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YOUNG EUROPEAN UNIVERSITY STUDENTS AND SOCIAL ACTIONS ONLINE. AN EMPIRICAL STUDY

ABSTRACT

This article makes an analysis of the actions performed online with particular reference to Big Data and digital tracks which are left in Internet. With respect to the above said, we would like to present a research work which has been performed in Italy and Europe during the 2016-2017 academic year. It talks about the awareness of the University students regarding information provided by them navigating on Internet every day. We have used the questionnaires with mostly closed answers and in particular estimated the value of such information (in euro) which the young people give to their personal information.

KEYWORDS: *Big Data, young University students, social actions, data value in Internet*

1. ACT IN INTERNET: NEW SPACES FOR SOCIAL ACTIONS

The common use of Internet generates daily considerable amount of information by making the profile of our "customs and habits". This profile is kept by social networks and by companies to which we provide our data. That's why the *social sites* become a real instrument of building and sharing of social communication in which the Internet becomes real space for the social action which involves more and more each part of our everyday life and contributes to the social and cultural transformation in the postmodern contest (Gallino, 2003). Let's just think of devices which can interact with users in every aspect of their life, such as, for example, monitoring of their bio and physical conditions. If the environment of the social action makes part of the structural aspects in every life moment thanks to Internet

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and technology, then we should question ourselves on the awareness of people who provide their personal data in exchange of the services.

This is why it is essential to introduce The Big Data which is generally represented by 3 characteristics: the *volume* of data generated, the *speed*, meaning as soon as information is published it can be used immediately, and the *variety*, since there are different types of more or less structured information. (Kitchin, 2014). The mathematic algorithms based on such platforms as Facebook or twitter allow to understand the value of published contents and decide which posts to show to this certain profile, therefore, choosing which information can be potentially more interesting, or there are also algorithms which allow to propose advertisement based on our current research in the Internet.

The Big Data refer to different contents: from one point, it can be data gathered as the result of exchange between citizens and administrations, and between consumers and companies which is called *transactional data*. From the other point of view, information published by users in Internet is defined as *digital by product data*, for example all status updates, photo and video published in the social networks, tweets, comments and advertisement posts published in the blogs (Lombi, 2015). Therefore, the Big Data reflect quite precisely the individual and collective behaviours of the social actors «in such way that different dimensions of our social life find its reflected image in the digital mirror: desires, opinions, lifestyles, movements, relations» (Giannotti, 2015). They become an important source of knowledge which opens the new area of investigation and here we should start reflecting in terms of its potential from one point, and of awareness of our personal data from another point. Considering the common use of Internet and of *social sites*, it is important to reflect on the awareness of the young people who leave digital tracks every day in the Internet. Such reflection leads to the question of the level of awareness that the young people have regarding the “digital leftovers” while using the Internet.

Giannotti (2015) is reflecting on how it always becomes more important to support the process of transparency online: this way the access to the knowledge of the Big Data becomes the common heritage. Moreover, every single person has an opportunity to use such data, to have an access to his personal information and if needed to change it. It is important to act in the following three directions: first of all, to support the self-awareness regarding personal information, it should be clear that some additional data can be extracted from provided personal information and the users should not be limited to the concept of agreement, therefore, another approach should be supported – evolution from “written agreement” to “awareness”. Then the users should have a possibility to manage independently their personal data and have the right to request that their information can be cancelled completely. And at last, they should have the right to have free access to the data and to collective knowledge as the common wealth.

Considering the above said, we would like to present the results of the research work which involved the European University students. It is important to consider the above mentioned issues, with the purpose to support the new generations in learning of how to use properly their personal data. It is quite clear that the students should be taught from the first years of school of how important it is to give the *value of information* in the development of their digital competencies.

2. WHAT IS THE VALUE OF YOUR PERSONAL DATA ON INTERNET? RESEARCH AMONGST THE YOUNG EUROPEAN UNIVERSITY STUDENTS

In this paragraph we would like to present the results of the empiric re-search which allows us to evaluate the behaviour of the young University students and the value given with regards to personal data provided on Internet. The empiric research represents the quantitative or standard re-search which is based on data matrix and refers to formalized procedures of data collection and analysis. The instrument of the research is the questionnaire with closed answers; its paper copies have been filled in by the students and the answers have been inserted with digital support

