

# INTERNET WEBSITE AS A TOOL OF COMMUNICATION IN SCIENTIFIC INSTITUTIONS



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The aim of the article is to analyze the use of websites in communication activities and image building of national scientific institutions. One of the reasons for undertaking this subject is the greater attention paid to scientific communication and its link to the need for society involvement in research, that was expressed in the "Rome Declaration on Responsible Research and Innovation in Europe" in 2014. Apart from that, there is an enhanced science mediatization that requires from PR specialists an extra effort to ensure that their messages are not distorted. The subject seems to be vital as there is a growing emphasis on commercialization of scientific research that creates the need to undertake deliberate efforts to popularize scientific discoveries. Moreover, a demographic decline, which more and more touches higher education institutions and forces them to strive for creating well-known brands, contributes to the subject's importance.

In order to realize the objective, in July 2015, 605 websites of national research institutions were reviewed to determine whether their operators shared contact details to the employee responsible for communication, posted messages informing about current events as well as visual content, used such tools as newsletters, RSS feeds and social media, utilized solutions that facilitate contacts with experts and reprinted materials about themselves published by other medias. The analyzes were performed taking into account the type of each scientific institution (i.e.: a public university, a private university, a research institute or the PAS institute), its size and the empowerment to award scientific degrees.

The results show that relatively few scientific institutions fully exploit the potential of websites in public relations activities. According to anticipation, scientific institutions with a department or at least a single position responsible for communication are more active in this field. Moreover, public higher education

www.minib.pl 38

institutions conduct the most professional communication. There is no clear regularity between the size of institutions and their activity in the field of communication, except for private universities. However, the greater engagement in communication activities is observed within the institutions authorized to award scientific degrees.

In addition, conducted research, on the one hand, resulted in identification of the most common mistakes committed in website communication, but on the other hand, revealed the examples of websites that performed their communication and image-building functions excellently. Such information may serve as a benchmark for practitioners who would like to assess their websites and correct eventual defects.

Keywords: communication, public relations, websites, public university, private university, research institute, PAS institute

### Introduction

Informing about the results of conducted research is an integral part of a scientist's profession. In the recent years broadly understood scientific communication covering all stages of research work has gained particular importance. What contributed to the intensification of activities in this area was the need to get the society involved in research, which has been observed on the European level and which was expressed in Rome Declaration on Responsible Research and Innovation in Europe in 2014. The importance of communication in science is emphasized not only with regard to the society in general, but also in the context of its particular groups such as entrepreneurs. Stimulating cooperation between the scientific environment and the private sector, which is supposed to lead to the commercialization of research results, depends on efficient flow of information about conducted works and on mutual trust. Meanwhile, enterprises report communication barriers making it harder to establish direct contact with domestic scientific employees and the fact that scientific units are not open towards the environment favours the formation of negative stereotypes about them (Institute for Western Affairs, 2012).

Additionally, the neoliberal concept of *new public management* forces scientific institutions to transform into entrepreneurial organizations, to build competitive advantage and to strive for visibility. Growing competition in the scientific sector and increased pressure on the efficiency of scientific units raise the interest in actions aimed at building the desired image of an organization (Kohring et al., 2013; Marcinkowski et al., 2014). Renowned institutions are more likely to establish more interesting and more profitable business contacts, to attract recognized researchers and in case of universities — also greater number of students. The last issue is particularly important for non-public universities, which unlike public universities charge tuition fees, as since 2006 they have been coping with a dropping number of students, which is caused by a demographic decline<sup>1</sup> (Antonowicz, Gorlewski, 2011). Decline of external demand for higher education services is exacerbated by the problems of university graduates with

finding employment, which leads to increase of popularity of other forms of education which guarantee learning a profession which is in demand on the labour market. Due to the fact that the operation of non-public universities is financed mainly with tuition fees, the shortage of demand for educational services may lead to the bankruptcy of some non-public universities.

In light of the mentioned facts it is possible to highlight at least two sources of scientific institutions' interest in communication and presence in the media: the will to assure that you serving the society, as well as striving to strengthen your competitive position. The changes taking place in the scientific sector enforce the professionalization of communication activities and contribute to the growth of importance of specialists on public relations, who have the knowledge and skills necessary to build the desired image of an institution, as well as to develop and maintain positive relations with the environment, including journalists (Kohring et al., 2013).

On top of these processes comes the phenomenon of mediatisation of science, which has recently strengthened and is also increasing the importance of actions from the area of public relations. Mediatisation is defined as a dual process of late modernity, in which media on the one hand become an independent institution with its own logic, which other social institutions have to adapt to, and on the other hand constitute an integral part of other institutions, including science (Hjarvard, 2013). A consequence of this process is tabloidization, as well as infotainment (from the words information and entertainment), that is, subordinating information to entertainment and increasing importance of celebrities. The latter are starting to assume the roles traditionally assigned to authorities. Some scientists are also subordinating themselves to the logics of the media, becoming science celebrities. They make statements for the media on any subject, regardless of the subject's relation to their specialization. They also publish information about their private life and emotions. They fill with content the time and space in the media which they could use to present the results of their research and to explain reality based on their scientific knowledge (Moleda-Zdziech, 2013).

# Internet website as a research subject

Internet websites are an important tool of communication that public relations specialists use to provide stakeholders with access to up-to-date information about a particular organization. Thanks to Internet websites it is possible to present their competitiveness and build relations with the environment. Moreover, Internet websites can be used to promote and shape the image of an institution. Internet is the first means of mass communication which allowed publishing contents which are not filtered by journalists, but which are fully controlled by the publishing organization (Hill and White, 2000).

In the United States already in the previous decade research projects concerning the communication activities conducted by scientific institutions by means of Internet websites were carried out, e.g. J. Gordon and S. Berhow (2009), S. Kang and H.E. Norton (2006), E.M. Will I C. Callison (2006). The research by Kang and Norton (2006) shows that almost all of the best universities in the United States would publish news and press releases about themselves on their Internet websites, they would also put their logotypes on the websites. Internet was an important tool of public relations for schools enjoying lower renown, which this way could compensate for their unfavourable situation.

Gordon and Berhow (2009) concluded in a research project carried out a few years ago that Internet websites of American universities are regarded as user-friendly and the information they share is regarded as useful. However, they facilitate conducting a dialogue to a much smaller extent, where — according to the authors — engaging in this type of activity boosts the chance to maintain positive relation with the environment in the long term. The necessity of bilateral communication with the environment, based on dialogue was highlighted earlier by Kent and Taylor (2002). However, as the above-mentioned research finds out, American websites don't fully take advantage of the potential of such solutions as: chat, blog, or RSS channel.

Among the highlighted reasons for the inability to maximize benefits from running your own Internet website is the scepticism about the efficiency of actions taken by means of a website and lack of care about the timeliness of contents published on the website (Hill and White, 2000). For decision-makers who don't

recognize the potential of an Internet website as a tool for building an organization's image, the timeliness of publication is not a top priority. It also happens in some cases that public relations units don't have at their disposal assets in form of personnel, funds and time to maintain Internet websites. Jest to o tyle niepokojące, że rozczarowanie stroną internetową przekłada się na postrzeganie jakości i funkcjonowania całej instytucji naukowej (Will and Callison, 2006).

