to crucially affect the consolidated role of professional gatekeeper and agenda setting effects (Shaw 1979; McCombs & Shaw 1993), of communication agencies and news outlets. In fact, they keep intensely (and wisely) planning their communication on social media.

Up to now the study has been mainly focused on the use of media for information purposes; from this point onwards we will put the attention especially on digital technologies and different usage practices.

Firstly, it is interesting to understand the intensity of use of social media (SM) from the number of subscriptions to social networking sites. By using the answers to this question, three groups were built: the first one, the *soft connected* one, represents 11 percent of the sample, and claims to have only one profile open on a single social media; the second group, that of *medium connected*, is composed of people who have subscribed to two social media and represents the wider part of the sample (49%); thirdly, the *heavy connected* group, which comprises 40 percent of the sample, consists of young people who declare to be subscribed to more than two SM. Among the types of occupation of subjects included in the sample and the number of social channels to which they are subscribed, there was a statistically significant relationship (*sig.*<0.05): students seem to be more present on social networks (with three or more profiles) while workers are less present (with one or two social media). The SM to which respondents claim to be active with only one profile are mostly Facebook (used by 96 percent of the sample) and Instagram (used by 79 percent of the sample), while Twitter attests to a rate of use of 29 percent on the total number of respondents.

The results demonstrate to be consistent with those obtained from a recent survey by the "Osservatorio Giovani" (Toniolo Institute 2017) on "Propagation, use, and dangers of social networks", conducted on a sample of 2,182 representative subjects of young Italians in the 20-34 age group. Almost all of them state to be on one social media (93%), and within them: 90.3% has an account on Facebook, followed by Instagram with 56.6%, and Twitter with about 40 percent. This use of social media does not mean, however, that it is unconditional and uncritical. Although the results reveal a certain knowledge level of the pitfalls and risks, the respondents are not always fully aware of the media's scope and potential implications.

The present study has shown that the bigger the number of different SM used by the respondents is, the higher is their propensity to enquire them to get informed. According to the survey, the social media more frequently used for information purposes were Facebook (about 90 percent of the subjects) and YouTube (45 percent). Social networks, however, seem to be generally used mainly to obtain information on cultural events, music, fashion, and events (i.e. *leisure* content). The most popular Facebook pages/profiles are those related to: *celebrities* (singers, groups, actors, 75% of cases), people of culture (writers, movie directors, etc. 61%), and pages linked to local and national newspapers (39%).

The research also analyzed the different types of content that the subjects indicated to publish on their Facebook profiles (the main social media used). This has highlighted three different typologies: those who claim to create mainly personal (multimedia) content (personal posts and photos, posts re-sharing activities from other social profiles of their own or of friends). They have been defined *personal users* (26 percent of the sample). People who have indicated to share mainly information-related content (news-related, scientific, and in-depth news) have been defined as *infousers* (14%). Those who publish content mainly related to leisure (entertainment news,

music videos, movie images, quizzes, games, sports, events: 29%) have been called *leis-users*. Lastly, there is a substantial number of subjects (32%) who share on their social profiles content from a wide variety of genre without manifesting a specific predominance (a bit of everything), whom have been defined as mixed users.

Also, these results have shown to be consistent with those of the aforementioned research by Osservatorio Giovani (Toniolo Institute 2017). Considering only the activities carried out in the past week, those related to the publication of content are mainly: commenting on posts by their own contacts (49.1 %), publishing material on their own profile (40.7%), sharing news (35.4%), posting their own photos or videos on other people's pages (32.6%). Worth mentioning is also: "Read/find work-related offers" (28.3%) and "Visiting accounts of public figures" (26.6%).

Overall, it can be affirmed that the active presence of young Italian people on social media is evident and it is carried out by activities such as interaction with others as well as sharing of content and opinions - especially in relation to personal material or entertainment content.

Therefore, following a constructivist thought, the process of social construction of technologies by social actors can be highlighted. In other words, technologies as social networking sites do not determine human action, but rather, human action shapes this specific technology (Pinch & Bijker 1984; MacKenzie & Wajcman 1985). Then, the ways social media are used cannot be understood without understanding how these technologies are embedded in daily life. Research results indicate social media are rarely used as information tools to find what happens in the world: these communication technologies, by contrast, are mainly considered as a way of peer-to-peer communication and useful in order to get entertainment-related contents.

