Student perceptions of LIS programs and profession: Study among undergraduates in Croatia and Turkey

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Abstract

Library and Information Science (LIS) is a discipline in flux, therefore LIS education has been in transformation for quite a long time. It is a time for change and there is no doubt that change requires making strategic decisions across the discipline and LIS education is not an exception. Strategic decisions are to be taken based on data collected from related stakeholders. The aim of this paper is to explore student perceptions of LIS profession and LIS programs, as well as their motivations for enrolling in these programs, their career plans and expectations. Survey by questionnaire was conducted among final year undergraduate students at the Department of Information Management of Hacettepe University, Turkey and Department of Information Sciences at Faculty of Humanities and Social Sciences, University of Osijek, Croatia. The data was collected from 69 questionnaires. Some similarities as well as differences were detected between the two student groups. Students from both countries believe that LIS profession plays an important role in the society (and will remain so in future) but that it does not enjoy high public status and is not financially rewarding. Students are generally satisfied with their choice of profession (although for a significant number of students LIS degree was not their first choice), the majority would recommend it to their friends and they are quite optimistic about employment opportunities. Dissatisfaction with their LIS program lies in most cases in insufficient amount of IT courses and practical training. Almost half of the Turkish students had some LIS related work experience prior to embarking on their studies unlike Croatian students. Two words (information and libraries) that first come to majority of students' mind when they think of LIS profession were the same for both group. Both groups of respondents agreed that LIS profession is interdisciplinary and disagreed that it is a female profession.

Keywords: LIS education, LIS profession, undergraduate students, perception, career plans, Croatia, Turkey

Introduction

Today, in Library and Information Science (LIS) education, there is a trend towards an increasing focus on information technologies (an inevitable result of massive technological advances), users' perspectives, and multi-disciplinarity (Cronin 2007). There are new career opportunities for LIS graduates as new positions are opening up in areas such as knowledge management, information architecture (Cherry, Duff, Singh & Freund 2011), research data management and digital humanities. While LIS education is transforming, the debate over the education is intensifying. Strategic decisions such as the changes in the structure, scope and focus of individual LIS schools/programs require not only a careful examination of literature regarding the flux in the discipline, but also data collected from related stakeholders (such as employers, LIS students, graduates, and professors).

Undoubtly, students are one of the key stakeholders, and their opinions, perceptions, needs and expectation should be taken into consideration for education related decisions. Therefore, research on LIS education should also be devoted to student perceptions.

Literature Review

Existing research on LIS students mainly focuse on students' perceptions of the LIS programs they enrolled as well as the profession in general, their motivations for enrolling in LIS programs, their career goals and expectations.

In their review Cherry et al. (2011) claim that "the literature presents a mixed view of perceptions of the information professions and LIS programs, and raises more questions than it answers" (p. 122). In this part of the paper a short summary of the literature will be provided.

In her study on the students of University of California-Berkley, Van House (1988) investigated the reasons of student enrollment in an LIS graduate program along with their work and salary expectations. Findings indicated that 81% of the students chose to pursue a LIS degree because they like the idea of working in a library. Interestingly, students underestimated the salaries they would earn.

Tiamiyu, Akussah, and Tackie (1999) studied students of the Department of Library and Archival Studies at the University of Ghana. They examined the changes in students' motivations and perceptions. According to their findings, younger students' perceptions of the profession had risen while archival students' estimations of career prospects reduced.

In another survey Berry (1999) asked students from North American LIS schools to assess their program. Students rated their programs highly for various aspects such as course content, quality of the faculty, and preparation for a library career. On the other hand, respondents' comments indicated concerns regarding overemphasis on technology and theory as opposed to practical library skills.

A survey conducted by Ard et al (2006) at the University of Alabama found that 89% of students had decided to pursue their graduate degree in LIS while they were in college and 34% indicated that their decision was influenced by an individual such as a mentor, professor, coworker or friend. Only 3% of students indicated that LIS was the profession of their dreams. The main reason for their choice was their expectation to find an interesting job. Findings indicated that LIS students believe librarians earn low salaries.

A Canadian study found relatively low levels of program satisfaction among LIS students. While 68% of students were satisfied with overall program quality, only 46% agreed that their program was providing them with an understanding of a career in the information profession. The most common suggestion offered for program improvement was more practical training (Cultural Human Resources Council 2006).

Findings of a study of the graduates from North Carolina LIS programs indicate that 86% of recent graduates agreed that their programs provided them a realistic understanding of what it is like to have a career in the information field (Workforce Issues 2008).

In her study Shannon (2008) found out that employability and career flexibility were the primary factors for the choice of school librarianship as a future career.

A survey conducted among Nigerian LIS students (Issa & Nwalo 2008) found that only 42% listed LIS as their first choice of study. Prior work experience in libraries was the most common reason for choosing LIS (38%).