In light of the presented facts, carrying out an analysis of the utilization of Internet websites in the communication and image-building of Polish scientific institutions was assumed as the goal of this research. In particular, an attempt was made to identify certain regularities occurring in this area, which results from such characteristics as: type of scientific institution, its size and the fact of holding the authorization to award academic titles. Additionally, in course of the conducted analyses, attention was focused on diagnosing the most common mistakes made in communication by means of Internet websites. Moreover, Internet websites perfectly serving their communication and image-building functions have been identified. This way the collected information may be interesting not only for marketing theorists, but also for the employees of scientific institutions who deal with maintenance of Internet websites on a daily basis. On their basis practitioners can compare their Internet websites to competition and decide on the implementation of necessary improvements.

## Research method

In order to achieve the goal of the research, a review of the Internet websites of 617 scientific institutions listed in the POL-on<sup>2</sup> system as of June 30, 2015, was carried out. Eventually, 605 Internet websites were subject to assessment (see table 1). The discrepancy between the number of institutions and Internet websites comes from the lack of Internet websites, or problems with their availability, mainly in case of non-public universities. A result of research activities started in July 2015 is collection of data concerning the whole population.

Internet websites were assessed with regard to the presence of a few elements associated with communication activity. First of all, it was investigated whether an Internet website contains information that its institution has a department,

Table 1. The number of scientific institutions and the number of Internet websites they are running, according to the type of institution in 2015

| Type of scientific institution     | Number of institutions | Number of Internet websites |  |  |
|------------------------------------|------------------------|-----------------------------|--|--|
| Public university                  | 134                    | 134                         |  |  |
| Non-public university              | 288                    | 277                         |  |  |
| Research institute                 | 118                    | 117                         |  |  |
| Unit of Polish Academy of Sciences | 77                     | 77                          |  |  |
| total                              | 617                    | 605                         |  |  |

Source: Own materials prepared on the basis of POL-on system, as of June 30, 2015.

or at least a particular position responsible for communication, as well as whether the identity of the employee responsible for this activity is provided. The lack of contact details of a unit dealing with the issues of communication and the lack of information about the existence of such unit within the structure of the institution was treated as tantamount to the conclusion that these institutions don't have communication specialists among their employees.

The research also focused on the issue of publication of messages which can build a beneficial image of a particular scientific institution on Internet websites. Bits of information promoting the achievements of employees, or students (in case of universities), initiatives taken up by organizations, received awards, established cooperation etc. were recognized as such messages. Thus, the group includes messages on subjects exceeding the scope of issues concerning internal stakeholders of a particular institution, or sales promotion of offered educational and/or scientific services conducted by means of Internet websites. Due to the fact that as a result of a pilot study of a few dozen Internet websites of Polish research institutions it was concluded that this kind of activity is conducted comparably rarely and additionally, it takes the shape of complex statements in rare cases, exceptionally liberal conditions identifying an Internet website as a tool for image-building activity have been adopted. In order to be recognized as a place where messages building the image of a particular institution are published, it was enough for a particular Internet website to have published at least 4 messages with the required content, consisting of at least 3 sentences each, over the 12 months preceding the research.

Third thing that was analysed was whether an institution monitors the

media and publishes on its own website materials concerning itself, prepared by journalists and presenting its advantages. It was concluded that the above-mentioned activities are conducted regardless of the location of the contents on an Internet website, that is, whether there is a special section, or whether they are published in the news/updates section.

It was also research author's intention to find out, whether Internet websites publish informative and visual materials concerning a particular scientific institution, especially prepared for the press. The conducted investigation revealed the lack of such materials on most of the investigated Internet website and thus undermines the purpose of the planned analysis. As a result, the investigation was limited to checking whether it is possible to obtain the logotype of a particular institution by means of its website. In most cases it was possible to download the logotype from a particular institution's website. In some rare cases the author of the research found information that an institution doesn't publish files with its logotype on its Internet website, as it wants to retain control over its use. If such a piece of information was accompanied by guidelines concerning the possibility of obtaining files with logotypes, such solutions were treated as equal to providing the logo by means of Internet website.

Moreover, information concerning the utilization of such tools as: newsletter, RSS channel and linking to an institution's profile in social media was collected. Moreover, it was determined whether on Internet websites solutions facilitating the process of finding and establishing contact with an expert from a particular institution.

Additionally, the following variables were taken into consideration in the research: type of institution (public university, non-public university, research institute, a unit of Polish Academy of Sciences), its size (small and big scientific institutions) and rights to awards scientific titles of doctor and habilitated doctor (possessing, or not possessing such authorization). Information about the type of institution and rights to award scientific degrees was obtained from the POL-on system (see table 1 and 2). At the same time the distinction between small and big institution was made according to the number of scientific employees and didactic employees registered in the POL-on system<sup>3</sup>. The median calculated for every type of institution separately was adopted as the border value (see table 3).

Table 2. The number of scientific institutions and the number of their Internet websites, according to the type of institution and held authorization to award scientific titles in 2015

| Type of scientific institution        | BRAK th | umaczenia                      | Nie posiada uprawnień<br>do nadawania stopni naukowych |                                |  |
|---------------------------------------|---------|--------------------------------|--|--------------------------------|--|
|                                       | Number  | Number of<br>Internet websites | Number   | Number of<br>Internet websites |  |
| Public university                     | 94      | 94                             | 40   | 40                             |  |
| Non-public university                 | 19      | 19                             | 269  | 258                            |  |
| Research institute                    | 38      | 38                             | 80   | 79                             |  |
| Unit of Polish Academy<br>of Sciences | 61      | 61                             | 16   | 16                             |  |

Source: Own materials on the basis of POL-on system, as of June 30, 2015.

Table 3. Classification of various types of scientific institutions and their Internet websites, according to the number of institutions' employees (on the basis of the median)

| Type of scientific institution        | Mediana | Small institutions     |             | Big institutions                     |                             |             |                                      |
|---------------------------------------|---------|------------------------|-------------|--------------------------------------|-----------------------------|-------------|--------------------------------------|
|                                       |         | Range                  | Num-<br>ber | Number<br>of<br>Internet<br>websites | Range                       | Num-<br>ber | Number<br>of<br>Internet<br>websites |
| Public university                     | 326,5   | Up to 326<br>employees | 67          | 67                                   | 327<br>employees<br>or more | 67          | 67                                   |
| Non-public university                 | 23,0    | Up to 23<br>employees  | 148         | 138                                  | 24<br>employees<br>or more  | 137         | 136                                  |
| Research institute                    | 38,0    | Up to 38<br>employees  | 55          | 54                                   | 39<br>employees<br>or more  | 55          | 55                                   |
| Unit of Polish<br>Academy of Sciences | 45,5    | Up to 45<br>employees  | 34          | 34                                   | 46<br>employees<br>or more  | 34          | 34                                   |

Source: Own materials prepared on the basis of POL-on system, as of June 30, 2015.

www.minib.pl 46

# Using Internet websites for image-building activities

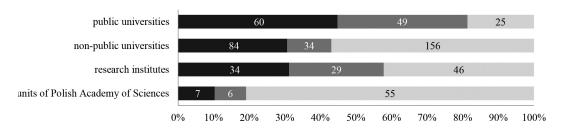
One of the elements of image-building activity conducted by means of Internet websites is publishing messages influencing positive perception of an organization. Despite having adopted exceptionally lenient criteria in this respect<sup>4</sup>, after carrying out a review of Internet websites, it was concluded that only 51% of scientific institutions conduct such activities. The result should be regarded as low, also due to the above remarks concerning the fact that journalists seldom act as intermediators in institutions' communication and that institutions tend to rely solely on their internal activities.