In the following paragraph we will use the various data, so far illustrated, as elements that form the overall picture of media consumption and usage practices of technologies (particularly the web) by young Italians.

4.2 ATTITUDES CONCERNING THE PHENOMENON OF IMMIGRATION

The results described have allowed reconstructing the various ingredients that characterize the media usage of the sample. These components were used as descriptive variables through which a cluster analysis was conducted³.

The statistical analysis has permitted to divide the subjects into four distinct clusters and to study the perception and attitude of the young people belonging to different groups towards the phenomenon of immigration, especially from a cognitive and evaluative point of view.

The considered variables were: the profiles related to the media used to get information (*radio-television*, *digital*, *paper*); the average index of access to information; the number of social media used to inquire; the type of presence on social media (*light*, *medium*, *heavy connected*) and the type of content shared online.

The resulted four groups were studied in the first place in association with the cognitive dimension of the migratory phenomenon perception, and secondly with the attitudes expressed by the respondents in relation to evaluative aspects of this topic. Both are considered as dependent variables of the research.

Immigration represents a regular topic in the *agendas* of most Italian media, playing also an important role in terms of information distributed on social networks. Immigration is a particularly complex phenomenon, which, of course, we will be unable to deepen in this circumstance. Nevertheless, we will be providing some quantitative data as a reference in order to compare the perceptions of the sampled group with the official data relating to migration flows towards Italy. Figures can be considered as one of the discursive forms representing social practices and facts.

STS approach routinizes, in his research practices, certain assumptions according to what is considered the "truth" for science is an institutionalize contingency. This is explained by the fact that the effective research activity is always open to several upstream interpretations. Therefore, consent to scientific and factual data is not

³ The cluster analysis - *non-hierarchical, K-Means Clustering method* - was constructed on the basis of a set of variables that resulted to be significant for group formation. The clusters are therefore adequately diverse and disjointed in terms of Euclidean mean in respect to the centroid.

a *natural* state, on the contrary, it requires production and maintenance as the largest part of it does not take place during the revision process among scholars, but involves the public in general.

To probe whether our respondents' knowledge of the actual numerical dimension of the migratory phenomenon reflects the published and official statistics, data from Italian National Statistical Institute (Istat) have been retrieved.

In January 2017, research on national population by Istat reported that 60,589,445 persons were residing in Italy, more than 5 million of whom of foreign nationality, accounting for 8.3 percent of residents nationwide. In 2016, the foreign population increased by 20,875 units. In the Istat database it is also recorded that in 2016 the number of immigrants with residence permit totaled 3,931,133, mostly from Eastern Europe (Albania, Ukraine, Moldova), China, India, Pakistan and Africa (Morocco, Egypt, Senegal) - Istat Data Warehouse (http://stradati.istat.it/Index.aspx).

With regards to refugee arrivals and asylum seekers, 123,600 people were estimated in 2016, mostly North Africans (more than 75 percent), but also from the Middle East and Eastern Europe (according to data on Asylum seekers of the Italian Ministry of Interior - http://www.interno.gov.it).

In the survey, we asked to indicate the percentage of the foreign population in Italy in the current year and the estimated number of migrants in 2016. The questions were: "The foreign population present in Italy today accounts for:" and "In Italy in 2016 how many migrants have arrived:". For each of these, sub-class numerical responses were posed, allowing respondents to identify the proportion of the migratory phenomenon in absolute terms and in percentage value, considered to correspond to the real one.

We then analyzed whether there were significant differences in the responses provided by subjects belonging to the four different clusters in order to verify the existence of any potential relation between their media adoption and their knowledge/perceptions with regards to the presence of immigrants.

