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The National Library of Romania in the Service of Communities: a Qualitative Analysis to Identify the Needs of the Users in the Free Reading Spaces

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The article is based on the dissertation Biblioteca Națională a României în slujba comunităților: o analiză calitativă pentru identificarea nevoilor utilizatorilor spațiilor libere pentru lectură [The National Library of Romania in the service of communities: a qualitative analysis to identify the needs of the users in the free reading spaces], held in June this year, at the final stage of the Master Program Management of Information in Contemporary Society. The research took place in 15th-26th of April, 2019. Our approach is unique, as the official activity reports published by the National Library are lacking the qualitative studies which would have helped establishing the directions of development of the services dedicated to different types of users. The quantitative reports officially reveal that the users tend to favor the free reading spaces in spite of the reading rooms. These statistics lead us to the idea that the library must operate changes in its public policies, considering new services and healthy conditions for 54,000 free spaces users per year. Who are these people? Where are they coming from? What do they need? What caused the change in their preferences? What does the National Library offer in these spaces to help people and what must it continue to do, to maintain its active place in the knowledge society and a determined role in the Romanian culture? The aim of our work is to answer these questions, or at least to approximate them.

Keywords: *National Library of Romania; library spaces; free reading spaces; Romanian*

1. The National Library of Romania and its environment: competitors and users: an introduction

The National Library of Romania (NLR), depository of the mobile national cultural heritage, is at present the largest informational institution of the country. Over 12 million bibliographic units make up the patrimony of the written memory of the Romanian nation, part of a precious legacy with Western European but also Byzantine influence. Any scientific approach at this level requires maximum and responsible attention. Major decisions must take into account not the emotional patriotic feeling, but the awareness of the strategic place that an institution of such magnitude must occupy in the Romanian culture, as one of the most valuable intellectual resources of our country.

In the post-revolutionary democracy (after 1989), Romania has not conceived a solid strategy to develop the public libraries, as the Communists had done, of course, to ensure their doctrinal strengthening and dissemination. Unlike them, today's leaders of culture and education have given libraries the freedom to complete their collections by themselves, the only impediment being the always austere budgets. Let us not forget that the most important investment in the technology of these institutions, *The Biblionet Program*, was possible through Bill & Melinda Gates Foundation and not with public funds. The lack of interest for reading is mainly felt in these institutions and it has already visible consequences in the Romanian education, despite the legislative changes applied to the education system in recent years. Romania, in the knowledge society, registers 42 percent functional illiteracy, among 15-year-olds (Peticilă 2018), given that, unlike the nineteenth and twentieth centuries, we have editorial productions comparable to the Western countries, as

nothing hinders the publication of any kind of information. We no longer have censorship institutions, and the information is one click away.

The Internet is a major competitor of the library, when it comes to the general public. As a tool of knowledge, the Internet becomes the main source of information available to anyone, regardless of space and time. Anyone can find out about editorial news, theatrical performances, new movies, everybody is able to see how a work is received by critics more or less consecrated. It becomes obvious that not much information is missing. Its quality, on the other hand, is missing.

However, the NLR has never carried out a study on national reading habits, in order to come up with solutions to the problems of education. No government seemed interested in a national interdisciplinary research program of the fundamental needs in culture: who reads, what people prefer to read, where do they read, do they have a proficient level of reading comprehension? The truth is we know nothing about these things. At the same time, we must take into account that reading/education influences the economic life of the individual, in an indirect but decisively way. Personal development, adaptation to the environment and prosperity are consequences of knowledge, acquisition and understanding of the information applicable in everyday life.

If we look, for example, at the book market statistics, at the sales of large bookstores and publishers during book fairs, we might mistakenly believe that things are going well. "The Romanians return to reading. The book market reaches the maximum of the last 7 years", headlines the online edition of a central daily newspaper (Cicovschi 2018). But statistics refer to trade. It does not exactly refer to who buys and why. Experience shows that there are people who buy books without reading them, as others read without necessarily buying them, either downloading them from the internet or borrowing them from the library. One can even read them in a large bookstore, if a special offer or simply a proper space gives people this chance.

It is important to recognize that nowadays big bookstores are huge competitors for the libraries. They can provide quick access to editorial news, which libraries do not always succeed due to the document processing activities, which require time and human resources. The bookstores have diversified their offer. They are not only selling books, but they also provide other products: from household items to show tickets. They organize cultural events and they offer comfortable reading spaces.

The information reported by publishers and bookstores can also give us hints about what buyers prefer (though they can be readers or not). Data about the readers' preferences are often found out from the public and school libraries reports. The NLR, for instance, is able to register the preferences of its patrons only when they use the reading rooms and the Reference Service or when other public libraries access the International Interlibrary Loan Service. Other public libraries, such as the county or communal ones, make reports on the needs of their readers as they check the previous home loan requests, in order to establish their resources acquisition policy. For example, in 2015, the County Library "Duiliu Zamfirescu" Vrancea purchased especially chick lit and fantasy belletristic genres. But these are in-house studies meant to serve the reading interests of the local community. We do not see them in qualitative reports at national level, which would help developing successful strategies regarding education.

The annual reports on culture consumption elaborated by the National Institute of Statistics (NIS) remain in the quantitative area. From the last study on the activity of the cultural units, published in 2018 and referring to the year 2017, which includes libraries, the figures describe an alarming picture. Thus, we find out that at national level, the number of volumes in collections decreased by 0.7 %, and that purchases fell by 5.3%, compared to 2016 (Institutul Național de Statistică 2017). But if these figures can reflect the budgetary decline and not the reading habits, be so. However, the fact that from 2016 to 2017 the number of active users decreased by 5.4%, according to the same study shows clearly that in the spaces intended for reading and around them people read less. We can also formulate an idea about where and how much people reads, considering that in 2017, according to NIS, the subscriber of a library in Romania used, on average, 11 volumes, with a maximum registered by the university libraries, which have provided 18 bibliographic units to a user, with a minimum of 8 units in school libraries (Institutul Național de Statistică 2017). The

communal ones boast an additional volume at the average value of consumption per user, with 9 units, according to NIS.

The weaknesses of education are also reflected in public discourse. Narrowing of understanding, acceptance of others, tolerance, at the level of identifiable groups in social media networks, the progressive inflection of everything that is national, including identity, describes societal failures that we do not know yet to manage and whose outlook is difficult to anticipate. In developing its management policies, the National Library must take into account these realities, for beyond its heritage mission, par excellence, it has also the obligation to place its country under the shelter of knowledge.

2. Free reading spaces in the National Library of Romania

The National Library of Romania has arranged in its new headquarters a series of spaces dedicated to reading, individual or group study, but also to socialization. They are organized around the Atrium, on the ground floor and they bear the names of the Greek letters Alfa (“Alpha”), Beta, Delta, Gamma, Epsilon, Theta, Sigma and Omega, to which are added Papyrus (“Papyrus”), Pergament (“Parchment”) and Scriptorium, names with deep resonances in the history of writing. The latter are also exhibition spaces. The six from mezzanine received the names of some symbolic spaces in Romanian culture: Dealul Spirii, Podu Vechi, Izvoru Rece, Fântâna Zodiac, Podul Mihai Voda, Strada Mântuleasa. And here are organized exhibitions of photography, fine arts, reproductions of documents in the special collections of the library, in various thematic series. The upper floors no longer have such areas, but the large flow of users in recent years has determined the library to arrange on the first and second floors such spaces, arranged in a circular fashion, infused by the natural light coming splendidly through the dome glass of the building.

The designation of free reading spaces is related to the way people use them. Moreover, their initial toponymy did not come into the public's consciousness, because the names are not displayed anywhere other than in the *Library Guide* on the library's website (Biblioteca Națională a României s.a.). Users call them simply *free spaces*, a phrase used even by library staff in current speech and internal documents. Staying in these spaces does not depend on the use of the library's documentary resources and is not conditional on leaving personal belongings at the wardrobe. The users come with their luggage, they benefit of tables equipped with unidirectional lamps, identical to those in the reading rooms, they can buy coffee, sandwiches, non-alcoholic beverages from the vending machines at the ground floor. Occupation of the seats is made on a first-come basis. No sign prohibits the use of mobile phones, but on the contrary, they can connect wirelessly to the Internet, without a time limit, for free, without restrictions regarding the sound volume when using their gadgets. In fact, there is no regulation that strictly concerns these spaces, but a general one, dedicated to all library patrons, which specifies rules regarding the access to collections and the use of reading rooms.

According to the Regulation, the access to the NLR takes place on the basis of an individual library card, not transferable. This is obtained without difficulty, by presenting an ID card and completing a form. The library card is issued on the spot, free of charge. If a user does not have the card and wishes to enter the library, a temporary license can be provided. Only in case of loss and request of a duplicate, the library charges a 15 RON fee.

In the open spaces there are work facilities, with tables for 2, 4, and 8 persons, equipped with lamps and chairs. Included in these spaces, the socializing areas on the ground floor and mezzanine are furnished with slightly shorter dining sets and armchairs, but the experience shows that they are also used for study.

The open spaces are available to public every day, from Monday to Friday, starting at 8 am. On Tuesdays and Thursdays, they are open until 8 pm, and the rest of the days until 6 pm. During the exam sessions, the library opens then spaces from the ground floor and from mezzanine on Saturdays and Sundays, between 9 am to 5 pm.

Because it was conceived as an open space, offering both a quiet place, for those in need of study,

as well as artistic manifestations, cultural programs dedicated to the entire community, the Atrium becomes the place where everyone's needs have to be fulfilled. Apart from artistic events (exhibitions, reading halls, musical sessions) the library rents out spaces for various other cultural events, such as product launches, national and international conferences, congresses with hundreds, sometimes thousands of participants. Thus, during these events, the free reading spaces around the Atrium become transit zones.

Each year, the Institutional Development Service of the National Library of Romania analyzes the degree of occupancy of these spaces to see to what extent the library must open the upper floors to the public and to adjust the program according to the needs of the public and the human resources of the library. They are internal, unpublished materials, most often serving administrative matters, without relevance to the public, for example, in scheduling the cleaning program or the area distribution of employees in the Department of Protection and Guard.