As picture 1 suggests, among various types of scientific institutions messages shaping the image of an organization are usually published by public universities. Also, over a half of research institutes take up such activities. At the same time, the practice is the least popular among units of Polish Academy of Sciences — only one out of five resorts to such The practice is only slightly more popular among big practices. institutions, than among small institutions. Only non-public universities are an exception from the above rule. It was assumed that the above general relationship exists, as small entities usually take up fewer activities; they organize and participate in a smaller number of events than entities operating on a larger scale. Due to a limited structure they also have fewer chances to receive awards, in comparison with large universities with multiple faculties. That's why potentially, they have fewer reasons to prepare messages building their image. However, if such a relationship occurred only in case of non-public universities, it is possible that the ability to create news is more important than the above-mentioned issues.

In terms of publishing image-building messages on their websites, non-public academic schools are the most active among all scientific institutions (see picture 2). Right behind them there are public schools, first academic and next non-academic schools. Within the group of research institutes the entities holding rights to award scientific titles are more active in this respect. However, an opposite situation exists in case

of units of Polish Academy of Sciences, among which a greater share of entities taking up the above-mentioned communication activities is typical of the group which doesn't have the right to award the titles of doctor and habilitated doctor.

Picture 1. Publishing image-shaping messages on Internet websites, in case of scientific institutions of various types and sizes (number of institutions)



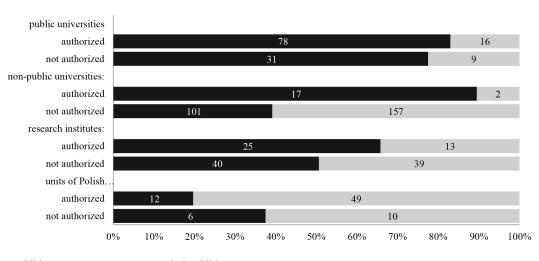
■ big institutions publishing messages

■ small institutions publishing messages

other institutions not publishing messages

Source: Own materials.

Picture 2. Publishing on an Internet websites image-building messages, in various types of scientific institutions with rights and without rights to award scientific titles (number of institutions)



■ publish messages

don't publish messages

Source: Own materials.

Scientific institutions organize information published on their websites in different ways. Some of them create separate sections aiming at popularization of events, which may serve the purpose of building their image and in order to pass on the current information to their internal stakeholders (e.g. informing students about the dates of exams, or change of workshop plans). This structuring of information brings order to a website and makes it easier for a user to navigate around the Internet service. Big institutions running exceptionally intensive active communication activity go even further and introduce an even more detailed division of messages (e.g. on the website of Warsaw University of Life Sciences the following sections are distinguished: student recruitment, scientific achievements, students, open days, interesting lectures, conferences, celebrations).

The imperfection of image communication conducted by means of an Internet website in many cases is associated with its brief character. It sometimes happens that events important for an entity, which well described could draw the attention of recipients, are reported by means of just a few sentences. An example of such a situation is a message informing about a distinction received for an invention, which is reported with just a single sentence. The message lacked a whole range of data: details about the distinction, details explaining the significance of the distinction, information about the body awarding the distinction, information about other entities competing for the award, the reasons why this particular institution won the award, details about achievement that was rewarded, etc. Some institutions don't even provide written reports, but publish only photographs from events in which their unit participated. This way their reports resemble communication by means of some social media portals which serve the purpose of collecting visual materials. Reducing the length of texts and basing the message on the image are undoubtedly the signs of current times. Such measures are supposed to make the conveyed content more attractive — facilitate the reception of the message among the recipients who often have to cope with shortage of time. Nevertheless, while addressing these expectations it is necessary to show restraint in reduction of volume, adapt the content to the means of communication and let the recipient decide himself how much time he wants to spend on reception of the content. What provides such an opportunity is a structure of message close to the rules of building a press release, where key information can be found in the heading, which is later expanded in the body of the message. This makes it possible to make sure that recipients don't feel insufficiently informed due to encountering very short statements.

For many institutions it is a problem to communicate more than just a few times a year. Perhaps, some of these organizations don't have at their disposal contents which could be used to create interesting messages. In light of the above deliberations, it seems more likely that the real problem is lack of engagement in search for subjects that could serve as a basis for communication. Looking through Internet websites it is also easy to find cases of scientific institutions, which used to regularly publish messages, but at some point stopped doing this for unknown reasons. As a result, a used visiting an Internet website finds news published a year, or two ago in the updates section, which is unacceptable. It is equally unprofessional when special occasion messages remain on display on an Internet website long after its sell-by date. Among such messages are Christmas greetings, which the author of this research encountered on several institutions' homepages in July. If for any reason a particular unit doesn't have the capacity to manage its Internet website on a regular basis, it seems that not publishing greetings on the website at all is already a better idea. This way a particular website will not be adapted to the current circumstances only for a few days, rather than a few months, when Christmas greetings remain on display long after Christmas.

Some scientific institutions try to bypass the requirement of publishing updates on current events by publishing electronic bulletins on their websites once a month or once a few months. Even though such materials may be valuable as chronicles, it is hard to replace regular communication activities with them. The fact that newsletters are published rarely means that a message that could be potentially interesting for many recipients, for example a message about an interesting conference becomes out-of-date and thus not very useful.

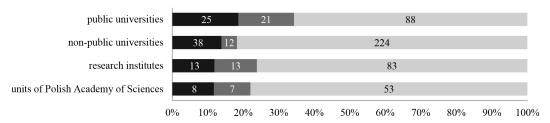
Another problem is careless approach to preparation of messages. Sometimes communication is handled without due diligence, as shown by mistakes and numerous misspellings, which can be found in texts published on Internet websites. Unprofessional editing of messages may be the result of insufficient human resources, or the fact that the discussed area of activity is handled by random people who don't have sufficient knowledge and skills in this area. At the same time, avoiding such mistakes is of huge importance, as they can seriously harm the image and undermine the trust for the institution running a particular website, as Will and Callison (2006) mentioned above pointed out.

Professionally prepared messages on the Internet websites of scientific institutions are rather uncommon, but can be found in case of all types of units. In this respect the following entities deserve recognition: Nencki Institute of Experimental Biology of Polish Academy of Sciences (www.nencki.gov.pl), Henryk Niewodniczański of Nuclear Physics, Polish Academy (www.ifj.edu.pl), Institute of Logistics and Warehousing (www.ilim.poznan.pl), Institute of Aviation (ilot.edu.pl), University of Social Sciences and Humanities SWPS (uniwersytet.swps.pl), Warsaw University of Life Sciences (www.sggw.pl) and Warsaw School of Economics (www.sgh.waw.pl).