Taylor et al. (2010) surveyed to find out about the motivations of MLIS students for choosing a library career. 76% students indicated that job function was the primary motivator.

Singh and Chander (2013) studied sources of motivation and factors that influenced career choice of LIS students in North India. Findings indicated that majority of respondents choose the LIS profession because of employment opportunities.

Kundak (2017) investigated final year LIS students' motivations for enrolling in LIS programs, perceptions of LIS profession and LIS program they enrolled. Employment opportunities and influence of an individual (mentor, professor, family or friend) were the major factors behind their choice of profession. Majority of students had decided to pursue their LIS degree at the time they had to make a choice based on their university enterance exam scores. Findings indicated a poor view of the profession's reputation and prestige. About half of the students agreed that practical part of the education programs needs to be improved.

As a conclusion, students seem to enroll in LIS programs because of the employment opportunities, despite low expectations of salary and professional status in society. Levels of student satisfaction with their programs are not consistent and there are concerns about the practical aspects of programs.

The Study Context

The study was conducted at the Department of Information Management, Hacettepe University, Ankara, Turkey and at the Department of Information Sciences, Faculty of Humanities and Social Sciences, Osijek University, Croatia.

The Department of Information Management of Hacettepe University was founded in 1972 and it became an iSchool in 2015. In the academic year 2017/2018 there are 21 faculty (including 4 post-docs and 4 research assistants) and 477 students (372 undergraduate, 74 graduate, 31 doctoral students). The names and average lengths of the degree programmes offered by the Department are as follows: undergraduate studies leading to a Bachelor degree in Information Management (4 years); Master studies leading to a Master degree in Information Management (2 years) and Doctoral studies leading to a doctor of philosophy degree (Ph.D.) in Information Management (4 years). All programs can be studied only full-time, and there are no specialization tracks. The undergraduate program of the Department consists of a year-long English Language Preparatory School followed by elective and compulsory courses in the four-year program. The language of instruction is at least 30% English. In order to enter the undergraduate program a sufficient score must be obtained from Undergraduate Placement Examination. Applicants for graduate programs are required to provide sufficient scores from Postgraduate Education Entrance Exam and a Foreign Language Exam (English). There is an increasing demand for the graduate programs from students who have different backgrounds (such as computer engineering and education). A large portion of undergraduates find placements with their Bachelor degree, so most of the graduate students at the Department are already working. Graduates of the Department find jobs in information centers, libraries, archives, documentation centers. In addition, graduates can find positions at various organizations dealing with database design and management, indexing and abstracting services, softwares companies, news agencies, publishers and research & development centers. Alumni have a chance to utilize current job opportunities such as information architecture, web designer, usability expert, etc.

There are a total of 72 courses in the program. To complete the bachelor's degree in the Department, students must successfully complete required and elective courses (138 credits / 240 ECTS). 55% (72 credit) of courses are required and 45% (66 credit) are elective. Undergraduate curricula of the Department is based on a conceptual model of education for information management having seven components which was developed by the Department's Academic Board in 2009 to identify the core subjects to teach. Seven components of the curricula are namely (Tonta 2012):

- Foundations of Information Management (information theory, cognitive sciences, libraries, archives and museums as social institutions, the philosophy and history of libraries, terminology, professional ethics, etc.),
- Organization of Information (information analysis, cataloging, classification, indexing, categorization, abstract metadata, theasurus construction, folksonomies, information retrieval, DBMS, document/content management systems, etc.),
- Information Systems Design (systems analysis, information systems, web interface design and evaluation, information architecture, programming, software development, image processing, document engineering, data mining, etc.),
- Management (information centers, collection management, human researces management, organizational behavior, cooperation, legal issues, law, information policies, security, privacy, standards, etc.),
- Research (research methods, statistics, information literacy, scholarly communication, resource use, writing reports, etc.),
- Resource-centric Information Management (discovery, finding, selection, collection, acquision, organization, storage, use, digitization, preservation, evaluation, archiving, weeding of information sources, information technologies, etc),
- Relationship-centric Information Management (identification of users' information needs, user groups, user types, human factor, information seeking behaviors, communication, reference services, recommendation services, marketing, information brokerage, usability, social networks, social informatics -information sharing, tagging, etc.).