348 seats are available in the spaces for free readings; however, frequented all year round are those from the ground floor and from mezzanine. During exam sessions, the library must also open the 1st and 2nd floors. Because the library does not yet have an RFID check-in and check-out system, employees are required to physically count the people at the desks. If during the usual periods of the year, such as October, November, December, March, April, this is possible, difficult, but achievable, because there are few users, during exam sessions, a naked eye counting becomes impossible.

These counts are carried out at 1 pm and 5 pm, temporal sections proven by the experience of the last years as peaks of the presence of users in the spaces for free readings. The librarians of the Department of Institutional Development have found that on Tuesdays and Thursdays, when the closing time is 8 pm, the most intense traffic is registered at 5 pm. When the library closes at 6pm (Mondays, Wednesdays and Fridays), the peak time is 1 pm. As it is shown in Table 1 [1], the following average occupancy rates, related to the total number of 348 seats, were obtained for the period October 1-31, 2018:

Table 1. *Occupation rate of the free reading spaces (1.11.2018-31.11.2018)*

Hour	1 pm	5 pm
Daily average of users	176	147
Occupation rate (%)	45.83	38.28

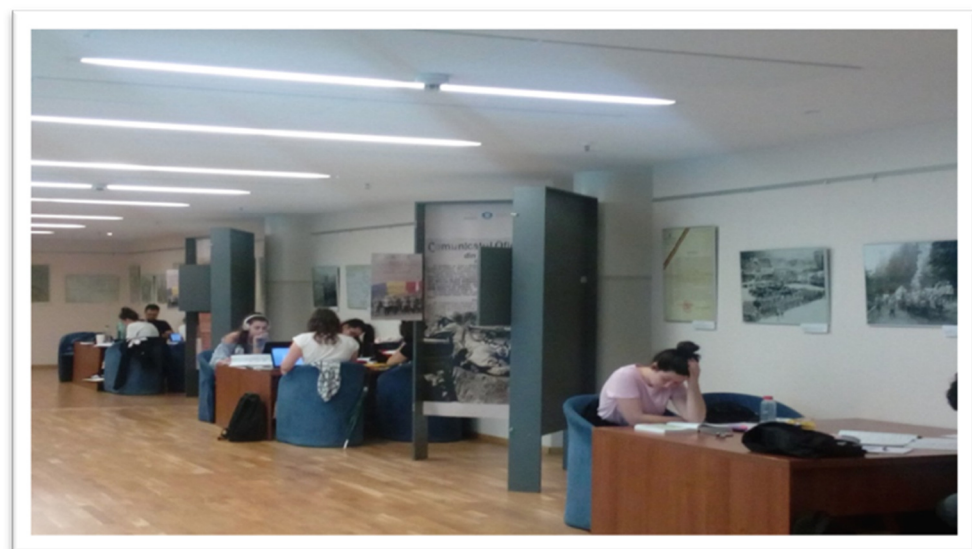
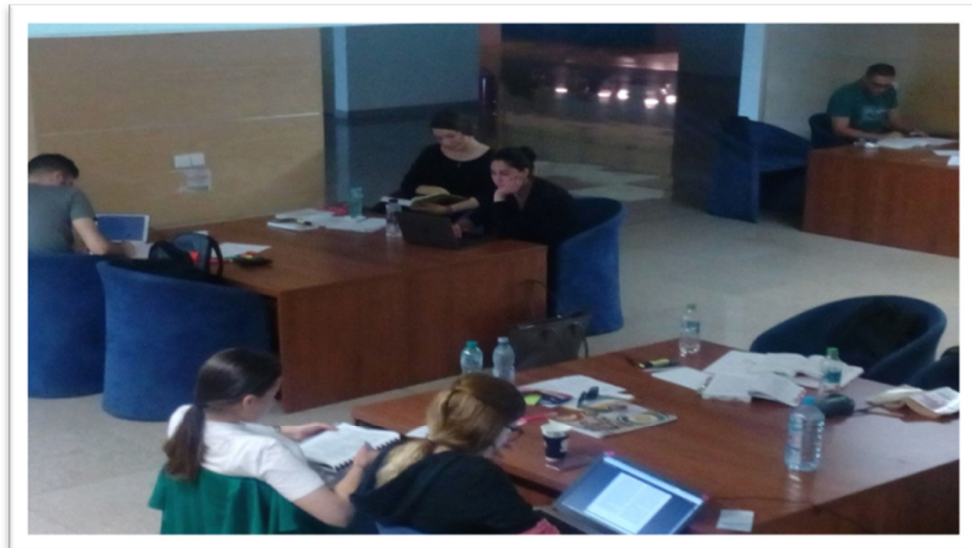
The official estimates are indicated in the annual activity reports of the library, and the one regarding the year 2018, published in 2019, shows that the spaces for free readings were used by 54 thousand readers, with a daily average of 183 people. The report mentions that “the value of this average is obtained from the total users of free spaces, divided by the number of days when the library was opened that is to 295” (Biblioteca Națională a României 2018a).

3. A qualitative study: objectives, research method and materials, the results and their interpretation

3.1. Objectives

The difference between the total number of users of the reading rooms, of 21 thousand people, calculated during 2018 and the ones counted on the free reading spaces, 54 thousand, reflects the public's clear preference for the areas not covered by the Regulation (Biblioteca Națională a României 2018b) and, more importantly, an interest of at least twice smaller for the library's collections. Moreover, if we look at the previous Activity Report, we will see that in 2017, the number of users of these spaces was 41,500. Up to 54 thousand registered in 2018 means an increase of 12500 people. A 30 % increase in traffic indicates a significant population growth. It is clear that we must be interested in what brought all these people here, in such a short time, what

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Photos taken in the spaces for free readings of the National Library of Romania during the summer exam session, 2019

their needs are, to keep them in the spaces of the National Library of Romania, what can we do for them.

Then, vital for the library will be the design / improvement of some services dedicated to the users, as well as the elaboration of projects that bring these people closer to the collections. In order to have a say in education, the ultimate challenge of the library must be to connect Millennial generation to its collections and guide them in finding and using valid information resources in the digital world.

Our research aimed to discover what professional environments users are coming from, what ages they have, what is the purpose of their presence in the free reading spaces, which is the level of satisfaction / dissatisfaction regarding the ergonomic elements: temperature, light, furniture, noise level and the Internet connection, considering that it has become a fundamental facility in the knowledge society.

An immediate objective is also to establish an access program in these spaces, which responds to the needs of the users, but which can be supported by the human resources of the library, the insufficient staff of the institution being known as a major problem.

We are also interested in how users appreciate the access to the free reading spaces and if an electronic identifying system would be necessary. We also try to find out if the users have complained regarding the level of civility, considering the lack of technical means of monitoring and control and the insufficient human resources. Their opinions are important to us in order to know precisely what is lacking, what is to be fixed, what is not working, what we should readjust. That is why, in our research, we paid special attention to the things that they would change in these spaces and how they would do it.

Last but not least, thanks to a challenge recently launched in the library world by the Department of Communication Sciences within the Faculty of Letters of the University of Bucharest, we are also interested in the ability of the public library, in general, to create happiness. The topic was debated at the International Conference entitled *Fericirile; Căile lor... [Happiness; Its ways...]* held in November, 2018. However, we consider that such a generous topic was far from being exhausted and the opinion of our patrons can reveal new and interesting ideas on this subject matter.

3.2. Research method and materials

In order to have a realistic picture of our users 'needs, we considered that an efficient qualitative method was the direct observation of the users' behavior and the questioning of a consistent segment of the public, with the help of an opinion questionnaire. Since a demonstration using the total number of subjects, 54,000, would have far exceeded our physical capabilities, we considered that reporting to the daily average of users would bring us closer to at least one side of the truth, if not to a final, exhaustive picture. Therefore, we considered that 210 queries represent significantly more than the daily average of 183 persons, calculated by our colleagues, for 2018.

We have chosen a period of intense traffic in these spaces, namely the pre-exam and exam session periods: 16 to 26 May, 2019, during which the first and second floors of the library were open.

The questionnaire, designed in six points, in multiple choice format, had a version in Romanian and one in English, because the National Library of Romania is open to everybody, regardless of nationality, ethnic identity, religion, sex, politic affiliation, etc. In evaluating the results, we made no distinction between Romanians and those of different nationalities.

Each objective of the research, mentioned above, corresponded to a challenge from the questionnaire. Many users annotated their answers outside the box, expressing their own views. As it will be observed in the following, most of them have offered us suggestions for various changes and this was the first good news for our research. Our readers have opinions about the library and they need it, they have expectations from it.

3.3. The results of the study and their interpretation

Out of 210 questionnaires, 203 returned to us with answers, which allowed us to remark that they were open to communicate. The first finding was related to their age. Our respondents are between 16 and 62 years old.

The occupational areas where they come from is diverse, the majority being an active population, as soon as only 4 persons declared that they are retired. The students are dominant, which means that the National Library of Romania breaks an important segment of public from the university libraries, where, in all likelihood, they do not have enough space. We included in this group Masters and PhD students, as well as the subjects coming from the school environment.