Apart from creating own texts and building the desired image, what may help in building the desired image is monitoring the media and publishing positive materials about an institution from external sources on the institution's Internet website. This may be, for example, a press article describing a conference, which took place in an institution, or audio-visual material, in which a unit's employee presents his expert opinion.

As data presented on picture 3 show, most scientific institutions don't publish on their Internet websites materials about themselves from the media. Only slightly more than a third of public universities and about 20% of each of the remaining groups of entities take up such activity. The tendency to publish the above-mentioned materials is about the same in case of small and big institutions. An exception here is only the group of non-public universities, in which among universities publishing such contents the share of small organizations is three times greater than the share of small organizations.

Picture 3. Publishing materials from the media concerning your own institution, according to type and size of institution (number of institutions)

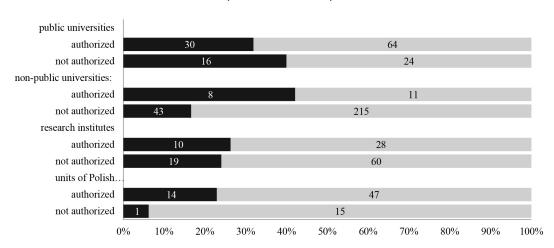


- big institutions publishing materials about themselves from the media
- small institutions publishing materials about themselves from the media
- other institutions not publishing materials about themselves from the media

Source: Own materials.

The biggest share of institutions publishing materials about themselves from other media has been observed in case of non-public academic schools and non-academic public schools (see picture 4). Activity in this respect is least popular among the units of Polish Academy of Sciences without authorization to award scientific titles and private universities.

Picture 4. Publishing materials from the media about your institution on the institution's website, according to type of institution — scientific institution with and without authorization to award scientific titles (number of institutions)



■ publish materials about themselves from the media

don't publish materials about themselves from the media

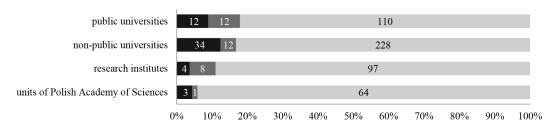
Source: Own materials.

What is remarkable is the fact that many organizations don't seem to understand this category of information, which is shown by incorrect classification of this type of information on Internet websites. Some institutions don't provide separate sections for this kind of content and publishes it in random locations. The others have special sections usually titled media about us, or press about us. As long as the right content is published in the above-mentioned section, such a solution is desirable, as it constitutes a clear signal for the user what materials he can expect in this location. However, it turns out that in some cases what you can find in these sections instead of the effects of media monitoring are press materials, or advertising videos prepared by a particular institution. There are also reverse situations in which institutions publish materials which should be located in the 'media about us' section in the press section for journalists, where, among others, the above-mentioned own press materials should be located. At the same time materials from the press and other media prepared by independent journalists, showing a particular scientific institution's positive aspects constitute contents which are supposed to build the image of an organization in the eyes of all its stakeholders.

In a situation where institutions communicate by means of Internet websites, we should expect them to take additional actions aimed at dissemination of the published contents. Such an opportunity comes with the utilization of newsletters and RSS channels. In this context ir is necessary to mention that according to the survey conducted by IIBR for WP.pl (Rynkiewicz, 2014), among Internet users the most popular tool of communication is still electronic mail (97% of users) and social media portals are the second most popular tool (84%). If we additionally take into consideration the low cost of this communication and the fact that it reaches the people who are really interested in it, the lack of the above-mentioned tools on an Internet website should be treated as a major oversight.

At the same time, whereas a half of the surveyed institutions publish image-building messages, only a total of 15% of them send newsletters. Slightly higher share of entities taking up such an activity can be found among public and non-public universities (see picture 5). In private universities a much higher number of organizations sending out a newsletter can be classified as big institutions. The possibility of subscribing for a newsletter is least common on the Internet websites of the units of Polish Academy of Sciences.

Picture 5. Sending out the newsletter in scientific institutions of various types and sizes (number of institutions)



- big institutions sending out a newsletter
- small institutions sending out a newsletter
- other institutions not sending out a newsletter

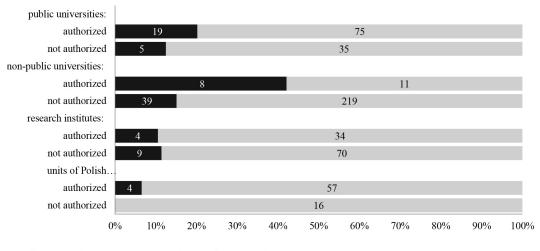
Source: Own materials.

Analysis of this issue in institution distinguished by holding the authorization to award the titles of doctor and habilitated doctor shows that newsletters are most often sent out by academic schools (see picture 6). In this group the discussed activity is pursued by almost a half of organizations, at the same time among academic public schools (group number 2 in this respect) the share amounts to just 20%. None of the units of polish Academy of Sciences not authorized to award scientific titles sends out a newsletter.

Another tool, which similarly as newsletter constitutes a convenience for people interested in contents published on an Internet website is RSS channel. RSS makes it possible to send headlines of messages. Thanks to this solution a user having at his disposal an RSS reader gains access to the title, brief description of the update and a link to detailed message published on an Internet website.

However, providing RSS channels on Internet websites is very rare among scientific institutions, as only every tenth organization has it. Public universities, especially the big ones are most active in this respect (see Picture 7). It is possible to subscribe for an RSS channel on every fifth Internet website managed by a public university. Only a few to about a dozen entities from the group of units of Polish Academy of Sciences, research institutes and non-public universities provide the users of their Internet websites with such an opportunity.

Picture 6. Sending out a newsletter in various types of scientific institutions — with and without authorization to award scientific titles (number of institutions)

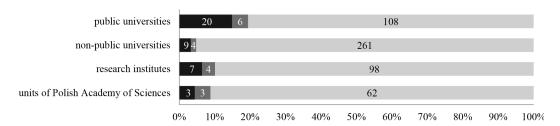


■ send out a newsletter

don't send out a newsletter

Source: Own materials.

Picture 7. Provision of an RSS channel in scientific institutions of various types and sizes (number of institutions)

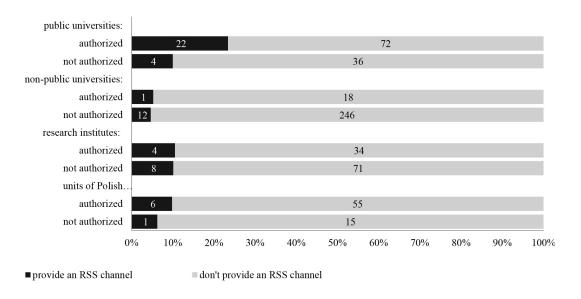


- big institutions providing an RSS channel
- small institutions providing an RSS channel
- other institutions not providing an RSS channel

Source: Own materials.