By analyzing collected data it has emerged that:

- the response option that has obtained the highest percentages actually refers, for all groups, to a substantially correct estimate of the figure for the quota of immigrants on Italian territory ("between 5% and 10% of the population" "from 3 to 6 million people"). However, it is worth mentioning that the first and fourth groups are inclined to overestimate the number of the foreign population in Italy, whereas the second and third groups tend to underestimate it. These differences were statistically significant (Pearson Chi-square<0.5 (0.122).
- the perception of the sample with regards to the number of immigrants landing on Italian coasts correspond to the actual number of arrivals only in 25 percent of the total (on average among the four clusters of subjects). The first and third groups indicated a lower number, while the second and the fourth ones gave a higher figure than the real amount of migrants arrived. However, these differences were not statistically significant (Pearson Chi-square > 0.5 (0.632)

In order to analyze the most evaluative dimension of the respondents' attitude to the phenomenon of immigration, an attitude scale was created from which a specific index was generated (this refers to a normalized index that has emerged, for each individual case, as a score obtained through a scale designed to assess the attitude towards immigration. The reliability of the scale (consisting of 10 items) was evaluated with Alpha of Cronbach, which was 0.843).

The differences within the results collected from the various groups have demonstrated to be statistically significant (*Pears Corr Sig 0.05*) and the attitude index was: neutral for the first group (0.016), positive for the second group (0.26), slightly negative for the third group (-0.12) and negative for the fourth (-0.27).

We can therefore summarize the various results outlined by recomposing the elements that have enabled to build the *clusters* of subjects (based on the peculiarities of their media consumption), and by linking them to the collected data with respect to perception and attitude towards the topic of immigration. Below is the list of *clusters* obtained, named after a summary label and with the related brief description:

• Group 1: the *Disinterested*. They constitute a cluster of 56 subjects who declare to be less informed (compared to other clusters) and predominantly online. The composition of their media consumption is not very diverse and their attitudes toward the migratory phenomenon are mostly neutral.

- Group 2: they can be defined as *Integrated* in the sense that they use the different media in a more integrated and complete way. The group is composed of 68 young individuals and is mainly formed by *radio-televisions* who are also present on social media for information purposes. They have a totally positive attitude towards immigrants and tend to perceive a higher share of migrant arrivals than the "real" figure.
- Group 3: they are defined *Critics* and represent the smallest group (32 subjects) with a mixed media consumption, including printed newspaper. Compared to the other groups, they get informed more and they also share news-related type of content. They have a slightly negative attitude towards the migratory phenomenon.
- Group 4: members of this group are defined *Misinformed* and are those (36) who do not actively look for news, but they rather come across them. They use social media mainly for personal use and as a diary, therefore, presumably, even news that reach them have a high emotional impact. Their negative attitude towards the migratory phenomenon and their idea of a larger numerical presence of migrant arrivals on national territory may directly depend on this.

Overall, the findings of the research indicate that young people of the sample considered use social media mainly for recreational purposes. In this way, social media represent the primary channels of peer-to-peer information. Therefore, in can be assumed that *filter bubbles* phenomenon, "that kind of personal ecosystem of information satisfied by certain algorithms" (Parisier 2011), is basically connected with the personal-relational sphere and to a lesser extent to news about current events.

From the pictured offered by interviewed people on the media landscape, the role of communication agencies and of the major news outlets appears as primary as they have a sounding board, mixing and amplification effect between traditional media (television in particular) and online. With regards to the flow of information, there is the creation of Echo Chambers (Sustein 2009), in other words, communicational environments where extremely consistent opinions, characterized by the non-alterity (perceptive and cognitive), are built and consolidated.

5. CONCLUSIONS

The reference to the term "Post-Truth" explicates one of the most problematic aspects of the current historical period: a generalized crisis of confidence towards not only the political establishment, but also the "experts", namely the leaders of the scientific community and institutions with the role of guiding in different ways the public debate. During the election campaign leading to "Brexit", characterized by a particularly loose usage of statistics related to economy and migrations, one of the leaders of the "leave" coalition affirmed, for example, that British people "have had enough of experts".

On the one hand, skepticism regarding élite (caused by the ruinous management of the financial crisis and by anxiety about globalization and immigration) reached extremely high levels in recent years; on the other hand the abovementioned evolution of media and digital technologies is undermining the communication models representative of this sector. This leads to increased difficulties in guaranteeing quality information. At the same time, as shown by Quattrociocchi (2016) in his studies about *echo chamber*, there is a growing awareness (and disillusionment) on possible distortions linked to information gained from web.