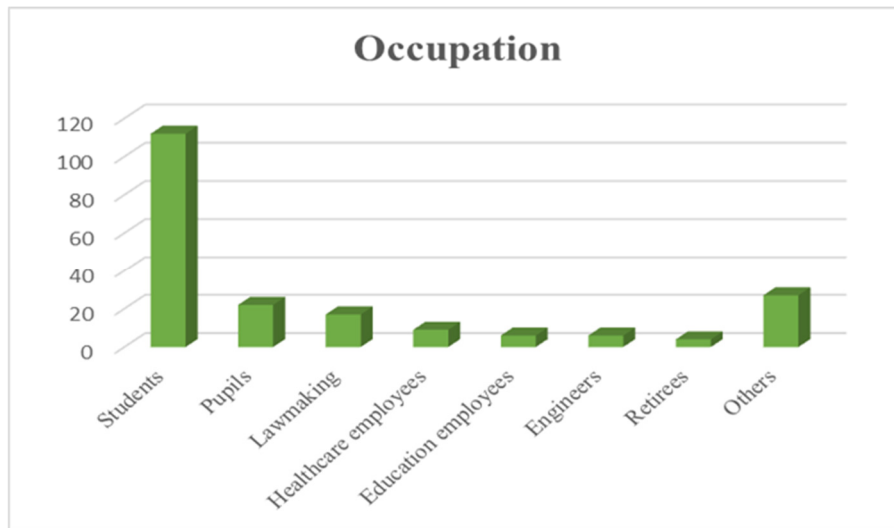


Figure 1. *The occupational domains of the users of the free reading spaces in the NLR*

The following table highlights more clearly the professional areas our users come from and in which proportions:

Table 2. *Occupational domains of users of free reading spaces*

Students	112	55%
Pupils	22	11%
Legal professions	17	8%
Care assistants	9	4%
Teachers	6	3%
Engineers	6	3%
Other professions	27	13%
Retirees	4	2%
<i>Total</i>	<i>203</i>	<i>100%</i>

If the youngest respondents are 16 years old, it means that the 22% of the table above are high school students. The closure of many school libraries in Romania in recent years is a well-known situation. The fact that they come to learn at the National Library shows that they are looking for free reading spaces now.

The proximity of the Bucharest Law Court probably justifies the presence of many users, 8% coming from the legal environment (lawyers, judges, legal advisers).

In the section “other professions” we have classified the domains represented by less than 4 subjects: economists, DJs, IT people, biologists, freelancers, but also those who refused to declare their occupation.

The answers for “What type of activity do you prefer in the free spaces of the National Library of Romania?” let us know their immediate needs:

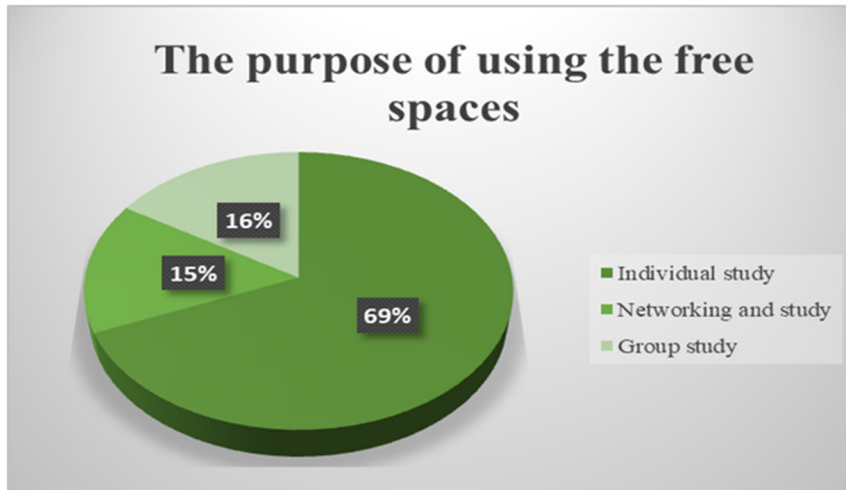


Figure 2. The objectives of the users of the free reading spaces

The first question allowed multiple answers. Therefore, in the table below, the total of the answers exceeds the sum of the respondents. This is because many users checked only one, two or all the answer options, which is reasonable, since the *individual study* does not severely exclude socialization, and *socialization and study* and *group study* are very close in meaning. All respondents answered this question, and 162 stated that they preferred individual study in the free spaces. From our observations, those who checked *group study* were under 22 years old. The pensioners advocated mainly for *socialization and study*.

Table 3. The objectives of the users of the free space in numerical avoidance

Objectives	No. of answers
Individual study	162
Socializing and study	36
Group study	38

“Appreciate with a rating from 1 to 5 temperature, lighting, furniture, noise level and Internet connection” was the second challenge in the questionnaire. We considered that the appreciation of these ergonomic elements by marks would express easily the ratings corresponding to the environmental conditions: *very bad, bad, acceptable, good and very good conditions*. From the collected data, however, we found that not all users had understood this, some scoring with 1, for example, a low level of noise, as a sign of appreciation of silence, and not as a mark of dissatisfaction (3 subjects). Others gave a high score, 5, to the noise level, complaining alongside or, in the section dedicated to their opinions, “Mention what you would change / improve in the free reading spaces...”, they specified that they had been affected by too much noise, not that they had been fine with it. (5 persons). At this point, the formulation in our questionnaire was not clear, so the 27% percentage denouncing very bad noise conditions might not be precise, as well as the 17%, representing positive appraisals, cannot be accurate, due to the deficient expression in the form. We are exclusively responsible for this ambiguity.

From the research based on our direct observation and the numerous suggestions written in the section “Mention what you would change / improve in the free reading spaces” we find that users do not seem to assume that this public space of the National Library is an open one, in which patrons are allowed with personal manifestation, vis-à-vis reading, they are allowed to socialize, which means “to talk”, “to communicate”. There is an obvious higher sound environment, compared to the reading room, where the use of mobile phones in silent mode is a condition provided by the Regulation. Also, the level of tolerance towards public or private events, which the NLR carries out in the vicinity of these spaces, is very low among those who prefer to occupy the areas for individual study. Several users complained about it in the questionnaire and some others denounced it on the Facebook account of the library. Each time the institution announces by

social media the schedule for all the events taking place close to these spaces and which might create discomfort.

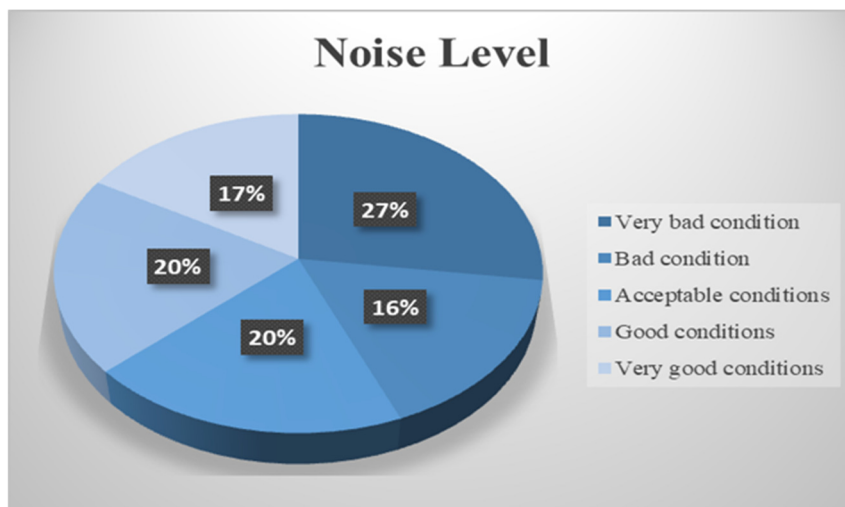


Figure 3. *Level of appreciation of noise conditions*

Table 4. *Number of noise level assessments*

Mark 1 (very bad conditions)	54	27%
Mark 2 (bad conditions)	33	17%
Mark 3 (acceptable conditions)	39	20%
Mark 4 (good conditions)	40	20%
Mark 5 (very good conditions)	33	17%

As for the temperature, not a few are those who gave a high score to this element, 28% of the respondents. Some users have made clear that their appreciation refers to the summer conditions, accusing with many exclamation marks the cold during the winter. According to our direct observations, we already know that a qualitative research of the needs of the users of free space during the winter, at the National Library of Romania, would not be possible. Because of the low temperatures, the patrons prefer to seat in the reading rooms. Still, the free spaces are full by the end of January, before the exam-sessions.

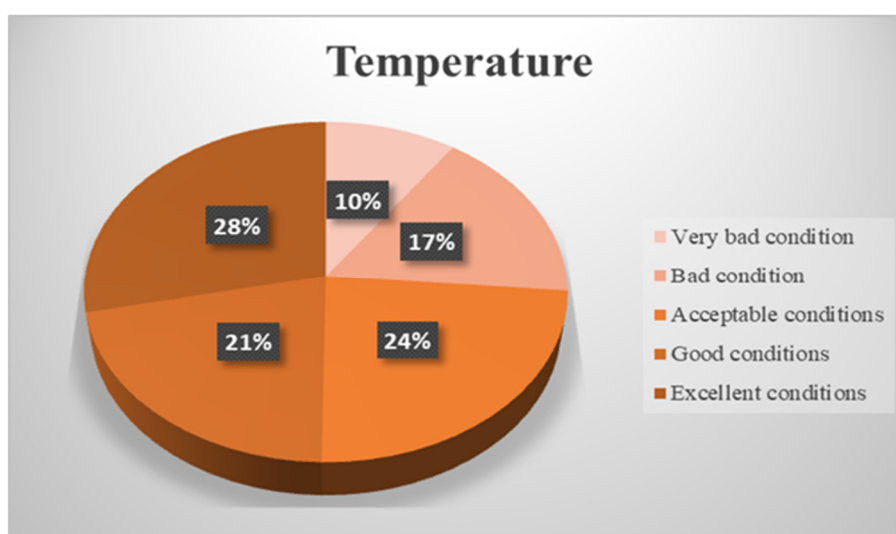


Figure 4. *The level of appreciation of the temperature conditions in the open spaces*

The quire's data show that 24% of the total respondents consider the summer temperature conditions as acceptable. 19% think that the temperature in the NLR is unbearable. We do not intend here to elucidate the administrative, bureaucratic and financial issues, but we can point out

a real problem, because in winter the free reading spaces remain almost empty.

The lighting and furniture registered clearer favorable results, with positive appreciations, recorded at the 5th issue of the questionnaire, regarding the fact that sometimes not all the table lamps work properly. However, 92 respondents rated the lighting system at highest level.