The Department of Information Sciences at University of Osijek was established in 1998, originally under the name Department of Librarianship. In the academic year 2017/2018 it employs 19 teachers (including 5 post-docs and 3 research assistants) and caters for the population of 168 students (110 undergraduate and 58 graduate). It offers accredited undergraduate (3 years) and graduate study (2 years) programs in Information Sciences. Both undergraduate and graduate programs can be studied only fulltime. In order to enter the undergraduate program a sufficient score must be obtained from Undergraduate Placement Examination and a solid GPA from secondary school is required. The majority of undergraduate students pursue a graduate degree because prospects of finding a job with Bachelor degree are not good. The graduate students can choose to study any combination of two of the following study fields/specializations: Information Sciences, Publishing and Information Technology. The majority of graduate students are recruited from the pool of the Department's undergraduate students because the enrollment of graduate students from other disciplines is almost non-existent due to formal enrollment requirements. Applicants for graduate programs are selected based on their GPA at undergraduate level. Unfortunately, recently the criteria of 3.5 GPA was removed (to coordinate entrance requirements with other Croatian LIS departments) so the Department cannot be too picky about the students it accepts. Majority of undergraduates pursues a graduate study program immediately after graduating, without any substantial work experience in LIS field. Graduates from this Department find placements in traditional environments such as different types of libraries but also in the growing IT sector and to a lesser degree in publishing industry.

The undergraduate and graduate programs in Information sciences offered by the Department educates contemporary profiles of multidisciplinary professionals who can work in information institutions, but also in e-learning, e-publishing, e-management and e-economy. Students are educated to mediate and participate in the selection, acquisition, organization, preservation, evaluation and use of different information sources and documents of different types. Study programs introduce students to the nature of information work, missions of different information institutions and the ways they provide service

within the global information infrastructure. Students learn about similarities and differences among different information professions, and specific conditions for their work and collaboration in the changing information society. Students are educated to use and produce quality information sources, services and products, develop web services and understand diverse needs and habits of users, based on their knowledge of the organization and mediation of information and IT skills. Graduate program in Information technology educates students for flexible application of IT in different contexts (public and private sector) in line with diverse user needs with ultimate aim to help tackle the problems of digital society. Students are motivated to develop and apply IT innovative solutions, products and services. Students learn to analyze, develop, manage and maintain information systems. Graduate program in Publishing educates students to understand and develop publishing as an activity which enables free flow of knowledge and information, to develop and advance publishing processes and products by implementing new knowledge and skills, to disseminate national heritage and science in print, web and mobile platforms.

The Study

The aim of this study was to understand how do undergraduate LIS students at two European universities (in Turkey and Croatia) perceive their study programs and profession in general, and to gain insight into their motivations for enrolling in LIS program and their career goals and expectations.

The study tried to answer the following research questions:

- 1. How do students perceive LIS profession?
- 2. Why do students choose to study LIS?
- 3. How do students perceive their study program?
- 4. What are the students' career goals and expectations?

Methodology

The data was gathered with the help of quantitative methodology (a survey by print and online questionnaire). A self-administered print survey (in Turkish) was distributed to final year (4th year) undergraduate students enrolled at Hacettepe University, Turkey (N=60). A link to an online questionnaire (in English) was forwarded to final year (3rd year) undergraduate students enrolled at University of Osijek, Croatia (N=26). Both questionnaires were completed in March 2018. The survey was piloted with several randomly chosen respondents (from both Departments). After this, several minor changes were made, such as the change in the wording of some questions. The questionnaire consisted of 41 closed, open, multiple choice and Likert-like scale type of questions¹. The survey questions covered the following thematic areas:

- questions related to social and demographic information about students (gender, age, LIS related work experience, LIS professionals among family members);
- questions related to students' perception of LIS profession (characteristics, public image, social role and value to society, importance of specific knowledge and skills and prospects of LIS profession in 20 years);
- questions related to students' motivation (when and why do they choose to study LIS, factors influencing their decision);
- questions related to the students' perception of their LIS program (subject interest, evaluation of different dimensions of study program, preferred title, expected future developments); and

¹ The questionnaire was informed by an instrument developed in the study by Cherry, J. M., Duff, W. M., Singh, N. & Freund, L. (2011) and hereby we thank the authors of that study for permission.

questions related to the students' career goals and expectations (job market and expected income).

The questionnaire was anonymous and filled out by 69 respondents (out of the total of 86 students at both Departments), resulting with the total recall of 80.2%. The recall at the institutional level was 88.5% for University of Osijek, Croatia and 76.7% for Hacettepe University, Turkey. Data was analyzed using SPSS software for statistical analysis. Although differences between the groups in the sample (Croatian and Turkish students) could not be statistically tested due to a small number of respondents, the data for two groups of respondents (Croatian and Turkish students) is presented separately so that some general trends and comparative differences could be observed.

Sample

The study was conducted among the last year undergraduate students enrolled in LIS programs at Hacettepe University (4th year students) and at University of Osijek (3rd year students).