RSS channels are seldom provided both in institutions authorized and those not authorized to award scientific titles. Against this background, only public universities can be distinguished, as among them RSS channels are much more common among entities awarding the titles of doctor and habilitated doctor (see Picture 8).

Picture 8. Provision of RSS channels in various types of scientific institutions — with and without the authorization to award scientific titles (number of institutions)



Source: Own materials.

# The utilization of social media by scientific institutions

Image-building activities can be conducted by scientific institutions also by means of social media. Thanks to the very fact of using this comparably new channel an institution is regarded as an organization following new trends. Social media serve the purpose of sharing information and building relations with the environment. They enable open exchange of information in real time, which can and should resemble a dialogue in character. A research by D.L. Linvill, S.E. McGee and L.K. Hicks (2012) concerning the use of the microblog popular around the whole world — Twitter — shows that American scientific institutions don't engage in a dialogue by means of

www.minib.pl 56

this tool, but use it to provide the public with updates concerning their organization. Thus, they are not fully using the potential that the above-mentioned microblog can offer.

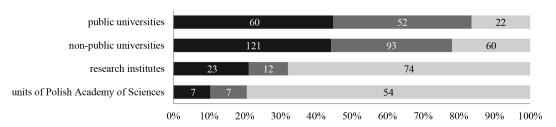
The conducted review of Internet websites on which scientific institutes provide links to social media portals shows that in Poland the most commonly used medium of this kind is Facebook, but Twitter, YouTube and Google+ are only slightly less popular. Moreover, scientific institutions have their profiles also in such services as Instagram, LinkedIn, FourSquare, Pinterest, Nasza Klasa, Flickr, SlideShare, GoldenLine, VK and vimeo<sup>5</sup>. Some of them maintain their profiles in a few social media portals at the same time.

As picture 9 shows, activity in social media is typical of universities. High popularity of this type of media in the above-mentioned group is most likely associated with the desire to reach the clients, that is, future and current students, who regard social media portals as an important source of information. The remaining institutions who don't regard young people as their main target group, use this kind of media even a few times less often. Communication activities by means of social media portals are least popular among the units of Polish Academy of Sciences. Additionally, in case of universities and research institutes there is an apparent domination of bigger organizations in this respect.

What's interesting is that all non-public universities authorized to award scientific titles have their profiles in social media. What is also noteworthy is that units of Polish Academy of Sciences without authorization to award scientific titles, are much more likely to use social media, in comparison to the rest of the group (see Picture 10).

A numerous group of institutions communicate by means of social media alone, that is, they don't publish messages on their own Internet websites. Such an approach can be regarded as risky, as a social network profile can be blocked and in such a situation an institution loses an important channel for communication with its stakeholders, as well as access to the information stored in the profile. Nevertheless, 38% of the surveyed entities present on social media portals act this way. Most of them — 72% — are non-public universities (see picture 11).

Picture 9. Maintaining an official profile in social media in scientific institutions of various types and sizes (number of institutions)



■ big institutions present in social media

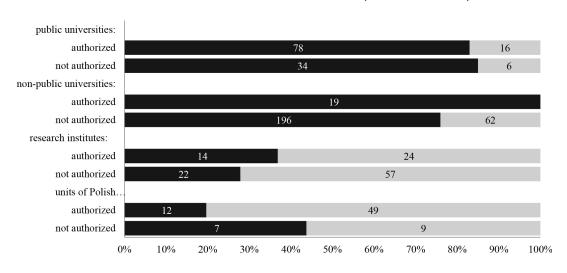
■ small institution present in social media

other institutions not present in social media

Source: Own materials.

Picture 10. Maintaining an official profile in social media in various types of scientific institutions

— with and without authorization to award scientific titles (number of institutions)



■ have a profile in social media

don't have a profile in social media

Source: Own materials.

58

Picture 11. Running an official profile in social media and at the same time abandoning the publication of image-building messages on own Internet websites in scientific institutions of various types (number of institutions).



Source: Own materials.

The above-mentioned practice doesn't seem right, also because the two channels target slightly different groups. If we take into consideration the fact that what influences a young person's choice of studies is his closest environment, that is, parents and teachers who use new media less frequently<sup>6</sup>, universities should run communication activities also outside social media portals. Using various channels of communication it is worth adapting the message to the characteristics of a particular channel. It is also possible to publish complementary information in various media, integrate messages and this way encourage the users to use many channels. Thanks to this a scientific institution gets a chance to expand the coverage of its message and reach a greater group of recipients and as a result strengthen the awareness of its brand and its desired image.

# Providing materials for the media

It is good practice to create on your website a section for the press, or more broadly — for the media. Thanks to such a solution it is possible to gather in one place information prepared especially for external stakeholders and in particular for journalists. However, it still happens that this information is scattered around various subpages of an Internet portal, which makes finding the right piece of information much harder. This is especially difficult in case of complex Internet websites of big organizations.

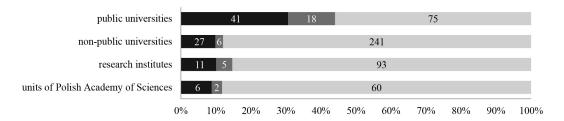
In the 'for press' section it is worth publishing both basic information, as well as information distinguishing a particular institution, including

professionally prepared visual materials ready for downloading (e.g. photographs of administration members, headquarters, infrastructure, logotype). What should be a standard procedure is publishing every piece of information for the press sent to the journalists on an institution's Internet website.

On the basis of a review of Internet websites of Polish scientific institutions it is possible to conclude that most of the websites contain a lot of multi-media materials, especially photographs from various events. However, the quality of these materials shows that they serve mainly the purpose of commemorating the events for the participants of these events. At the same time materials published for the purpose of utilization in professional communication are missing. This may be show that an institution simply doesn't have such materials, or has little awareness of the importance of visual identification for the image of a scientific institution.

Own logotype, or instructions for persons interested in acquiring the logotype can be found on websites of only about a dozen percent of each of the following groups: non-public universities, research institutes and units of Polish Academy of Sciences (see picture 12). Only public universities display greater awareness in this respect, as almost a half of them publish their logotypes on their Internet websites. Big institutions more often than the small ones to pay attention to the discussed issue.

Picture 12. Provision of logotype in scientific institutions of various types and sizes (number of institutions)

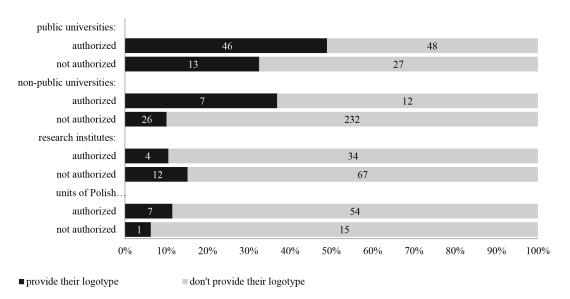


- big institutions granting access to their logotype
- small institutions granting access to their logotype
- remaining institutions not granting access to their logotype

Source: Own materials.