This paper describes an empirical research aimed at analyzing the existence of a relationship between the information sources used by a sample of young Italians and their perceptions/attitudes towards the migratory phenomenon.

We found different media usage practices (both *online* and *traditional*) for different purposes: first informative, but also recreational, relational, cultural, etc. The perception and attitudes towards immigration (a particularly frequently discussed topic on the national media agenda in recent years) have been reconstructed with questions about the dimension of the phenomenon, both in terms of the percentage of immigrants in Italy and of the total number of arrivals. By linking to some "classic" theories on the effects of the media (*particularly the Cultivation theory, Agenda setting, Uses and gratification*), supplemented with more recent reflections on the phenomena described as *Filter Bubbles* and *Echo-chambers*, the main purpose of this work was to verify the hypothesis that a more varied and differentiated media usage, and so a greater plurality of information obtained on a specific social fact, tends to be associated with a more "correct" and less stereotypically negative view of the migratory phenomenon.

The cluster analysis conducted on the results obtained through a structured questionnaire, submitted to a sample of 200 young Italians, has allowed us to create four different groups of individuals, differing by sources of information used and by media usage scope.

Overall, the young respondents, with a higher average level of schooling and better knowledge of media use – both of the informative type and non-informative – compared to those of the Italian population, demonstrated to be generally informed on the percentage impact of the migratory phenomenon, which they estimate in a substantially correct way (about 8 percent of the population). A research published in 2016 on a representative sample of the entire population showed, however, that the Italians tend to quantify to 26 percent (!) the percentage of foreigners living in our country (Pagnoncelli 2016).

The differences in the perception and attitudes of the four groups with respect to the migration phenomenon seem to confirm that respondents who claim to use a less diverse sources of information, predominantly made of a poorly selective exposure to social media (*Disinterested* and *Misinformed* groups), tend to overestimate the presence of immigrants in Italy in a statistically significant way compared to the other two groups.

Again, confirming a positive association with a poorly aware and less critical use of social media comes by observing the attitudes towards the migration phenomenon recorded in the *Misinformed* cluster, classified as the most negative out of all four groups. The results gathered on the *Integrated* cluster confirm the same direction. Although being strong users of traditional media (TV and radio), the *Integrated* are well informed and have less prejudicial negative attitudes towards the phenomenon.

Results obtained by *Critics* cluster require a more complicated interpretation: they constitute a smaller group showing how the less recreational kind of information is also the least researched (and also the one with less appeal towards general audience) by young people who prefer technical-scientific news. They include young people with the best knowledge of data related to the migratory phenomena (indicating the correct number of presence and arrivals of immigrants in Italy most of the time). However, they have a bivalent attitude towards this phenomenon.

On one side, the outcome is the result of media communication effects and the related basic mechanisms (discussed in previous paragraphs). On the other side, however, the mismatching between what is perceived on a cognitive level (and evaluative) with regard to a social fact and the phenomenon itself (generating, as a consequence, Post-Truth effects) is also in part responsibility of the scientific community and experts in general.

As Latour has argued, constructivism has nothing to do with the idea that science is not real (Latour 1999; Latour and Woolgar 1986), and it is through constructivism and a situated, engaged perspective (Haraway 2004) that people can face the challenge of post-truth more productively. Central to Latour's work is the notion that facts are constructed by communities of scientists, and that there is no distinction between social and technical elements of science. Furthermore, as showed by past and present experience, even experts make mistakes and for this reason considering also opposing opinions is fundamental.

However, the use of a technical or scarcely understandable language has often prevented the communication of scientific knowledge to laypersons. This is not an easy task. In fact, it is said that *a picture is worth a thousand words*, as being able to communicate objective data (numbers, statistics) about a specific theme, in particular when media transmit evocative images with high emotional content, is not simple. Activities of scientific production and dissemination of information about specific social phenomena should take into account those aspects in order to be able to challenge the Post-Truth effects generated by media.

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