The questionnaire has been prepared by the authors of this article (University of Turin), by Stefano Poli and Claudio Torrigiani (University of Genoa) and Cristina Ispas (University of Resita, Romania). The data has been collected during the academic year 2016-17 in Italy and Europe by involving different groups of University students which participate in different courses of Italian degree, coming from Piedmont, Liguria, Sicily and from European University centres, in particular from Resita in Romania and from Valencia in Spain. We have considered the following parameters during our research work: actions in Internet (from posts on social networks, use of *App* for car or *bike sharing*, use of sharing systems Cloud, *App* which requests for geolocation or register information related to personal state of health), amount of personal devices, understanding that the use of information technology generates data which can be used by the commercial companies or other organizations, gathering of social and personal data. In addition to the above said, we estimated the value in euro that the students give to their personal data provided on Internet (out), and at the same time the profit that they believe they gain from the services provided when their personal data is used by the external companies (IN). We considered eight types of preferences: politics, religion, sex, sports, food, fashion, free time, automobiles. For each preference we asked to give the added value of personal information not only when such information is "provided" but also when personal information gives the advantage in terms of receiving the services. Our target group is formed out of 1.091 students coming for more than 50% from Turin (45,6% of which are signed for human sciences degree and 8,5 % to the Polytechnic University), for 15% from Romania (signed for human sciences degree courses), for 11% from Valencia (signed for Philosophy and Educational Sciences Courses in the University of Valencia (Univesitat de València) and some students from Polytechnic University of Valencia (Univesitat Politecnica de València), for 8% of the University of Eastern Piedmont (Università del Piemonte Orientale) (signed to the course Degree in Nursery Sciences), for 6% of the University of Genoa (signed to the Degree in Educational Sciences), and finally for 5% from Palermo (signed to the course of Degree in Law). The social and personal information represents the sample composed from 75,6% of females and 24,4% of males with an average age of 22,8 year old. The activities performed by them in Internet are numerous: in average 7 activities per person, with 3% of respondents up to 3 activities and 5% of the respondents from 12 to 18 activities. The respondents possess in average 3 technological devices (smartphone, laptop and tablet).

Our sample declares an average of 1.107 euro as total value of personal preferences in case given to others (OUT), and an average of 688 euro as value of the personal preferences in case the services are provided (in). The interviewed students evaluated as *zero* all 8 preferences presented by them, in particular 36% in case of out and

38% for in; therefore, little more than one third of the sample gives the zero value to all its personal information.

The Table 1 compares the average values of principle variables with reference to the nation of residency of each respondent. We can observe that the average of the total value of the “given” preferences (OUT) is superior in Spain (1.776 euro) compared to Italy and Romania (relatively 1.029 and 847 euro); the average of the total value of the personal preferences in case the services are provided (IN) is worth 844 euro for Spain, 710 for Italy and 435 for Romania. Therefore, it seems that the students from Valencia give a major value to their information and it is the only group that gives the same value both for out and in, whereas Italians and Romanians give major value to “given” information (OUT) rather than to the “services provided” (IN).

Table 1.
Summary of the average of main principle variables, per nation of the interviewed student
(data for academic year 2016-2017)

Nation		Total value in euro of personal preferences in case given to others (OUT)	Total value in euro of personal preferences in case the services provided (IN)	Difference between information given and services provided (OUT - IN)	N of activities in the Web	N of technological devices owned	Age (years)
Italy	Average	1029	710	193	8,1	3	22,6
	N	643	657	607	804	804	772
	Dev. std.	3708	4100	4023	2,8	1	3,8
Romania	Average	1776	435	1459	6,6	2,5	24,7
	N	121	131	114	166	166	154
	Dev. std.	9791	1041	10104	2,9	1,2	6,2
Spain	Average	847	844	-4	6,3	2,8	22,4
	N	119	120	119	121	121	121
	Dev. std.	1300	1275	419	2,8	1	2,1
Total	Average	1107	688	337	7,7	2,9	22,9
	N	883	908	840	1091	1091	1047
	Dev. std.	4833	3541	5066	2,9	1	4,2

By studying and interpreting this data, we can make the conclusion that even some micro information which is left by us can represent our real digital DNA that allows to make the profile of the person visiting the digital space. The low value which the University students tend to give to their information in Internet explains the increasing phenomenon of cyber bullying which is present especially amongst the youngest ones. The problem of how the young people provide their personal information can be approached at

different levels (political, cultural and at school). Therefore, it becomes inevitable to develop the critical skills of using the technological instruments, by developing the awareness and always keeping in mind the value of personal data.

REFERENCES

- Gallino, L. (2003). *L'uso delle nuove tecnologie nella didattica*, «Rassegna dell'istruzione», 2, pp. 52-54
- Giannotti, F. (2015). *Big Data e social mining: i dati, a saperli ascoltare, raccontano storie*, in Tasso, E. & Mola A. & Cortesi, A. & Candiello, A., *Misurare l'innovazione digitale. Gli indicatori di successo delle politiche di innovazione territoriale*, Firenze, Edizioni Ca' Foscari
- Grimaldi, R. & Cavagnero, S.M. & Gallina, M.A. (2016). *Uso della rete e consapevolezza delle tracce digitali. Una ricerca tra studenti universitari*, in «Sociologia e ricerca sociale», XXXVII, n. 109, pp. 204-218
- Kitchin, R. (2014). *Big Data, new epistemologies and paradigm shifts*, «Big Data & Society», 1 (April-June), 1–12
- Lombi, L. (2015). *La ricerca sociale al tempo dei Big Data: sfide e prospettive*, «Studi di sociologia», n. 2