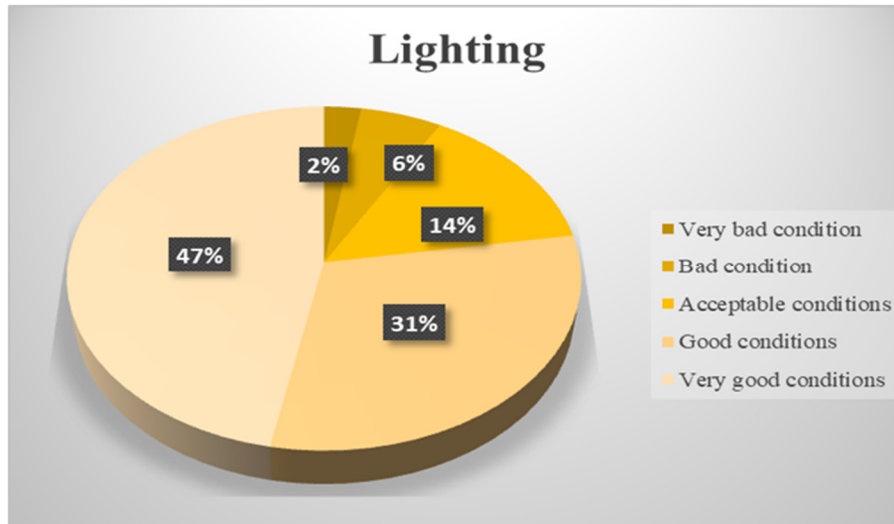


Figure 5. *The level of appreciation of lighting in free spaces*

Least satisfied with the system were those who complained about the lack of natural light in the areas Alpha, Beta, Gamma, Epsilon and Delta, initially designed for socializing and networking.

Table 5. *The level of appreciation for the lighting system in open spaces*

Mark 1 (Very bad conditions)	5	3%
Mark 2 (Bad conditions)	11	6%
Mark 3 (Acceptable conditions)	28	14%
Mark 4 (Good conditions)	60	31%
Mark 5 (Very good conditions)	92	47%

The furniture is rated with the maximum mark, 5, by 49% of the respondents and only 2%, that is 3 subjects out of the 203, who considered that it deserved the lowest mark, 1. Some of those who have given lower marks to the furniture have motivated their answer at point 5 of the questionnaire, some of them saying that the armchairs are too short for tall persons. However, we noticed that the users often occupied seats for individual study in the spaces designed for socialization, which were furnished with smaller tables. The armchairs do not have the height necessary to fit comfortably onto a study position. The initial design of these particular socializing spaces drew exactly their intended purpose of a relaxed, comfortable communication area, not of a lecture activity. They have no table lamps, and some of them do not benefit of the natural light, remaining totally dependent on the artificial, ambient light. The best part is that, in their vicinity, are sockets, so most readers can use laptops whose screen lights are helpful.

The Internet connection is free of charge and it's provided wirelessly in the free reading spaces. Unfortunately, the simultaneous connection of several users makes the signal weak due to the limited processing capacity of the routers. However, the results of our analysis reveal that, at this point, the differences between satisfied people and the dissatisfied are quite small, most of them deciding that the Internet connectivity is *acceptable*.

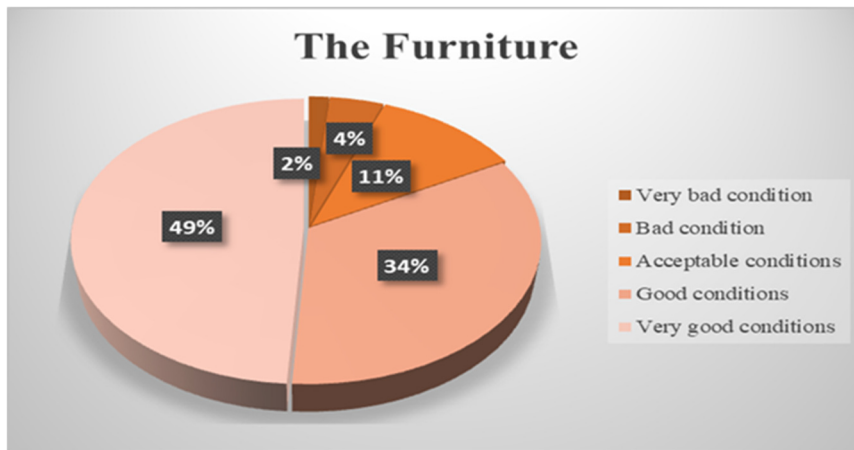


Figure 6. The level of appreciation for the conditions created by the furniture, expressed as a percentage

Table 6. The level of appreciation for the conditions created by the furniture

Mark 1 (Very bad conditions)	3	2%
Mark 2 (Bad conditions)	8	4%
Mark 3 (Acceptable conditions)	22	11%
Mark 4 (Good conditions)	66	34%
Mark 5 (Very good conditions)	95	49%

A problem that none of our respondents left unmarked is the one related to *the program*. The question “Do you consider that the program in free spaces must: be extended by a few hours daily// extended to Sunday// extended overnight// it may remain so”, allowed multiple answers. Most of the users believe that the access schedule should be extended to Sunday. It is worth noticing that those who believed that the program could remain the way it was were not students or professionals involved in an education process. The latter’s answers were repeatedly: *extended daily, extended to Sunday, and extended overnight*.

The library management was very perceptive about these suggestions and decided immediately to extend the program to Saturdays and Sundays during the exam session’s periods.

Because the NLR has faced a severe lack of human resources in the last years, especially in the protection and guarding services, it needed great efforts to ensure the key security posts of the institution. Our study reveals that the library did not confront in these free spaces serious misconduct gestures or any other kind of regrettable events. Most of the respondents appreciate the level of civility as high and very high (51%), as shown in the data set.

The indicator system, the access and the level of civility obtained the highest marks. Only 8% of the users consider that the signs are not helpful in the orientation and it is true that, at a first visit, the headquarters of the National Library can be quite complicated in the absence of a proper guidance.

123 people think that the free access is very good, which tells us that most of the users are happy to spend time here, regardless of the use of stairs, elevators or access ramps for people with special needs. Among those who rated accessibility 3 and 4, some suggested the library has to ensure the operation of both elevators in the Atrium, an only one being insufficient in the rush periods.

We consider that point 5 of the questionnaire, “Mention what / how you would change in the free spaces of the National Library of Romania” gave our respondents the opportunity for the most interesting suggestions. Only 6 people said they would not change anything. All the others had useful recommendations. We grouped their opinions, according to the frequency of a same issue:

- *the high level of noise*, which, according to some users, is due to the events that take place on the ground floor (36 respondents). Others (18 respondents) criticize the library staff for disturbing their peace of mind: *they wear heels, they talk loudly on the phone, the cleaning staff screams, they organize events that they do not announce*;
- *insufficient desk sets*: 40 users suggest that the library buy a larger number of desk sets, tables and chairs in areas with natural light. Some of them consider that the library does not manage the free spaces judiciously;
- *inappropriate furniture*: 19 of our respondents propose us to adjust the furniture by equipping them with higher chairs, to allow a correct, healthy position for the study and 17 have noticed that not all the sockets and lamps always work;
- *cleanliness* is claimed by 16 users. They consider that the tables and the restrooms are not always disinfected properly;
- *Where are the books?* 13 people wonder why they do not have access to the books in these free spaces and 7 users suggest that in the National Library of Romania the environment would be warmer if we organize some book shelves and if we decorate the places with some indoor plants.

The last issue, the 6th in the questionnaire - “*Do you think that a public library can create a state of happiness? (Check the answer you consider correct!)*” - gave the possibility of a single answer (Yes or No). 174 people answered positively and only 12 consider that the library cannot be a creator of happiness. Few of the optimistic users suggested that if it was not about happiness in the library, it was is sure about *mind comfort, education, personal thinking, free speech*.

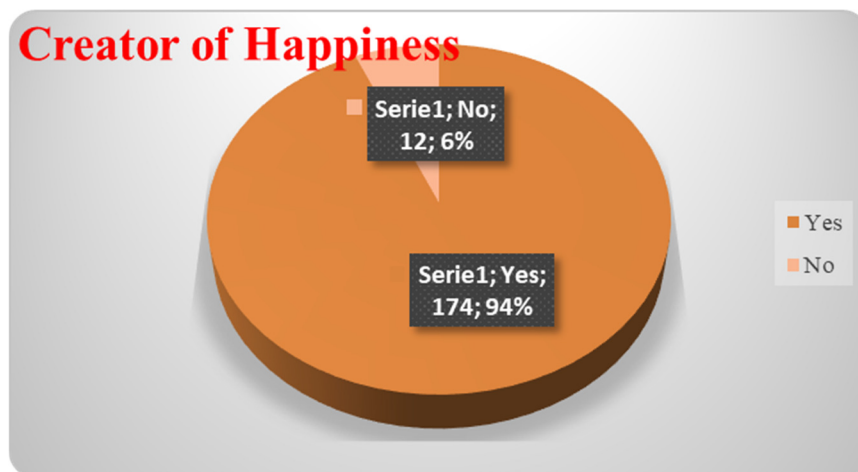


Figure 7. *The user's opinions about the library's ability to create happiness*

3.4. Discussion

We consider that the research has reached its objectives. The study let us know where these people are coming from in such a large number, looking for a seat, early in the morning – most of them - in the free spaces of the National Library of Romania. A large majority comes from the Bucharest university environment. This is a great opportunity for the NLR, it offers perspectives but also creates demands. First of all, it calls for a strategic recalibration of the library public services and a closer cooperation with the Ministry of Culture in achieving the budget, in order to provide these young people with fundamental study conditions: normal temperature, comfortable spaces, lights, furniture, office accessories and hygiene.

We understand now why these people are coming to the NLR: they need space for individual study, mainly. Secondary, they need socialization and third, they are looking for the opportunity to study in their groups. They require networking, communication, information access, they want peace. The library will also have to deal with the noise problem. As its financial needs are important issues to deal with, the Management team has to balance the timing for the private events held in the proximity of these public reading spaces, so that the users would not be disturbed.