Table 1. Respondents by general characteristics

	%	%
Country	Croatia	Turkey 66.6
	33.3	
Gender		
female	78.3	60.9
male	21.7	34.8
do not want to disclose	0	4.3
Age Group		
20	8.7	0
21	60.9	0
22	13	23.9
23	8.7	21.7
24	0.0	28.3
25	0.0	8.7
26+	8.7	17.4
LIS related work experience prior to study		
yes	0.0	47.8
no	100.0	52.2
LIS professionals among close family		
members		
yes	4.3	6.5
no	95.7	93.5

The questionnaire was filled out by a total of 69 respondents: 33.3% from Croatia, 66.6% from Turkey. The largest number of respondents were female students (78.3% in Croatia and 60.9% in Turkey) and those from the age group 21 (60.9%) in Croatia and those from age group 24 in Turkey (28.3%). Unlike Croatian students, almost half of the Turkish students (47.8%) had some LIS related work experience prior to embarking on their studies (mainly in libraries). Very small portion of the sample (4.3% respondents from Croatia and 6.5% from Turkey) indicated that they have a member of a close family (parents, siblings) who are LIS professionals. Table 1 shows the distribution of respondents in relation to their general characteristics.

Findings

Perception of LIS profession. Students were initially asked to choose three words that first come to their mind when they think of Library and information science (LIS) profession. The majority of respondents, both from Croatia and Turkey, indicated information (87.0 % and 78.3% respectively) and libraries (73.9% and 67.4 % respectively). However, the third most important association is different for Croatian and Turkish students: 43.5% of Turkish students relate LIS profession with knowledge management and 52.2% of Croatian students relate LIS profession with information technology (IT). Although Croatian students relate LIS profession to IT far more frequently than Turkish students, interestingly both groups of respondents relate LIS profession more frequently with IT (52.2% of Croatian students and 23.9% of Turkish students) than with books (8.7% and 21.7% respectively) and culture and cultural heritage (21.7% and 8.7% respectively).

Table 2. Top three concepts related to LIS profession

LIS profession	Croatia	Turkey
	(%)	(%)
information	87.0	78.3
libraries	73.9	67.4
knowledge management	17.4	43.5
information technology	52.2	23.9
service provision	4.3	32.6
books	8.7	21.7
culture/cultural heritage	21.7	8.7
education	26.1	6.5
preservation	8.7	4.3
information economy	0.0	6.5

In order to gain deeper understanding of their perception of LIS profession, the respondents were also asked to indicate on scale from 1 through 5 (1-disagree fully, 5-agree fully) the level of their agreement with a number of statements regarding the characteristics of LIS profession (Table 3).

Table 3. Characteristics of LIS profession

LIS profession	Mean	
	Croatia	Turkey
interdisciplinary	4.30	4.35
demands continuous updating of knowledge and skills	3.87	4.39
IT intensive	3.91	4.22
has tight connections with education	4.04	4.15
has an important social role	4.04	4.02
deeply related to culture	3.70	4.04
contributes significantly to information economy	3.74	3.98
non-profit	3.43	4.02
innovative and ground-breaking	3.13	3.76
business-related	3.13	3.74
a profit-making sector	2.78	2.35
has a positive public image and enjoys high prestige in	2.83	2.26
public		
a female profession	2.35	1.78

Both groups of respondents agreed that LIS profession is interdisciplinary (Mean 4.30 and 4.35 for Croatian and Turkish students, respectively), has tight connections with education (Mean 4.04 and 4.15 for Croatian and Turkish students, respectively), and has an important social role regarding democracy, intellectutal freedom, multiculturalism, social inclusion, human rights etc. (Mean 4.04 and 4.02 for Croatian and Turkish students, respectively). Similarly, both groups of respondents disagreed with statements that LIS profession is profit-making sector (Mean 2.78 and 2.35 for Croatian and Turkish students, respectively), has a positive public image and enjoys high prestige in public (Mean 2.83 and 2.26 for Croatian and Turkish students, respectively) or is a female profession (Mean 2.35 and 1.78 for Croatian and Turkish students, respectively).

When asked to rate the value to society of several professions (including LIS profession) both groups of respondents placed librarians/information professionals to the very end of the scale: Mean 3.13 (Croatian students) and 3.26 (Turkish students) for librarians/information professionals in non-library environment (industry, banks etc.) and Mean 3.61 (Croatian students) and 3.0 (Turkish students) for those working in traditional library environment, respectively) (Figure 3). Top three professions for both Croatian and Turkish respondents included medical doctors (Mean 4.26 and 4.54), school teachers (Mean 4.04 and 4.11) and lawyers (Mean 3.78 and 4.07), followed closely by web designers/software developers (Mean 3.74 and 3.78). Interestingly, while Croatian students placed librarians/information professionals working in traditional library environment above those working in non-library environment, Turkish students did the opposite (Table 4).