In almost all surveyed groups greater awareness of the significance of logotype is displayed by institutions authorized to award scientific titles, compared to those that don't have this right (see picture 13). In this respect a particularly strong disparity can be found in the group of non-public schools. Research institutes are an exception, as in their case visual identity symbol appears more often on the websites of entities not authorized to award the titles of doctor and habilitated doctor.

Picture 13. Publishing the logotype in various types of scientific institutions — with and without authorization to award scientific titles (number of institutions)



Source: Own materials.

Even though Polish scientific institutions hardly ever have professionally managed sections for the media, it is still possible to find some positive examples in this area. A good example to follow is the organization of content adopted on the website of Warsaw University of Life Sciences, where in the section for the media such areas as: press information, press file, university authorities, gallery, experts of Warsaw University of Life Sciences and contact for the media. The press file contains links to logotype files and to texts presenting the university in figures, as well as texts presenting the

university's history. (see picture 14). Other positive examples worth Poznań University mentioning are: of **Economics** http://ue.poznan.pl/pl/wspolpraca,c10/media,c156/ (29.11.2015), Wroclaw University of Environmental and Life Sciences in Wrocław http://www.up.wroc.pl/media/20254/media.html (29.11.2015) and WSB University in Poznań — http://www.wsb.pl/poznan/dla-prasy (29.11.2015). In this context it is also worth mentioning the efforts of Wrocław University of Technology which within its website has a separate page devoted to its visual identity system — http://www.logotyp.pwr.edu.pl/Default.aspx?page=Main (29.11.2015). Such a venture shows strong motivation to create a uniform and positive image of the represented institution.

# Solutions facilitating contact with experts

A chance for building a positive image in the media are also situations in which scientists employed in a particular scientific institution are invited by journalists to provide expert opinions on the subjects discussed by journalists. Also, representatives of the industry sometimes look for experts to establish cooperation. In both situations what may be helpful are solutions facilitating the search for and establishing contact with the right scientist by means of the website. In case of big institutions an expert search engine will be this tool. It enables searching in resources concerning scientists not only by name, but also by other key words. In an organization in which there are only few scientists, it is enough to appropriately organize information about them, together with their contact data. However, many Internet websites provide either no, or insufficient information about institutions' employees (only contact data, or information about the scope of their scientific interest is provided). There are also opposite situations in which the amount of data provided is too big. Presenting a detailed biography of a scientist, together with a full list of publications would be of great value under different circumstances, but in the discussed case it makes it harder to efficiently search for an expert and discourages from establishing contact. Thus, moderation and the ability to prepare a concise and substantial piece of information about a scientist's specialization, together with his contact data, are crucial.

#### Picture 14. Section for the media on the Internet website of Warsaw University of Life Sciences



Rejestracja dziennikarzy Logowanie

PL EN

SGGW » Dla mediów » Komunikaty prasowe



#### BIURO PRASOWE

#### INFORMACJE PRASOWE

- ) Rekrutacja na studia
- ) Osiągnięcia naukowe
- ) Studenci
- ) Dni otwarte / Dni SGGW
- ) Ciekawe wykłady
- ) Konferencje
- ) Uroczystości

#### TECZKA PRASOWA

- ) Fakty i Liczby
- ) Historia uczelni
- ) Rekrutacja
- Logotypy

#### WŁADZE UCZELNI

- ) Rektor
- ) Prorektor ds. Dydaktyki
- ) Prorektor ds. Nauki
- ) Prorektor ds. Rozwoju
- ) Prorektor ds. Współpracy Międzynarodowej
- ) Kanclerz
- ) Senat Akademicki
- ) Komisje Rektorskie
- ) Komisje Senackie
- ) Komisje Uczelniane
- ) Pełnomocnicy Rektora

GALERIA WIDEO

GALERIA ZDJĘĆ

TELEWIZJA SGGW

PRASA UCZELNIANA

SYSTEM MONITORÓW LCD

MEDIA O NAS

EKSPERCI SGGW

KONTAKTY DLA MEDIÓW

30 czerv

## Student SGGW wicemistrzem świata w Taekwondo



Mateusz Mróz student informatyki na Wydziałe Zastosowań Informatyki i Matematyki SGGW został wicemistrzem świata w Taekwondo...

czytaj więcej

maja

# Tak prezentowała się SGGW na Pikniku Naukowym



Relacja SGGW.TV. Podczas Pikniku Naukowego na Stadionie Narodowym nasza uczelnia miała silną i wyróżniającą się reprezentację: Wydział Nauk o Żywnośc...

czytaj więcej

31

24 kwietnia

# Zagraniczni studenci SGGW Mistrzami Europy w futbolu



Dwa zespoły damskiej i męskiej reprezentacji piłkarskiego klubu Cumann Warszawa Gaelic Football Club po raz drugi z rzędu zostały zwycięzcami Mistrzos...

czytaj więcej

# Studenci i naukowcy SGGW w Radiu Kampus



Zapraszamy do stuchania audycji Akademickiego Radia Kampus (97,1 FM w Warszawie i okolicach) w których uczestniczą studenci i naukowcy Szkoty Głównej ...

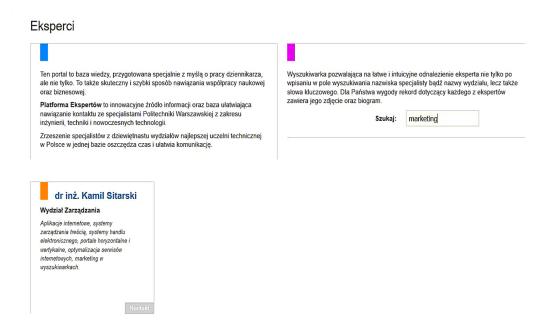
czytaj więcej

20 marca 10 marca

Source: http://www.media.sggw.pl/pl/releases/3776 (14.07.2015).

Among well-designed solutions facilitating the search for scientists is the Platform of experts for the media provided on the Internet website of Warsaw University of Technology — http://eksperci.pw.edu.pl/ (29.11.2015). The result of a search using the key word marketing is presented on picture 15. A good example to follow, in case of smaller number of experts is the solution adopted by John Paul II Catholic http://www.kul.pl/zespol-ekspertow-Lublin University of kul,17414.html#Nauki%20Humanistyczne (29.11.2015). In this case employees were divided according to represented scientific areas. Next to every name there is room for a photograph, name of the area of expertise and a more precise description of scientific interests. Direct contact data is not provided, but the website informs that it is possible to contact experts by means of the Representative Office of John Paul II Catholic University of Lublin.

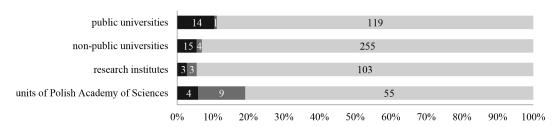
Picture 15. Platform of experts for the media of Warsaw University of Technology



Source: http://eksperci.pw.edu.pl/Eksperci (29.11.2015).

According to the data presented on picture 16, most scientific institutions don't take actions aimed at making it easier for external stakeholders, including journalists, to establish relations with employed scientists. Every fifth unit of Polish Academy of Sciences guarantees efficient contact with experts. Twice more often these are small entities, which may be associated with the technical easiness of presenting a smaller number of employees. Percentage-wise in public universities solutions facilitating contact with experts are twice less common than in units of Polish Academy of Sciences. Only few private universities and research institutes take up activities in this area. However, in case of universities this mainly the domain of bigger entities.