The option of individual study outside the collections can be frustrating for the library, but the choice comes naturally in the context in which the NLR has not yet designed specialized offers for these spaces (new entries in our collections, video stations, free access to some book shelves (organized from the general fund of the library), touristic or social assistance info point, Romanian as a foreign language courses, etc.). The lack of such personalized services for these areas determines a mandatory observation: as far as the free reading spaces are concerned, the library becomes a passive assistant at the educational process of its users, as they seem to be less interested in our documentary resources.

We understand that library staff should be more careful when going through these spaces, so that the users wouldn't be disturbed. A special regulation for these areas might be useful, in order to assure procedures for librarians as well as for the readers.

The study reveals that they would like books, music and plants in these spaces. In fact, they want a friendly, stimulating, learning conducive environment.

The research also reveals a paradox. Though many users complain about all kinds of issues, 176 persons out of 203 can think of happiness in the library. It seems that this feeling it is not conditioned by certain technical investments. It demands us the responsibility to receive these people with warmth, to honor them, to help them.

An important aspect of our analysis consists in the further questions raised by its results, future issues of library's concern: How can we keep these students as our users after they finish schools? Are we able to make them interested on the library's collections as well? Can we offer them more than a passive assistance in their education? Can we do something consistent for their personal development? What special services we can create and proceed for the users of these areas in the NLR?

4. Conclusions

It turns out that the social tasks of the National Library of Romania become more important and more consistent every day, especially when we refer to certain groups of our communities: pupils, students, people working in the educational environment, professionals of liberal fields, retired persons. Users of different nationalities, belonging to various social and professional categories come to the library to find a peaceful place to study, a pleasant environment, and opportunity to communicate and to meet each other. Despite the inconveniences they complain about without any restraint, the patrons admit that a public library is the place to look for when they need information, even if they use their own tools to get it. Still, a daily observation of their activity would reveal that a large majority does not seem to realize the importance of guidance through the Internet resources, since just a few users ask a librarian in the Front Office for help finding certain information, unless they access the reading room service.

However, the NLR lives today a certain sense of freedom, which is given by those who come to its spaces. Paradoxically, when the budgets are austere, as in most cultural institutions in the country, The National Library is experiencing a moment of grace: it has become one of the few places in Romania, where the societal discourse does not seem fragmented by deep, poisoned wounds, where people sit next to each other, without the fear of the different opinions, where everyone comes, knowing that a free corner is always to be found, a chair and a bit of warm light.

It looks more like a social shelter for some people. Actually, there are days and evenings when the guardians confront users who don't want to leave the building at the closing hours. The library has to manage often such situations. In order to be able to handle such cases, the National Library of Romania must cooperate closely with institutions with responsibilities in the field of social protection.

For others, the NLR has become a cultural shelter. They are those who come in the free spaces for reading their own books. Their increasing number in these spaces, with 12,500 people in a single year, is not a common phenomenon. It might look like something more powerful than gathering

people around the study. The idea of common free reading seems to be more than just being in the need of space. What if we need each other in a higher sense than we already know? The anthropologist Michele Petit, at the opening of a conference of the Association of Librarians in France, in 2014, said about libraries and books that they "... were always welcome for exiles. Many of us have used and have abused of the hospitality of reading, of its huge character of a mother. Reading is a way to resist exclusion, oppression. To read is a way of recovering the subject position instead of the derogatory object of the discourse of others..." (Gibouin 2016) [2]. The anthropologist's words lead us to a natural question today. Should the information boom be a form of aggression, in front of which the individual feels the need of a shelter?! We would never understand better the library's vocation nowadays.

To find out with more accuracy what the public needs from free spaces, the library need the results of a wider and rigorous professional study, an interdisciplinary one, a project that should involve sociologists, teachers, anthropologists, historians, IT people and, of course, some librarians who understand their role and the epoch they live in. With such a research, The National Library could co-interest the Government in developing a strategy to support culture through education, by promoting reading, by bringing users closer to the largest collection of documents in Romania. The library can become a valuable binder in a permanent, constructive social dialogue. Such qualitative studies must be carried out periodically, in order to understand the reading habits of the communities, their development needs, in conjunction with the changes imposed by the information society and with the needs of the labor market. They are essential elements in the elaboration of cultural strategic policies in a European state.

The acquisition of an RFID system and the setting up of some book shelves from the general fund of documents in the free reading spaces should not be the most difficult of the historical tests of the National Library and of the Romanian State. It would connect people directly to the general fund, it would give them the opportunity to communicate in all the affordable dimensions in the knowledge society. The advantages of the library would be enormous, in terms of obtaining specific data regarding the number of users, the time spent in the library, the types of the information resources requested. Today, the library can only technically monitor the documents requested in the reading rooms and the activity of its few employees.

Library literature today develops topics of interest in the information society, with practical applications particularly important for users with concerns in the area of scientific research. The valuable works, elaborated by the National Bibliography Department, are important for the users who need an exhaustive, up-to-date information on the documentary resources available in Romania. The book *Ghidul de identificare a publicațiilor pseudoștiințifice [Guide for identifying predatory publications]* (Constantinescu 2018) can prove to be a very useful tool, both for librarians and users interested in a rigorous selection of information resources. Such works, as well as the guidance services offered by specialist librarians in bibliographic references are essential elements in the relationship that the library can build with its users, coming in a large majority from the university environment.

In fact, the NLR must redefine its mission, in accordance with the new milestones of the information society and it has to be in a continuous social dialogue, if it intends to maintain its central place in our culture. In their turn, the authorities must know that investments in libraries return efficiently in a society where the individual is aware, responsible and educated. As for the governmental investment in the National Library of Romania, this would be a legitimate priority in a national strategy, elaborated in the interest of our culture, as a strengthening part of a coherent Europe.

Notes

1. Table 1 is extracted from an internal material issued by the Institutional Development Service of the National Library of Romania in 2018.
2. Original version (French): “Les livres ont toujours été accueillants aux exilés. Nous sommes nombreux à avoir usé et abusé de l'hospitalité de la lecture, de son caractère englobant, maternant. Lire est un moyen de résister à l'exclusion, à l'oppression. Lire est un moyen de reconquérir une position de sujet au lieu d'être l'objet moqué du discours des autres”.

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The Need for Inclusive Romanian Libraries

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More and more in Romania the need to have well-trained teaching and administrative staff in order to transform schools, universities and libraries into inclusive environments is felt. Often, not only the material base is missing (for example: access technologies), but a large part of staff also feels that they do not have the skills necessary to ensure effective communication with people with disabilities and their families.

This research aims to investigate the training needs of teaching staff and librarians, both in schools and universities. This article uses a mixed methods research, combining a survey based on questionnaire with one-on-one interviews. At this research 85 respondents participated, 34 of whom were professors and 51 were librarians. A majority of respondents (95%) consider necessary to take part on courses for updating the knowledge and skills necessary for working with children/pupils/students with disabilities and their families. Also, the respondents point out the need for a team of specialists to mediate the relationships between professionals and people with special needs.

Keywords: *special needs students; diversity; strategic planning; inclusive environment*

1. Introduction

A permanent concern of schools and libraries is to create an inclusive environment, an environment in which diversity has expression (Jaeger&Franklin 2017). But the road from desires to achievements is a winding one, pressed with various obstacles. The library, along with the school, has an overwhelming role in the formation and development of students and young people of all categories, especially those who come from vulnerable groups or have special needs.

An increasing number of children with special needs attend mass education. We can also observe an increasing number of young people with special needs who decide to continue their university studies. But for them, particular educational and informational support should be implemented. "Limited access to communication technologies, trained staffing, or other basic supports are common" (Mulliken&Atkins 2009, p. 276). Public, school libraries and especially university libraries are a real support in developing the skills of those who wish to learn, regardless of age, capacity, ethnicity or other differentiation criteria.

In the specialized literature we find that there are still situations in which students with disabilities integrated in mass education are marginalized, isolated and have partial access to information (Pijl 2018). The limited access to information is due, in part, to the difficulty of entering institutions destined to culture and education or receiving personalized support for their needs. Books in special formats (e.g. Braille) are missing, access technologies are missing, audio book collections are poor or non-existent.

Pionke&Manson (2018, p. 63) states that although many libraries are inclusive environments, however:

“there continues to be a deficit in services and information for and about individuals with disabilities, especially resources on different types of disabilities grouped in the same, easily accessible, location that address various types of information including clinical, academic, assistive technologies, or popular culture”.

The Romanian reality is similar to that of other countries. Often librarians express their concern about not being able to cope with the challenges posed by children and students with learning disabilities. They consider necessary to implement measures such as: “program modifications, staff training, collections and resource, and the idea of co-location” (Ross&Akin 2002, p. 15).

Libraries and schools are institutions that rather react to social changes, to educational policy and are less proactive. An American study that measures the progress made by libraries regarding their accessibility for people with disabilities shows that, although they have much more experience on this subject, compared to our country, there are still issues that can be improved (Willis 2012). Although they meet the minimum criteria required, the issues discussed relate to the training of staff to effectively communicate with people with disabilities and to avoid their social labelling, text friendly formats, online catalogues, the use of adaptative equipment. Libraries wishing to serve persons with disabilities can begin by exploring ways to implement assistive technology (Burke 2009).

Another important aspect is the inclusion in the curriculum list of readings and the provision by the public and school libraries of those books that highlight, portray people with disabilities (Wopperer 2011). The Romanian reality shows a tendency to implement this aspect. Aside from the inspirational model that all students can find in these characters, they can develop empathy and tolerance towards people with special needs.

The vast majority of library staff training sessions can be done both at the workplace and online (Brannen et al. 2017). The main content areas aim to improve communication competences and resources training, preparing the librarian on the necessary services and equipment. A recent study proposes an inclusive library model for children with disabilities and their families (Kaeding et al. 2017). Such an institutions must focus on some essential elements such as: “collections, physical barriers (space and equipment), partnerships, programs, training and marketing” (Kaeding et al. 2017, pp. 107-108). Supporting diversity is one of the essential principles of inclusive library, a value that brings children, library students closer (Switzer 2008).