Table 4. Value to society of different professions

Professions' value to society		Mean	
	Croatia	Turkey	
medical doctor	4.26	4.54	
school teacher	4.04	4.11	
lawyer	3.78	4.07	
web designer/software developer	3.74	3.78	
phisiotherapist	3.65	3.70	
politician	3.39	3.59	
social worker	3.83	3.20	
journalist	3.48	3.09	
librarian/information professional in non-library environment	3.13	3.26	
(industry, banks etc.)			
librarian/information professional in traditional library envirnment	3.61	3.0	

Majority of respondents (52.2% in Croatia and 63.3% in Turkey) thinks that in 20 years from now LIS profession will be more important than today. To a much lesser degre respondents in Croatia and Turkey think it will have the same status (34.8% and 23.9% respectively). Only 13% of respondents, both in Croatia and Turkey, reported that the think it will be less important than now. (Table 5)

Table 5. Perception of LIS in 20 years

LIS profession in future	Croatia (%)	Turkey (%)
LIS profession will be more important	52.2	63.0
LIS profession will be less important	13.0	13.0
LIS profession will have the same status	34.8	23.9

Motivation for LIS program.

Only 39.1% of respondents, both in Croatia and Turkey, reported that LIS school was their desired (i.e. first choice) study program when they were selecting your current field of study. The remaining 60.9% originally wanted to study something else, such as art and design, literature and linguistics, computer science, history, law, public administration, political science, education, psychology, pedagogy, physics, sociology etc. Majority of Croatian students, and all Turkish students decided to study LIS last minute i.e. at the end of their secondary education and not long before they had to decide what to study. Only 17.4% of respondents in Croatia reached this decision earlier, i.e. during their secondary education. Despite the fact that the majority of respondents (60.9% in Croatia and 82.2% in Turkey) first heard about the LIS program through word-of-mouth (from family members, friends, teachers, librarians etc.), for none of the respondents the LIS profession was a dream career from childhood. A smaller proportion of respondents (39.1% in Croatia and 17.8% in Turkey) learned about LIS program from the catalogue of the study programs. (Table 6)

Table 6. Decision about LIS school

LIS School decision	Croatia (%)	Turkey (%)
not long before I had to decide what to study	82.6	100
during my secondary education	17.4	0.0
in my childhood	0.0	0.0

When asked to explain why they enrolled in the LIS program the majority of Turkish students said that they chose this program because it was recommended to them by their friends, family members etc. (58.7%). Croatian students were, on the other hand, to the largest degree motivated by the diversity of career options within the profession (47.8%). Interestingly, the failure to enroll in the preferred program due to entry requirements (GPA, entrance points etc.) was the second most frequently listed reason for enrolling in the LIS program for both groups of respondents (34.8% for Croatian students and 37.0% for Turkish students). Good job market was a more important motivator for Turkish students (30.4%) than for Croatian (17.4%). Respondents were least frequently attracted to this profession by public image and the status of the profession in the society (13.0% in Croatia and 4.3% in Turkey) and expected compensations and benefits, such as expected income (8.7% both in Croatia and Turkey) (Table 7).

Table 7. Motivation for LIS study

	%	
Study motivation	Croatia	Turkey
personal recommendation	21.7	58.7
this was the only study program I could enroll	34.8	37.0
diversity of career options within the profession	47.8	28.3
I like working with computers and new technologies	26.1	34.8
I like books and reading	26.1	32.6
good job market	17.4	30.4
I like working with people	30.4	19.6
nature of the work	21.7	15.2
job security	26.1	13
compensation and benefits	8.7	8.7
public image and the status of the profession in the	13.0	4.3
society		

Perception of LIS program.

In this section of the survey respondents were asked a number of questions to gain insight into their perception about the specific LIS program in which they are enrolled. The respondents' interest in subjects/specializations offered in their academic programs is shown in Table 8. Turkish students indicated the largest interest for specialization tracks in knowledge management (Mean 3.74), information technology (database development, software development, data mining etc.) (Mean 3.61) and librarianship (Mean 3.61). On the other hand, Croatian students reported the largest interest for knowledge management (Mean 3.78), information technologies (Mean 3.78) and creative industries and publishing (Mean 3.65). The lowest interest by both groups of respondents is recorded for records and archives management (Mean 2.80).

For the majority of respondents (69.6%), both from Croatia and Turkey, the preferred choice of specialization track did not change over the course of their study. However, 30.4% reported that they changed their mind about which specialty track to pursue, and in most case the initial interest in (traditional) libraries was replaced by interest in IT.

Table 8. Preferred specialization tracks

Specialization track	M	Mean	
	Croatia	Turkey	
knowledge management	3.78	3.74	
information technology	3.78	3.61	
librarianship	3.26	3.61	
digital humanities	3.43	3.37	
data science (research data management)	3.52	3.28	
creative industries and publishing	3.65	3.22	
museum studies	3.17	3.30	
records and archives management	2.83	2.78	

Although their arrangement slightly differs, both groups of respondents indicated the following types of knowledge and skills among the most important ones for LIS professionals: information literacy (Mean 4.65), information behavior and retrieval (Mean 4.39 for Croatian students and Mean 4.67 for Turkish students), and IT skills (Mean 4.26 for Croatian students and 4.72 for Turkish students).

