
An Experimental use of social media platforms in information retrieval from the Perspective of the Library Managers

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Abstract: The aim of this study is to investigate private Jordanian universities' use of social networking sites, and its impact on the provided information services from the perspective of the directors themselves. It also identifies some of the difficulties and obstacles that limit the use on those sites in the libraries of the study populations. A questionnaire was used as a measurement tool, and the study's population consisted of the directors of Jordanian private university libraries for the academic year 2019-2020. Of the contacted 17 directors in the sample, 13 responded, which constitutes 76.47% participation. Surveys and both historical approaches and case study were used as they constitute an appropriate method for studies of this kind. The study finds that library study samples' use of social networking sites was very weak, with an average score of 2.17, which indicates lack of its impact specifically on the improvement of the services they provide, where the total impact score was 0.468. The study also finds many difficulties and obstacles limiting the use of library directors in private Jordanian universities of social networking. The most prominent result was the weakness of their systems and of the instructions used to guide the establishment of websites for the study population. In that light, the study recommends urgent use of social networking sites among private university library directors in their libraries and using them to improve the services that they provide for the benefit of the community. This is important because it has now become a pressing need for all organizations and their customer bases. The study also recommends that the senior management of universities' study population reformulate their systems and instructions to best facilitate the establishment of library pages for them on social networking sites, in order to improve the provided information services.

Key Words: University Libraries, Social Networking Sites, Information Services.

1. Introduction:

In our current time, the world witnesses a number of transformations and changes, none of which are expected to stop at any given point. These transformations have resulted from the large, ongoing, and corresponding 'Revolutions' in the fields of information and communication as well as the developments that accompanied them (Bouziane, 2004). Organizations of all different shapes, sizes, and areas of interest have also undergone to such changes and transformations (Ammar, 2000). Organizations have been encountering a number of increasing pressure to improve the quality of their products, reduce costs, and compete in the production of services. This has required them to search for innovative solutions to enable them to confront and embrace these challenges, and to ensure that they continue to thrive in an environment characterized by rapid change and fierce competition (Hamshari, 2013).

Libraries and information centers have never been an exception to these challenges and transformations. They have faced, along with many other organizations, a number of challenges that have made them search for innovative solutions that enable them to face these challenges (Al Bataineh et al, 2021 and Al-Hindawi, 2007).

In this context, Dr Corbyn (1988) (cited in Humaidat , 2015: 45) states that “Not many librarians fully realize that they are in the midst of what we could consider not just one revolution, or two revolutions, but several concurrent revolutions that are affecting one another, and when they collide and influence one another, they will become both ubiquitous *and* painful, as was the case in the Industrial Revolution of the nineteenth century.” He continues, “Society, as we see it today, will collapse if the computers, information, and communications suddenly disappear.” Perhaps this was a warning for employees in libraries and information centers, and those responsible for managing them, of the need to prepare themselves for changes they may face as a result of these technological ‘revolutions’.

In Jordan, libraries and information centers, especially those in private universities, are striving to follow the current developments and innovations, and to increase interest in adapting to them. From the researcher’s own experience, many libraries have re-engineered their operations, re-designed their organizational structures, and increased investment in various technological assets. They have adopted the modern tools, methods, and applications that will confront the latest developments, their role in competition, and the maximum benefits they may reap that will ensure their survival, continuity, and quality (Al Bataineh et al, 2021 and Humaidat 2009). Perhaps the most prominent and recent of these means is social networking sites and the Web 2.0 applications that have emerged and become an essential part of the internet.

2. Literature Review

2.1 Previous Studies:

Al-Hajji and Al-Busaidi. (2018) conducted a study is to identify the experience of the main library of Sultan Qaboos University regrading utilizing social media networks such as Facebook, Twitter, and Instagram in marketing and promoting its services, providing knowledge to users, and interacting with comments and queries of the university community. The study collected data through a review list and interviews with members of social network committee at the library. Findings indicate that the library uses social media networks to deliver different services. These included instructions for using library services with 49.5%, and community services with 41.3%. The library account in YouTube received 9726 views. While 4028 visitors liked the Instagram photos, and 3056 visited the University Facebook page. The study also revealed that users like almost 92% of library messages delivered on social media networks. Comments and responses came from users of Twitter (94.1%), Instagram (52.8%) and Facebook (28.6%). In light of these findings, the study recommends that the main library should allocate more investments to its accounts at various social media networking platforms. Further, it needs to utilize social media networks in contacting the university community regarding selection of library materials.