2. Methodology

The research investigates the training needs of teaching staff and librarians regarding their skills in working with children/pupils/students with disabilities and their families. To achieve this goal, mixed methods research was used, combining a survey based on questionnaire with one-on-one interviews. The questionnaire was built for this research and contains 10 items, of which 5 are aimed at obtaining socio-demographic data, and the following 5 are aimed at the perception of respondents about the institution in which they work. Also, 6 one-on-one interviews were conducted (two librarians, two professors from university education, one teacher from pre-university education and a school psychologist).

“Mixed methods research is formally defined here as the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study” (Johnson&Onwuegbuzie 2004, p. 17). It has been preferred to use such a research design, typical in educational research, as it allows capturing the complexity of the investigated phenomenon.

The research objectives were:

1. Identification of the degree of inclusion of the organization/institution in which the participants work (i.e., if it allows the access of persons with disabilities and if it is prepared to respond to their specific needs);
2. Analyzing the need for a training/updating course of the knowledge and skills necessary for working with children/students/students with special needs;

3. Highlighting those competencies, skills and knowledge that should offer such a course;
4. Knowledge of the characteristics of educational and cultural context that justifies the current reality.

2.1. Participants

A number of 85 persons, 79 respondents to the survey and 6 respondents to the interviews, expressed their agreement to participate in this research. Before applying the research tools, each participant gave his/her informed consent to participate in the research. Subjects were explained the purpose, methods and research instruments and their rights as research participants. The completion time of the questionnaire was 5-7 minutes for each participant.

The questionnaire was applied electronically, using the Survey Monkey platform. Potential subjects received research information, informed consent, and the link to the questionnaire. Respondents from Argeş, Bucharest, Bacău, Braşov, Buzău, Galaţi, Iaşi, Ilfov, Olt, Oradea, Sibiu, Timiş, Vrancea, of whom 49 are librarians and 30 are teachers. Of the teachers, 30% are from higher education and the rest from pre-university education.

As we can see in Table 1, among the participants, 12 people were identified as having a technical training, 2 persons as having a background in the exact sciences, and 57% of the total subjects have a humanistic training. The category of 25% of the total who chose another educational profile is made up of managers, social assistants, teachers for primary education, special psycho-pedagogy teachers, and documentary teachers.

Table 1. *The profiles of the respondents' specializations*

	Frequency	Percent	
Specialization profile of respondents	Other:	20	25,3
	Technical	12	15,2
	Exact Sciences	2	2,5
	Humanities	45	57,0
	Total	79	100,0

The group of respondents includes both young and mature people. In Table 2, we notice the relative homogeneity of the lot from the point of expertise in their profession. Thus, 22.7% of the total, have accumulated maximum 15 years of professional experience, and 77.2% have over 16 years of work experience.

Table 2. *The years of work experience of respondents*

	Frequency	Percent	
Seniority	0-5 years	8	10,1
	6-10 years	2	2,5
	11 -15 years	8	10,1
	Over 16 years	61	77,2
	Total	79	100,0

Apart from respondents described above, at the one-on-one interviews attended two librarians, two university professors, one teacher in secondary education and a school psychologist. The interviews were conducted at their places of work. The maximum duration of the interviews was 30 minutes. The interviewees have over 10 years' experience at the workplace. Aspects related to inclusive education, the rights of persons with disabilities, universal design of learning were topics

well known to the respondents.

3. Results

The inclusive organization/institution has been defined as one that allows access for people with disabilities and is prepared to respond to their specific needs. The results of questionnaire-based survey show that 63.29% of all respondents believe that the organization/ institution where they work is an inclusive one and 36.71% consider that the organization/ institution (school, library) in which they work is not inclusive.

A majority of respondents (95%) consider necessary to take part on courses for updating the knowledge and skills necessary for working with children/students/students with disabilities and their families. A significant number of respondents, representing 40% of total group, considers that *psycho-pedagogical skills specific to working with students with special needs* should be the focus of such a course. Participants have detailed these skills as: communication skills and networking, “about how people with disabilities should be approached”, depending on their condition, the ability to adapt the didactic and library activities to the needs and characteristics of the child with disabilities, knowledge of the specific needs and modalities of action, modalities to adapt the curriculum according to the disability, classroom management (of the training process and group/ interpersonal relations) in the class with typical and disabled students.

Another group of skills that respondents seem necessary in working with people with special needs are *communication, networking and organizational skills* detailed as follows: communication languages, techniques for adapting the services for different categories of disabilities, interaction modalities, how to identify what the expectations of people with special needs are from the library, information on appropriate behaviour, “to be able to help them feel comfortable next to other colleagues”, organizational and digital competencies, reading psychology, bibliotherapy, communication with students' parents with special needs.

The participants identified a third category, materialized in the need to *know those specific services for people with disabilities*: techniques for adapting the services to different categories of disabilities, things needed in order to be able to work with people with special needs, possible applications that can be used for this category of people, software for adapting existing materials in libraries for people with special needs, access and training technologies to use these mediation tools.

Also, a large part of the subjects emphasized *the necessity to train/develop the attitudes* needed to work with people with special needs. Thus, the following training needs were highlighted: skills development and knowledge of methods in order to communicate effectively and interact beneficially to people with special needs, understanding, empathy, patience, tolerance, good observation, the desire to change the current attitude of rejection or avoidance, “to learn to know their needs; learn to make them understand that special needs are not necessarily an obstacle in personal development”.

In the section for answers, comments and suggestions of respondents, they have pointed out the need for a team of specialists to mediate the relationships between professionals and people with special needs, as well as the need for continuous training courses for professionals in the educational and cultural fields in order to meet the needs of all children, pupils and students, regardless of their limitations.

From the analysis of the information revealed by one-on-one interviews, we have identified that the measures related to the access of persons with motor or visual disabilities in the institutions are rather under development or in the process of being finalized. Very few institutions have access ramps, elevators or automatic doors. Also, indicators in Braille or accompanying persons, specially designated or a guiding application of the institution or organization seem to be elements of a very distant future.

To a large extent, spaces for education and culture are not adapted for people with special mobility needs. The furniture is not adapted to them, some spaces being totally inaccessible. Access technologies are missing, search engines of information resources are not adapted to people with

disabilities, audio-book collections are limited or missing, educational materials are mostly old and limited.

Respondents also point to the need for a team of specialists to mediate the relationships between professionals and people with special needs and to facilitate communication and cooperation between librarians, teachers on the one hand, and persons with special needs and their families, on the other. The respondents consider that the existence within the organizational structure of the institution they represent by, of at least one person whose training profile would include skills in the field of special psycho-pedagogy, would represent progress towards an inclusive environment.

4. Discussion and conclusions

In this research, answers were obtained related to the identification of the degree of inclusion of organization/institution in which the participants work (if it allows the access of people with disabilities and if it is prepared to respond to their specific needs). Although at the declarative level, the analyzed institutions (schools and libraries) try to become inclusive, there are still many steps needed to reach a satisfactory level of adaptation for people with special needs.

The analysis of the training needs revealed the need to implement at least one training course/to update the knowledge and skills necessary for working with children/pupils/students with special needs, which will cover all the components of a competence (information, skills and attitudes). An overwhelming majority, representing 95% of the total number of respondents, considers that such educational steps are necessary.

The research also aims to highlight those skills, abilities and knowledge that should be offered by such a course. Following the analysis of the results obtained, they are: the psycho-pedagogical skills specific to working with students with special needs, communication, relational and organizational skills, knowledge of those services, specific techniques for people with disabilities and the need to train/develop the necessary attitudes in working with people with special needs.

Last but not least, the research aimed to identify the characteristics of the educational and cultural context that justify the current reality. Often, the respondents considered that the extremely low level of real inclusion is due to the lack of funds but also to the poor educational preparation to provide an adequate and stimulating environment for all people, regardless of their needs.

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Directions for Developing the Efficiency of Scientific Research

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The article surprises elements of novelty and needs in the activity of scientific research and communication, identifies the needs and their practical settlement.

We identified the needs and behavior of the academic staff involved in research and we analyzed trends in contemporary research. The universities have the opportunity to improve their services for research support in today's information society using new technologies and different avenue for this move into the future. The effect of libraries using the same, shared hardware, services and data, enhances the both library user's experience and library staff workflows.

Connected data, collaboration, digitization and cloud computing will strongly increase the role of library support for academic research.

Keywords: *scientific research; academic staff; scientific communication; information technologies; research data*

The behavior of users involved in research regarding information seeking evolves in parallel with technological developments, sources and policies for access to information, and modern university libraries must keep up with these developments. The directions of developing the efficiency of the research are presented through examples of good practice.

1. Directions for developing the efficiency of scientific research

The directions for developing the efficiency of scientific research are presented by examples of good practice.

a. New channels of communication and support technology

As Abel et al. (2013) say, there are now “new ways to connect entities that were previously considered separated and impossible to connect: people, resources, experiences, various types of content and communities, as well as experts and novices, formal and informal modes, mentors and counsellors”. Examples of such connection are the applications for smart device *iResearch* from the American Institute of Physics, *Nature.com* from the Nature Publishing Group, *WorldCat Mobile* from the Online Computer Library Center - OCLC (Online Computer Library Center).

b. Open access to information

OA still faces resistance from publishers and even from some authors, but the benefits of publishing in open access journals (golden open access) and institutional deposits (green open access) for researchers, institutions, the wide public and society, are generally already found.

This motivates the academic and scientific community and governmental forums to find viable and sustainable funding solutions, rethinking the relationship between researchers, the institutions they are part of, publishers, libraries and the public and the role of each of these entities in relation to communicating scientific information and research results.