Table 9. Most important knowledge and skills for LIS professionals

LIS knowledge and skills	Mean	
	Croatia	Turkey
information literacy	4.65	4.65
information behavior and retrieval	4.39	4.67
IT skills	4.26	4.72
knowledge organization and management	4.04	4.54
communication skills (written and spoken)	4.35	4.39
knowledge of practice in the field	4.26	4.37
team work and collaboration skills	4.17	4.37
knowledge of legal issues and ethics	3.83	4.52
knowledge of the theory of information studies	4.39	4.24
knowledge of research design and data analysis	4.13	4.28
interpersonal or "people skills"	4.00	4.33
foreign language	4.39	4.07
problem-solving skills	3.96	4.24

intercultural communication (in multicultural	4.22	4.11
society)		
project management skills	3.65	4.37
marketing and fundraising skills	3.74	4.02
management and entrepreneurial skills	3.70	3.98
leadership skills	3.65	3.80
pedagogical knowledge and skills	3.65	3.78
ability to work under pressure	3.57	3.67

While Turkish students rated highly also the knowledge of legal issues and ethics (Mean 4.52), Croatian students gave more preference to the knowledge of the theory of information studies (Mean 4.39). On the other hand, ability to work under pressure, management and entrepreneurial skills, leadership skills, and pedagogical knowledge and skills were reported among the least important. Full list is shown in

The relationship between faculty members and students (Mean 4.09 and 3.87, for Croatian and Turkish students respectively) was indicated by both groups of respondents as the best dimension of their LIS programs. Turkish students also rated highly the overall quality of their program (Mean 3.78) and quality of academic advising (e.g. information on degree requirements) (Mean 3.67). On the other hand Croatian students rated highly the amount of practical training (Mean 3.52) and range and number of core courses (Mean 3.48) in their program. Both Croatian and Turkish students were least satisfied with the range and number of elective courses (Mean 2.96 and Mean 3.13 respectively) and quality of career advising (Mean 3.22 and 3.02 respectively). Turkish students, in addition, rated poorly the amount of practical training in their study programs (Mean 2.52) while, on the other hand, Croatian students were poorly satisfied with the amount of IT courses (Mean 3.13) in their program (Table 10).

Table 10. Dimensions of LIS programs

LIS program dimension	Me	ean
	Croati	Turke
	a	y
relationship between faculty members and students	4.09	3.87
overall quality of the program	3.35	3.78
quality of the academic advising	3.35	3.67
range and number of core courses	3.48	3.33
preparation for a professional career	3.35	3.28
teaching methods and pedagogical approach	3.30	3.09
amount of IT courses	3.13	3.09
quality of the career advising (e.g. information about employment	3.22	3.02
opportunities)		
range and number for elective courses	2.96	3.13
amount of practical training	3.52	2.52

The majority of respondents in both groups believe that the education of future LIS professionals should include more practical training than instruction (65.2% for Croatian students and 56.5% for Turkish students). Slightly over one third of respondents, both in Croatia and Turkey (34.8% and 37.0% respectively) indicated that equal amount of instruction and practical training is required. Only 6.5% of Turkish students think that more instruction than practical training should be included in the LIS programs.

In line with data in Table 1 (the make-up of the sample), but in contrast to the data in Table 3 (LIS as female profession), 82.6% of respondents in Croatia and 93.5% in Turkey reported that there are more

female students in their Department. Much smaller proportion, both in Croatia and Turkey (17.4% and 6.5% respectively) indicated that both genders are equally represented. (Table 11)

Table 11. Gender distribution at Departments

Gender distribution	%	
	Croatia	Turkey
more female students	82.6	93.5
both genders are equally represented	17.4	6.5
more male students	0.0	0.0

During their studies, a larger proportion of respondents in Turkey than in Croatia attended a professional or scholarly conference (97.6% and 44.4% respectively%). However, a larger proportion of Croatian students presented a paper, poster etc. at such an event (77.8% for Croatian students and 22.0% for Turkish students). While Turkish students reported more frequently that they hold membership in professional associations (e.g. ASIS&T or national professional association), Croatian students reported more frequently that they have spent some tima abroad in a student exchange program (e.g. Erasmus program, international summer schools). (Table 12)

Table 12. Students activities

Student activities	%	
	Croatia	Turkey
attended a professional or scholarly conference	44.4	97.6
presented a paper, poster at a conference	77.8	22.0
hold a membership in professional association	11.1	26.8
spent some time abroad in a student exchange program	22.2	14.6
had one or more papers accepted for publication as sole author or co-	11.1	4.9
author		

A total of 82.6% of respondents in both study groups indicated that their academic program was a discipline based i.e. academic, meaning that it provides them with competences required for a work in wide range of institutions of which libraries are just one subset. 17.4% reported that their academic program was vocational i. e. profession-centred and that it prepares them for a specific vocational position e.g. a librarian. Ultimately, when asked whether their LIS program provides them with a realistic understanding of what it is like to work in the information field, 47.8% of Turkish and 43.4% of Croatian respondents agreed, while 13.1% in Turkey and 8.7% in Croatia disagreed. The remaining 39.1% (Turkey) and 47.8% (Croatia) neither agreed nor disagreed.