Rysunek 16. Facilitating contact with experts in scientific institutions of various types and sizes (number of institutions)



- big institutions facilitating contact with experts
- small institutions facilitating contact with experts
- other institutions not facilitating contact with experts

Source: Own materials.

If you look into analogous actions in groups of institutions distinguished by their rights to award scientific titles, it turns out that non-public universities authorized to award the titles of doctor and habilitated doctor are most engaged in facilitating contact with experts. Over a third of them take up such activities (see picture 17). About a dozen percent of units of Polish Academy of Sciences are also active in this area — regardless of their authorizations — and a similar percentage of public academic schools. In other institutions such conveniences are almost inexistent.

public universities: authorized 14 80 not authorized 39 non-public universities authorized 12 not authorized 246 research institutes: authorized 36 not authorized 75 units of Polish. authorized 51 10 not authorized 13 0% 10% 20% 60% 30% 40% 50% 70% 80% 90% 100% don't facilitate contact with experts

Picture 17. Facilitating contact with experts in various types of scientific institutions with and without rights to award scientific titles (number of institutions)

■ facilitate contact with experts

Source: Own materials.

# The significance of communication specialists

Separately, attention was paid also to the issue of scientific institutions' units, or positions for conducting activities in the area of public relations. Some entities have a press office and employ a press spokesman. What is also common is a situation in which tasks from the area of communication are allocated to organizational units whose employees also have other duties. This happens when they are responsible not only for contact with the media, but also for activities associated with recruitment, which is particularly popular in case of non-public universities, or for preparing scientific publications. What is also practiced at universities is allocating responsibility for communication to career offices dealing on a regular basis with establishing contacts between students, graduates and potential employers. Sometimes the section of promotion is located in the

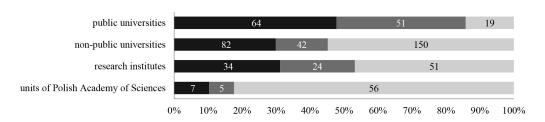
provost's office, or is included in the department dealing with international cooperation.

At the same time in research institutes communication activity sometimes belongs to the duties of the unit responsible for the dissemination of knowledge. Even though the two areas mentioned above have a certain common area of interest, they differ in terms of distribution of emphasis. In activity from the area of *public relations* the emphasis is on the scientific institution and the development of its positive relations with the environment. At the same time in activities disseminating science the emphasis is on popularization and promoting scientific discoveries. In some situations these actions may be mutually complementary. For example, the organization of a conference, which is supposed to popularize research results, will be an action disseminating knowledge and at the same time promoting information about the conference will be an institution's image-building activity. However, there are also such areas of PR, which exceed the scope of interests of the department dealing with dissemination of knowledge. For example, the appointment of a renowned scientist as the director of a unit is an event which the public relations department should inform about. However, for the team dealing with dissemination of knowledge this wouldn't be a reason to take action. Similarly, a report on students' participation in blood donation event would contribute to building a positive image of a university, but wouldn't attract the attention of the department disseminating knowledge. Moreover, public relations activity involves also crisis management and the associated communication. The abovementioned examples clearly show that activity aimed at dissemination of knowledge is something different than shaping an institute's image. The same public relations specialists may find it hard to achieve the desired goals in the area of image while working within the department disseminating knowledge. Judging by the quality of the communication of research institutes conducted by means of their Internet websites, this is not an efficient solution.

Data presented on picture 18 show that among various types of scientific institutions a communication department or work position can be found most often in the group of public universities. At the same time such a solution is least common in units of Polish Academy of Sciences. Among

non-public universities and research institutes the discussed unit, or position can be found in every second institution. What's important is that the share of units/positions responsible for communication is similar in case of big and small scientific institutions. Non-public universities are an exception — in their case this solution is definitely more popular among big universities.

Picture 18. The presence of communication unit/position in scientific institutions of various types and sizes (number of institutions)



- big institutions which have a communication unit/position
- small institutions which have a communication department/position
- other institutions that don't have a communication position/unit

Source: Own materials.

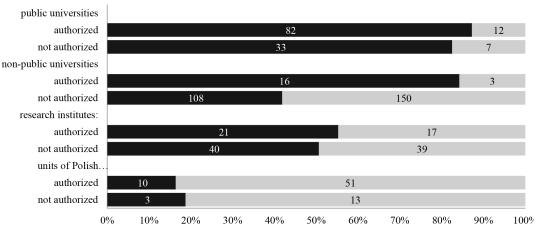
The analysis of institutions, taking into consideration whether they are authorized to award scientific titles, or not, generally shows the share of entities that have a unit, or position for communication is similar in case of both the group with and the group without the right to award scientific titles. Non-public universities are an exception, as in their case the share of entities with communication units, or positions is twice higher among universities awarding scientific titles. This way non-public academic schools are becoming similar in this respect as public universities (see picture 19).

The analysis of institutions, taking into consideration whether they are authorized to award scientific titles, or not, generally shows the share of entities that have a unit, or position for communication is similar in case of both the group with and the group without the right to award scientific titles. Non-public universities are an exception, as in their case the share of entities with communication units, or positions is twice higher among

universities awarding scientific titles. This way non-public academic schools are becoming similar in this respect as public universities (see picture 19).

Picture 19. The presence of a communication unit/position in various types of scientific institutions

— with and without the right to award scientific titles (number of institutions)



■ have communication unit/position

don't have a communication unit/position

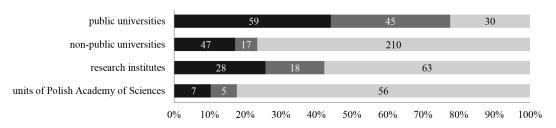
Source: Own materials.

In this context it is worth mentioning a good practice, namely, revealing the identity of the employee responsible for communication on the Internet website. Such information is particularly important at the stage of establishing first contact with an institution, as the lack of this information may discourage from starting a dialogue. However, many websites still provide only a general e-mail address, or phone number of a unit responsible for communication.

The name and surname of the person dealing with communication are most often revealed by public universities, both big and small ones. In this respect research institutes are second, but their result is half that of public universities. This practice is the least common among units of Polish Academy of Sciences; however, it is necessary to remark here that these are institutions where the fewest communication units/positions can be found.

At the same time, in comparison to the number of units dealing with communication activity, the practice is the least popular among non-public universities (see picture 20).

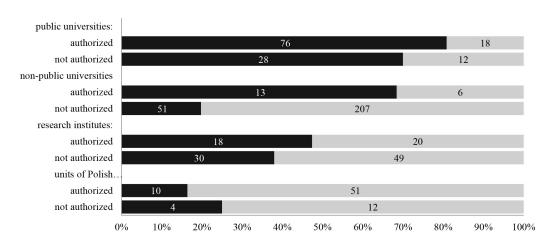
Picture 20. Revealing the identity of the employee responsible for communication in scientific institutions of various types and sizes (number of institutions)



- big institutions revealing the identity of the person responsible for communication
- small institutions revealing the identity of the person responsible for communication
- other institutions not revealing the identity of the person responsible for communication

Source: Own materials.