The transformations in the area in which the universities operate are interconnected and interdependent; advances in data storage and transmission technologies, access to a huge volume of connected data, the possibility to provide open access to information, etc., combining synergistically to help the library successfully serve modern users with specific needs.

c. Multiple channels of communication

Modern users frequently use social media and networks, such as YouTube, Facebook, Twitter, Tumblr, Pinterest, blogs, wiki, etc., both individually and as members of interest groups. The stated purpose of groups such as *Parkinson's Research Interest Group* on Facebook is to provide up-to-date information regarding the research on their area of interest, to facilitate discussions between researchers and to increase participation in research activities in these fields.

d. Intensive usage of data in research

According to the *Merriam-Webster* dictionary, by data we mean "factual information (such as measurements or statistics) used as a basis for reasoning, discussion or calculation".

As Borgman (2007, p. 215) says, data sets represent outputs for the research process and inputs for academic publications and for subsequent research activities, thus forming the basis of research.

e. New methods of interception of data and big volume of data

An alternative to traditional surveys are the applications for mobile devices such as those built on ResearchKit and CareKit software platforms, which allow data collection for the medical field through less traditional methods, such as: using the gyroscope and other features of smart phones to measure dexterity or balance of people, detection of facial expressions when watching a video on the phone to understand the emotional reactions, photographing parts of the body and skin to record and detect changes over time, etc. (Apple 2018). Similar, smartwatches that record body functions and health indicators, in combination with dedicated mobile applications where users can record data on their daily behaviour, diet, emotions and events are an extremely rich source of data for the medical sector.

In addition to the mobile devices we now use regularly, there are more and more equipment connected to the Internet: from video games and sports equipment to *smart homes* in which the environment, security devices and even home appliances can be remotely controlled and up to industrial equipment. They form the so-called *Internet of Things* - IoT (*Internet of Things*), a network of interconnected smart devices that continuously generate data (including locations and data about the equipment owner) and send them over the Internet.

Regarding data as a result of research, Information Science specialists have extensive experience in classifying, documenting and recording metadata and can play an essential role in managing an extensive volume of data and extending the usefulness of data sets beyond their intended purpose for which it was collected. The risks of keeping digital data in time are related to technology and differ from those related to physical collections, and the experience gained in managing material information collections recommends them to help set standards (such as the necessary descriptor sets) to extend the usefulness of research data not only over time, but also across technological platforms, legislations and different fields of research. The libraries thus add to the traditional collections of documents and information, which can only be read and analyzed by people, a new type of resource: *big data*. De Mauro et al. (2018) defines *big data* as information resources which, due to the huge volume, the speed with which they are generated and updated and the variety of format and content, require specific analytical technologies and methods to be enhanced.

In an investigation conducted for Research Libraries UK in 2012, Auckland (2012) mentions the following activities of growing importance in relation to data and information, which librarians carry out in support of researchers: *information management, discovery and management of data used in the research activity, but also the collection and preserving of the data resulting from the research.*

f. High-performance data analysis methods

Here are three examples of how libraries support data analysis:

- University of Guelph Library, Canada provides consulting and technical support for the organization, analysis, interpretation and presentation of different types of data, including geospatial, quantitative and qualitative data (University of Guelph 2018);
- Michigan State University Libraries, USA offer a set of thematic resources for data analysis, which includes contact information for other departments of the university providing data analysis

support, software application recommendations for analysis data in a variety of domains and a list of relevant information resources (Michigan State University 2018);

- *Map and Data Library* of the University of Toronto Libraries offers: software application tutorials; workshops and training sessions; a rich set of thematic resources; dedicated computer rooms with specialized software for accessing and analyzing maps and data sets (University of Toronto Libraries 2018).

g. Connected data

For researchers, using connected data allows virtual collections of objects that are much easier to discover and analyze.

For libraries this concept is relevant from the following points of view (OCLC 2012):

- by including *connected data* in the online description of library resources, users can more easily find library resources on the web; search engines and other information services on the Internet will be better able to send users to these materials directly and quickly;

- by providing library data in granular and better-defined segments, the *connected data* allows programmers to create innovative metadata-based applications obtained from a variety of sources;

- *connected data* gives library specialists the opportunity to rethink cataloguing more efficiently.

h. Collaboration and common access to resources

Library consortium benefit from pooling experience and resources and stimulate creative answers to common problems, have greater purchasing power in transactions with publishers, provide access to richer resources through resource sharing and interlibrary loan agreements, and cooperate on the development of collections (Alison 2013).

i. Interdisciplinarity

According to the report *Facilitating Interdisciplinary Research*, interdisciplinary research is “a way of research by which researchers or teams of researchers integrate information, data, techniques, tools, perspectives, concepts, and / or theories from two or more disciplines or specialized knowledge patrimonies, in order to advance the fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or a single field of practical research” (National Academy of Sciences et al. 2005, p. 26).

Following a study funded by the Andrew W. Mellon Foundation, librarians at the University of Calgary identified six main components of an interdisciplinary research platform: analysis and visualization, analysis services and data sharing, digitization, metadata services, expertise and training, as well as the arrangement of spaces for collaborative activities (Sowa 2017).

j. Digitization of collections

Many university libraries implement projects for the conversion and digital preservation of books, maps, posters and other flat media means, 3D objects, as well as audio and video materials, to support both research and teaching and learning processes. Using specialized equipment, the staff of these institutions digitizes entire collections, including rare or fragile documents, objects and artefacts, for absorption into their own institutional collection or the creation of online galleries, collections and catalogues. For researchers, the existence of these objects and artefacts in digital format also allows new ways to interact with their content and to study them, and even the possibility to analyse and compare a large number of such documents and objects much faster.

k. Cloud technologies

Goldner (2010) mentions four key principles of collaborative platforms: openness, extensibility, abundance of resources and opportunities for collaboration.

Libraries can choose from a variety of *cloud* service packages or a combination of them. Among the most relevant are the packages of infrastructure, platform, software, storage space, security and data, laboratory with equipment for visualizing maps and data, such as 3D printers, scanners and virtual reality devices; the services of a specialized librarian who provides consultations and instruction regarding data visualization librarian (data visualization librarian); examples of analyses and visualizations made available by the members of the university's academic

community.

In a report requested by the Minnesota Historical Society from USA, the organization Instrumental Inc. (2013) identifies the following elements that need to be considered in determining the benefits and risks of migrating to a *cloud* solution provided by an external provider for digital storage services, in addition to cost-effectiveness considerations, authentication methods, system requirements, system level necessary expertise of the personnel of the organization and possibilities of extension:

- ownership of files and stored data;
- reliability and integrity of storage type;
- possibility to recover in disaster case through adequate backup;
- portability of files and data when migrating to another provider and retention policies applicable if data and files need to be removed from *cloud*;
- guaranteeing availability regarding the infrastructure, web services and software applications used;
- data and file security;
- scalability of the services offered according to the needs of the library;
- data management and storage functionalities;
- monitoring and processing of stored content for protection against the wear and tear of the technology.

2. Conclusions

The academic environment is evolving rapidly, in parallel with technology and is constantly adapting to the needs of its consumers and today's changes in the information field. Today's user has little in common with the one from a few decades ago, apart from the need for information.

All transformations are interconnected and interdependent. We cannot talk about a large volume of data without talking, for example, about changes in storage methods and *cloud* technology. The need for open access to the data resulting from the research activity and, even more, to existing data in the Internet network, requires the linking of these data and the standardization of their representation to make it accessible to high-power computing machines. Opening the access to information to facilitate the progress of science requires changes to the system of publishing research results and motivates the academic community to collaborate and find viable and sustainable funding solutions, rethinking the relationship between researchers, their institutions, publishers, libraries and public as well as the role of each of these entities.

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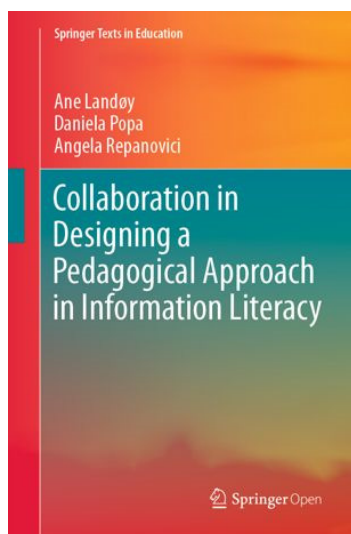
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New Publications



Ane Landøy, Daniela Popa, Angela Repanovici, *Collaboration in Designing a Pedagogical Approach in Information Literacy*. Springer, Cham, 2019.

ISBN 978-3-030-34258-6 (online), 978-3-030-34257-9 (print)

The book was published by Springer in 2019 with funding from the University of Bergen and is available in Open Access (<https://link.springer.com/book/10.1007%2F978-3-030-34258-6>), an important aspect when considering the skyrocketing prices of textbooks. *Collaboration in Designing...* is part of the Springer Texts in Education series which aims to offer students and researchers both comprehensive theoretical coverage and practical examples, case studies, and other useful materials.

The book is the result of a collaboration between Ane Landøy, academic librarian at the University of Bergen, Norway, Daniela Popa, lecturer at the Faculty of Psychology and Education Sciences and Angela Repanovici, professor at the Faculty of Product Design and Environment, *Transilvania* University of Brasov, Romania. Ane Landøy and Angela Repanovici have previously had several international collaborations, including ones in projects funded by the Royal Norwegian Ministry of Foreign Affairs, and/or by the European Union, and have experience in teaching information literacy to students in their home institutions.

The book has ten chapters focusing on aspects such as teaching, basic concepts related to information literacy, and extensive information about finding, accessing, and using information. Each chapter has an abstract and keywords that facilitate finding the useful information and an extensive bibliography for those looking to further their knowledge. The first few chapters offer a needed theoretical basis about information literacy, standards and models, previous studies on the subject, and contemporary perspectives on teaching. Teaching is an integral part of this textbook, being discussed in the second and last chapters. The authors adopt a modern (and much-needed in the Romanian educational system) vision regarding teaching: “learning is not an individual process, but a collaborative production”, “the individual acquiring competence through effective involvement in the learning process”, “educational relations are democratizing, the teacher becomes an affective partner of the learner, guiding and not imposing the path and rhythm of the learners’ formation” (p. 13). This vision is visible through the book through the exercises that encourage active learning, cooperation and discovery.