When asked about the preferred title they would like to be given after graduation, the largest majority of respondents (69.6%) from Turkey indicated information manager. In contrast, only 17.4% respondents from Croatia chose this option. Information specialist was the title with highest response rate among Croatian students (60.9%). Interestingly, in both countries information specialist was given the same level of preference. This was followed by librarian (47.8% in Turkey, 26.1% in Croatia), digital librarian (41.3% in Turkey, 26.1% in Croatia) and information architect (41.3% in Turkey, 13.0% in Croatia). Less than a quarter reported the following preferred titles: web designer (26.1% in Turkey, 24.8% in Croatia), software developer (13.0% in Turkey, 30.4% in Croatia), data librarian (21.7% in Turkey, 8.7% in Croatia) and data curator (8.7% in both Turkey and Croatia).

When asked about their plans after graduation, 71.4% in Croatia and 56.8% in Turkey reported that they would seek employment in this field. Only 4.85% respondents in Croatia and 13.6% in Turkey indicated

that they would seek employment in another field. Much smaller proportion of respondents reported that they would pursue further education in this or another field. (Table 13)

Table 13. Plans after graduation

Post-graduation plans	%		
	Croatia	Turkey	
Seek employment in this field	71.4	56.8	
Seek employment in another	4.8	13.6	
field			
Pursue education in this field	4.8	18.2	
Pursue education in another	11.4	11.4	
field			

Finally, in this section respondents were asked about direction in which they think their Department and LIS program should move in future. As shown in Table 14, the majority of respondents both in Croatia and Turkey thinks that in the program more emphasis should be given to professional work and practical experience (91.3% and 71.7% respectively), information technology (69.6% and 63.0% respectively) and greater integration of different areas of studies/departments such as archives, information science, library science, communication, computer science, marketing, business studies, history etc (47.8% and 65.2% respectively).

Table 14. Future directions for LIS programs

Future directions for LIS program	%	
	Croatia	Turkey
more emphasis on professional work and practical experience	91.3	71.7
more emphasis on information technology	69.6	63.0
greater integration of different areas of studies/departments	47.8	65.2
more joint and collaborative programs with other departments	34.8	52.2
increased offerings via distance education (web-delivered courses)	26.1	41.3
more emphasis on student research and thesis	26.1	28.3
recruitment of faculty members from a broader range of disciplinary	8.7	26.1
backgrounds		
increasing the size of the school by hiring more faculty members and	4.3	10.9
accepting more students		
more emphasis on theoretical foundations	0.0	2.2

Career perception and expectations. A total of 60.9% respondents in Croatia and 58.7% in Turkey are satisfied with their choice of (LIS) profession/career, and would chose the same program again, because (as explained in an open ended question) they believe it offers them a wide array of job opportunities/career choices and they think that they stand a good chance to find a job because they obtained diverse knowledge (interdisciplinarity). On the other hand, 39.1% of respondents in Croatia and 43.5% in Turkey who would not pursue the same studies (LIS program) if they could choose again elaborated (in an open ended question) that they are confused about their career options, they expected more IT courses and IT intensive practical training, and in their opinion too much emphasis in the program was placed on librarianship. Several respondents reported that they are not satisfied with the (LIS) profession because it was not their first choice career and they are not interested in this kind of profession.

A total of 56.5% of respondents in Croatia and 73.9% in Turkey reported that their perception of LIS profession changed since they started their studies, and they further explained that the change was in most cases a positive one. Before the study they didn't even know what was LIS about and during their study program they realized that the field is much more complex, wider and diverse than they initially thought, it is more IT intensive than they thought and the job opportunities are wider. Those who indicated that their perception of LIS profession became more negative, reported that they find it dull and too often limited only to librarianship. For 43.5% of respondents in Croatia and 26.1% in Turkey the perception of LIS profession did no tchange since they started their studies. 87.0% of respondents in Croatia and 58.7% in Turkey would reccommend LIS profession to their friends because, in the words of several respondents: "Anyone can find something that they like in LIS, like I did.", and "It is interesting and there are many fields so almost everyone can find something they like."

Overall, the majority of respondents in both countries (60.9% in Croatia and 65.2% in Turkey) think that their study program prepared them well for a professional career. Only 17.4% in Croatia and 4.4% in Turkey 8.9% disagree on this, and 21.7% in Croatia and 30.4% in Turkey neither agree nor disagree. While 30.4% of respondents in both countries think that the job market for librarians and information professionals is poor (they think that they will not be able to find a job), 8.7% in Croatia and 6.5% in Turkey think it is good (they believe that they will not have any problems in finding a job).