Picture 21. Revealing the identity of the employee responsible for communication in various types of scientific institutions — with and without rights to award scientific titles (number of institutions)



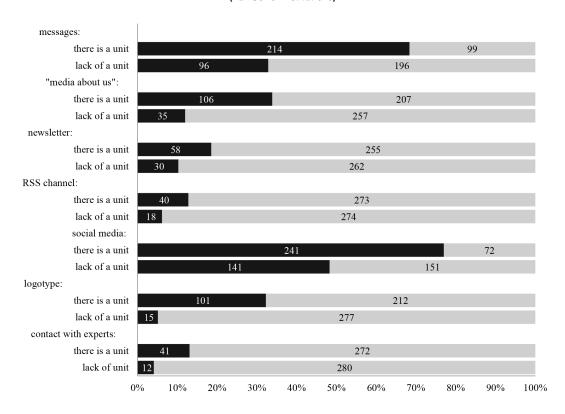
■ provide the identity of the person responsible for communication

Source: Own materials.

don't provide the identity of the person responsible for communication

Moreover, publishing the name of the person responsible for communication on an Internet website — except for units of Polish Academy of Sciences — is more popular in institutions authorized to award scientific titles. This is particularly visible in case of non-public universities, among which almost two thirds reveal the identity of the press spokesman, or other employee dealing with communication, in case of academic schools and only one fifth — in case of remaining entities of this type (see picture 21).

Picture 22. Taking up communication activities by means of an Internet website in various types of scientific institutions — with and without a communication unit/position (number of institutions)



Source: Own materials.

not present on the Internet website

present on the Internet website

In course of the conducted survey the activity of scientific institutions in the area of communication and image-building activity, depending on the presence of a communication position, or unit in their structures was analysed. The data presented on picture 22 leave no doubts that such a relationship exists. The entities which have the mentioned unit, or position are more active in the discussed area, just as expected. They publish messages building the image of an institution, send out newsletters and provide RSS channels twice more often. They publish on their Internet websites materials from other media concerning their own institutions and offer solutions facilitating the search for experts among employees about three times more often. At the same time, in terms of providing access to files with their logotype, they are almost seven times more active. The presence of a unit, or person responsible for communication has the smallest impact on whether an institution runs an official profile in social media; however, the difference is also significant.

# Conclusions from the survey

The changes taking place in the science sector are creating the need to build strong brands. The image of scientific institutes is becoming an instrument for achieving competitive advantage on the market, which makes it necessary to apply professional standards to communication activities. The surveyed institutions are becoming more aware of these changes only slowly and still pay too little attention to communication. Only few of them fully take advantage of the potential of Internet websites.

On the basis of the conducted review it is possible to get the impression that many Internet websites are treated mainly as tools for redirecting users to social media profiles of scientific institutions. Links to social media were provided in a total of 63% of websites and at the same time image-building messages were published only on every second. Contents that can be classified as media about us are published by every fourth institution and only every fifth institution provides files with its logotype. Other functionalities such as: newsletter, RSS

channel, or solutions facilitating contact with experts are even less common.

Moreover, many institutions don't update their websites regularly, or run them carelessly. Among negligences that can be found on Internet websites there are: publishing sections without contents, providing icons suggesting presence in social media which are not linked to profiles, or providing the possibility of subscribing for a newsletter which hasn't been published for a few years. It is necessary to remember that the negative impression evoked by an Internet website, especially when this is the first contact with a particular institution may lead to unfavourable perception of the institution's research and/or educational activity.

Public universities are characterized by the highest degree of professionalization of communication. At the same time it is units of Polish Academy of Sciences that pay least attention to communication. The association of communication with such characteristics of an institution as its size (defined on the basis of the number of employees) and the fact of holding authorization to award scientific titles is not that clear any more. Non-public universities are an exception here. In this group communication on the level close to that of public universities is conducted by academic entities and the big entities. It is possible to presume that by means of their communication activity they want to compensate for their weaker position, compared to public universities and in order to gain equal recognition on the market.

What definitely has a strong impact on activity in the area of communication activities is the fact whether an institution has a communication unit, or position. It is because the quality of these activities depends on the engagement and professionalism of people responsible for *public relations*. Even though this may seem obvious, in light of the collected data, which show that only every second entity among non-public universities and research institutes and only every third unit of Polish Academy of Sciences has such a unit, or position, it is a very important message for the managers of these institutions. In order to build a positive image of an organization by means of an Internet website, it has to become one of priorities, which is associated with allocating funds to this purpose and allocating competent employees to the task of running an Internet service.

As a result of the conducted research a few hints which may be helpful for professionals interested in improving communication by means of an Internet website have been formulated. First of all, it is necessary to provide contact details — including his name and surname — of the employee responsible for the communication of a particular institution on the institution's website. Second thing is that activity in social media shouldn't replace communication conducted on own Internet website. Third thing is that press information sent to journalists should be published also on the Internet website. What is also worth consideration is preparing a section resembling a traditional press file in terms of its content. It would include basic information about a unit, downloadable files with the logotype and other audio-visual materials that can be used by the media, or other cooperating entities (e.g. photographs of the headquarters). It is also advisable to monitor the media and search for materials prepared by journalists which show the organization and its employees from a positive perspective, in order to use these materials as a basis for building an institution's positive image. In order to raise the reach of communication it is advisable to provide on an institution's website an RSS channel, as well as the possibility to subscribe for its newsletter. As employees of an institution also have an impact on shaping the image of their institution, it is advisable to introduce solutions which facilitate establishing contact with this group by means of an Internet website.

The above conclusions were formulated on the basis of the conducted review of Internet websites. In order to gain a deeper insight into this subject, it is necessary to learn about the needs and expectations with regard to Internet websites of the science sector formulated by scientific journalists. Future research from the area of communication activity on the Internet could cover also the manner of utilization of social media by various types of scientific institutes and an analysis of the content of profiles maintained by institutes in social media portals.

# **Przypisy**

<sup>&</sup>lt;sup>1</sup> According to forecasts, the decline of the number of 19-year-olds will continue till at least 2020, when their number will be 48% lower, compared to the peak year 2002.

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<sup>&</sup>lt;sup>2</sup> POL-on is an integrated database containing information about higher education in Poland. The database contains information about all Polish scientific units.

<sup>&</sup>lt;sup>3</sup> In case of 20 scientific institutions classification was impossible due to lack of information about the number of employees in the POL-on system.

<sup>&</sup>lt;sup>4</sup> See Research method.

<sup>&</sup>lt;sup>5</sup> The sequence of portals roughly reflects their popularity among scientific institutions in Poland.

<sup>&</sup>lt;sup>6</sup> The percentage of Internet users registered in social media portals in 2014 in the age group 18-24 amounted to 92%. At the same time among people aged 45–54 it was 43% and in the 55–64 group — just 30% (CBOS, 2014).

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www.minib.pl 76