Practical applications and examples are included starting with the second chapter and present through the book, more so beginning with the fourth chapter which includes homework suggestions and several exercises. It is in the inclusion of these practical applications (along with the basic theoretical information) that the strength of the book resides: an instrument for learning more than just (another) book about the hot topic that is information literacy.

Chapters four, five and six discuss the different ways of accessing information both on the web and in the traditional library. Important aspects such as types of documents, catalogues, keyword search, Boolean operators, indexing, and thesaurus are explained in a simple enough way to be understood by anyone and with recommendations for those who want to further the subject.

While the book in its entirety is designed with the needs of academic librarians in mind (or other librarians that have student users), chapters seven, eight and nine (*Information Evaluation*, *Information Management* and *Information Communication*) are useful resources also for students,

academics and researchers because they tackle ever present subjects (for the mentioned categories) such as evaluation of scientific sources, quality of information, peer review, bibliometric databases and their usage, impact factor, Hirsch index, plagiarism, proper citation, and presentation of scientific information.

A useful resource for any academic librarian, this book can be used both as a teaching aid by professors and librarians, and as a guide for those wanting to find out more about information, how to find, evaluate and use it correctly.

Mihai Constantinescu

A Book about International Trends for Academic Libraries

From the project „Modernization of Academic Library Services in Moldova” financed by the Norwegian Cooperation Programme in Higher Education with Eurasia, the book *International Trends in Academic Library Development* (editors: Ane Landøy, Silvia Ghinculov, Angela Repanovici) has recently been published.

The project has been conducted in partnership between 18 university libraries from the Republic of Moldova, the University of Bergen, Norway and the Transylvania University of Brasov, Romania, and with support from the Moldovan research institution “Information Society Development Institute” (ISDI).

The Ministry of Education, Culture and Research of the Republic of Moldova is present in all the projects of library modernization, and has financially supported the editing and publishing of this book. *International Trends in Academic Library Development* is part of the results of our institutions in promoting the changing role of university libraries in the digital information age.

The book primarily addresses university library leaders, who will be able to use the information in the work process, in writing new projects and for improving in the field. The book is also useful for all the leading factors in universities and ministries for the use of university libraries as supporting institutions for education, scientific research and progress. The book also helps the library users to more deeply understand the important role of the university library in their professional training, the modern tools through which the learning and academic writing process is made easier, and the documentation that becomes an innovative activity.

Continuous training of employees is the strategy for developing of successful institutions. Within the project “Modernization of Academic Library Services in Moldova”, the librarians from the Moldovan universities were trained by organizing workshops, summer schools and strategic planning workshops. These activities have been carried out from 2016 to 2019.

A professional and international team guided the library leaders from the Republic of Moldova in the process of modernizing the services and implementing the new information technologies. The editors of this volume wish to share this welcome experience, by publishing materials that address all the topics of interest debated on the project platform: new trends in information service, marketing, scientometrics, bibliometrics, open access, digital institutional repositories, information literacy, research data management, pedagogical techniques and others.

The internationalization of all activities has proved to be in the interest of all, and sustainability of the collaboration is ensured by the signing of the Collaboration Agreement between the participating institutions for the period 2020-2023. By signing this document, 22 organizations from our partnership have confirmed their intention to focus on efficient cooperation also after and outside the project, to contribute to the development of the information society, the improvement of professional services and competencies, the dissemination of best practices and the exchange of experience between librarians.

This publication represents a moment of pride and satisfaction: that together we were able to hold a real professional debate in which famous names in the science and practice of information participated. Several world-wide experts in the field of libraries participated in the training of the staff from the Moldovan libraries: Andrew MCDONALD, member of the IFLA Council, emeritus professor at the University of East, London, United Kingdom; Sanda ERDELEZ, prof., PhD,

University of Missouri, USA; Ismail SERAGELDIN, PhD, director of the Alexandria Library and director of the Executive Board of the World Digital Library, Alexandria, Egypt; Jesus LAU, PhD, Veracruz University, Mexico; Ane LANDØY, Bergen University Library; Angela REPANOVICI, PhD, Prof. Transylvania University, Brasov, Romania; Manolis KOUKOURAKIS, PhD, Director of the University of Crete Library, Greece; Mioara VONCILA, Director, University Library of Galați, Romania; Nicolaie CONSTANTINESCU, Kosson Community, Romania; Serap KURBANOGLU, prof., PhD, Hacettepe University, Ankara, Turkey; Nelly ȚURCAN, prof., PhD, State University of Moldova; Robert CORAVU, PhD, University of Bucharest, Romania; Anna CHULYAN, PhD, director of the Library of the State University of Languages and Social Sciences Brusov, Yerevan, Armenia; and others.

The editors hope that the presentation and documentation of project activities, services and new information products in this book will enhance the image of the library in our universities and will maximize their ability to effectively mediate the relationship between users and the information they need. Without professionals with a creative spirit, capable of implementing and developing new information technologies in the library, it is impossible to set up a library of the future, to satisfy users' expectations and needs for faster and easier access to relevant information. We will continue to identify the problems faced by the university libraries and will outline new strategic directions and objectives for strengthening the role of these institutions in the development of academic education and research.

The articles in the book are the following:

Silvia GHINCULOV, *Sustainable Development of Information Services for the Academic Environment*

Ane LANDØY, *Important Trends in International Academic Library Development: Collaboration*

Angela REPANOVICI, *How We Keep Up with the Dynamics of Changing Information Needs in the Society Based on Technology and Knowledge?*

Serap KURBANOGLU, *The Role of Libraries in Preservation of Cultural Heritage*

Nelly ȚURCAN, *Open Access to Research Outputs in the Republic of Moldova - Institutional Policies and Researchers' Views*

Anna CHULYAN, *The Development of Academic Libraries in Armenia*

Robert CORAVU, *Research Data Management in Academic Libraries: Landmarks and Uncertainties*

Nicolaie CONSTANTINESCU, *Research Data Management in Research Libraries*

Natalia CHERADI, Ina NICUȚĂ, Elena RAILEAN, Ana GUDIMA, *Analysis of the Degree of Informing of the Users of the University Library Concerning the Institutional Repository*

Karin RYDVIING, *Research Data Services in Norwegian Academic Research Libraries*

Elena RAILEAN, *International Project as An Innovative Form of Activity of a Modern Library*

Ludmila COSTIN, Viorica LUPU, Vera SOBETCHI, *Modernization of the Library and Information Services for Researchers in the Republican Scientific Agricultural Library*

Ecaterina SCHERLET, *Reading Competences - A Key Factor in Education Realisation*

Irina BOTNARU, *The Program „Care for the New Users”: Evolution and Evaluation*

Veronica SANDU, Ludmila VÎHRISTIUC, Angela CAȘLEV, Ghenadie CERNEI, Denis PUȘCA, *Scientific Library of the State University of Tiraspol Within the Framework of the Project „Modernization of Academic Library Services in Moldova”*

Rodica SOBIESKI-CAMERZAN, *Impact of International Projects on the Development of the Library of the Academy of Public Administration of Moldova*

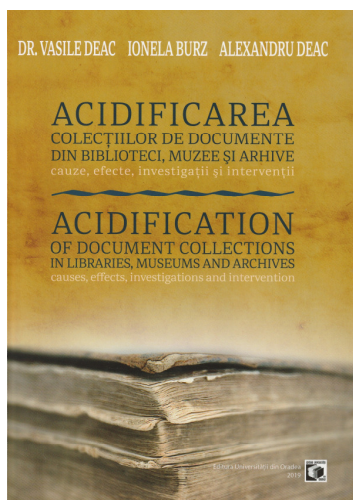
Elena HARCONIȚA, Aculina MIHALUȚA, Valentina TOPALO, Mihaela STAVER, *Innovative Services Offered by Librarians for Bălți Academics*

Silvia HABAȘESCU, Alla IAROVAIA, Svetlana STUDZINSCHI, *Information Literacy Is at the Top of the Agenda: From the Experience of the Scientific Library of the Academy of Economic Studies of Moldova*

Natalia SUVAC, Aliona PROCA, *Communication as A Means of Relationship Within University Libraries*

Ane Landøy, Angela Repanovici

**Romanian Scientific Contributions
in the Field of Conservation and Restoration of LAM's Paper Documents**



Vasile Deac, Ionela Burz, Alexandru Deac. *Acidificarea colecțiilor de documente din biblioteci, muzee și arhive : cauze, efecte, investigații și intervenții = Acidification of Document Collections in Libraries, Museums and Archives : Causes, Effects, Investigations and Interventions.* Oradea: Editura Universității din Oradea, 2019. 141 p. ISBN 978-606-10-2027-0

The book includes four studies resulted from the project “The research, testing and using in the laboratory of natural products presenting significant impacts for de-acidification of paper collections”, published both in Romanian and English. As the authors underline in *Introduction*, these studies’ main goal was “to establish the technology for the use of natural nanoparticles to protect the info-cultural goods and to maintain the hygiene in the library environments”, but their results concern also the paper documents detained by the other cultural memory institutions, i.e. archives and museums.

The studies proposed by the three authors under the coordination of dr. Vasile Deac, an well-known specialist in conservation and restoration, are the following:

- *Considerations Regarding the Acidification of Document Collections from Libraries, Museums and Archives;*
- *Research on the pH Evolution Monitoring in Library Collections, Archives and Museums. Synthesis of the Results Obtained During the Period 2012-2015 at “Gheorghe Șincai” County Library Oradea - Conservation-Research Laboratory;*

Magnesia Research on Treatments for the De-acidification of Info-documentary Collections from Libraries, Archives and Museums: Case Studies (first published in English in iss. 4, 2017 of RRBSI - <https://doi.org/10.26660/rrbsi.2017.13.4.87>);

Researches on the Use of Micronized Product D.Z.D. (1: 1: 1) in Laboratory and Deposit Conditions for the Deacidification Treatments of the Info-Documentary Collections from Libraries, Archives and Museums (first published in English in iss. 1, 2018 of RRBSI - <https://doi.org/10.26660/rrbsi.2018.14.1.11>).

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