However, the largest portion of respondents (60.9% in Croatia and 63.0% in Turkey) reported that the finding the job will not be too problematic. Also, 47.8% in Croatia and 37.0% in Turkey believe that their income and benefits, if employed in LIS profession, will be satisfactory and sufficient to cover their living cost. 17.4% in Croatia and 30.4% in Turkey disagrees with. About a third in both countries (34.8% in Croatia and 32.6% in Turkey) does not have an opinion on this issue.

In the final question, students had an option to comment on any aspect of their study program or the information profession that they think may be of interest to this study, and which was not covered by the survey. Received comments referred mainly to a demand to increase the amount of practical training (internships), introduction of online courses and the separation of different specialization tracks (e.g. library and IT track) so that students can focus on their preferred area of specialization.

Concluding discussion

LIS Profession.

The results show that, in comparison with Turkish respondents, students in Croatia are younger and do not have any LIS related work experience prior to enroling into the LIS program. Both Croatia and Turkey perceive LIS as highly interdsiciplinary, IT intensive profession with tight connections with education and culture. They also believe that it has an important social role regarding democracy, intellectutal freedom, multiculturalism, social inclusion, human rights etc.

Although the number of female students is predominant at both departments, respondents do not think that it is a female profession. Also, majority of respondents does not see LIS profession as belonging to a profit-making sector. Both Croatian and Turkish students agree that LIS profession does not have a positive public image. With respect to the occupational prestige, respondents on average rate the status of the profession within society low.

Nevertheless, majority of respondents in both countries is optimistic about the future of LIS profession and they believe that it will be more important in 20 years than it is now.

LIS programs.

More than half of the respondents from both countries admitted that degree in LIS was not their first choice and none dreamed about becoming a librarian/information professional since their childhood. When asked to explain why they chose to enroll in this program the respondents from Turkey reported most frequently personal recommendation of a family member, friend or teacher. Croatian students, on the other hand were most frequently motivated by diverse employment opportunities. While professional image and status within the society, along with expected compensations and benefits (e.g. expected income), were reported least frequently as motivational factors for pursuing the LIS program, the failure to enroll in the preferred program was the second most frequently listed reason for enrolling in the LIS program for both groups of respondents. The study asked respondents to indicate their potential interest in different subjects/specialization tracks in the program, including knowledge management, information technology, librarianship, digital humanities, data science, creative industries, museum studies and records and archives management. Both groups of respondents indicated the highest interest for knowledge management and information technology (database development, software development, data mining etc.). While in Turkey, librarianship attracted the same level of interest as these two tracks, in Croatia the respondents indicated creative industries and publishing as the third most popular specialization. For the majority of respondents, both from Croatia and Turkey, the preferred choice of specialization track did not change over the course of their study. The lowest interest, by both groups of respondents, was reported for museum studies and records and archives management.

Furthermore, respondents were asked to rate the importance of various areas of study in their program. They rated information literacy, information behaviour and retrieval and IT skilles, as the most important areas of study, and leadership skills, pedagogical knowledge and skills, and ability to work under pressure as the least important. The findings suggest that, in relation to the best dimensions of their LIS programs, respondents are highly satisfied with the relationship that they have with their teachers. While Turkish students also rated highly the overall quality of their program and quality of academic advising (e.g. information on degree requirements), Croatian students rated highly the amount of practical training and range and number of core courses in their program. Both Croatian and Turkish students were least satisfied with the range and number of elective courses and quality of career advising. The majority of respondents in both groups believe that the education of future LIS professionals should in general include more practical training than instruction, which is in line with the findings of similar previous studies.

LIS Career.

In general, findings indicate that majority of respondents are satisfied with their choice of profession/career and that they would recomment it to their friends because it is wide and diverse area, although LIS degree was not their first choice. While some respondents reported that they initially had only a vague idea about what LIS actually was, the perception of the field and the profession by the majority of respondents improved over the course of their studies. Finally, respondents are relatively optimistic about their employment opportunities (although finding a job might take some time). This is also in line with the findings of similar studies.

The aim of this paper was to share data collected in the first phase of multi-national study which investigated students' perceptions of LIS profession and LIS programs. In the paper only a portion of the preliminary results were presented, namely data collected from a small group of last year undergraduate students at two LIS departments in Croatia and Turkey. This localized snapshot of mixed views of student perceptions raises many questions and cannot be readily applied to other contexts.

Since educational experience for LIS students differes among different countries, and sometimes even across one country, a larger study is under way which will include more students (both at undergraduate, graduate and postgraduate level) and students from other LIS departments across Europe. This approach will hopefully, remove limitations recognized in this study and contribute towards a more complete understanding of this phenomena at European level.

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