Albosaidi, Al-Kindy, and Al-Saqri (2016) carried out a study to recognize the reality of utilizing social networking as marketing tools for information services in the academic libraries, as well as the nature of activities that can be implemented through the use of those networks, the services that can be developed under the development of the Internet, and how to activate their properties. The study adopted qualitative content analysis method and was applied on (26) academic libraries in the Arab Gulf Cooperation Council (GCC) which use the most widely

used social networks, namely Facebook and Twitter. The study results emphasize the importance of social networking sites and their marketing ability as tools in various information institutions. This study, thus, recommends providing training programs for workers in libraries to familiarize them with marketing activities and services that can be offered through social networks, and how to activate their characteristics.

Al-Suraihi and Al-Shihri. (2014) discusses the services that social networks can provide and contribute to the development and activation of learning resource centers in Saudi schools and how they can develop the services of the centers. The study aims to identify the social networks and their importance to the employees of learning resource centers, as well as to identify the degree to which the directors of the learning sources centers in Jeddah governorate use social networks and benefit from the learning sources centers. The study used the survey method as a data collection tool. A questionnaire was designed to collect the data from the directors of the learning resource centers in Jeddah governorate. The study concludes that social networks have an important role in supporting the work of these centers and activating communication with their audiences. Therefore, the study recommends the need for the Saudi Ministry of Education and the Departments of Education to adopt a clear-cut strategy that is viable to activate the use of social networks through learning resource centers. AlAwadhi, and Al-Daihani (2019) examine the use of social media in the marketing of academic library resources and services in Kuwait to identify the factors related to the use of social media applications in marketing academic libraries. In total, 89 valid questionnaires have been analyzed using descriptive and inferential statistics. The study provides insights into the factors related to the use of modern social media platforms to promote information resources and services at academic libraries to provide outreach services to current and potential users. This research also contributes to the field of information studies as it highlights the importance of using social media platforms in marketing academic library information resources and services. The study shows that the academic librarians have a positive perception toward the use of social media. The identified factors relating to the use of social media for marketing library information resources and services are the usefulness of social media tools in raising awareness and in providing needs analysis and satisfaction assessments. By contrast, management support for the use of social media for library marketing was found poor. As a result, the study recommends that library administrators could use the results to develop social media marketing plans to effectively promote their library resources.

Jones & Harvey (2019) propose that many libraries are opening accounts on social media platforms in an attempt to market their services and connect with potential users, and particularly young people. Research suggests a contradiction between the advice relating to marketing and that regarding the use of social media in libraries, with the former emphasizing the importance of the user at the center of all considerations and the latter placing library staff as central to decisions. The researchers attempt to re-address this imbalance by surveying the current state of library activity on Twitter and, by means of questionnaires, investigate the experiences and motivations of librarians (n=58) in using social media and whether students (n=498) are willing to engage with the library in this manner and why. The findings confirm that libraries investigated are indeed struggling to foster interest in their social media activities and go some way to understanding why this is so.

Mishra and Maharana (2019) pinpoint that academic libraries are progressively using social media platform to connect users, felicitate services, promote resources, reach the outreach, and enhance visibility through online presence. The study investigates the adoption rate of social media as an innovative medium to deliver services, explores influencing factors and examines the effectiveness of using social media tools in Indian business school libraries for the benefits of users. The findings demonstrate the approaches, strategies, and challenges of adopting social media for the benefits of library users. The study included Academic Business School Libraries based on the National Institute Ranking Framework (NIRF) of the year 2018. The finding of the study reveals that innovation has a significant influence in library marketing in respect of adopting and implements social media among business school libraries. The outcomes suggest that libraries should follow evidence-based, innovative practices for effectively implementing social media for the more significant benefit of patrons in a collaborative online environment.

In this paper, we will shed light on the state of private Jordanian university libraries' use of social networking sites from the perspective of the library directors themselves. Additionally, we will investigate the impact of these libraries' use of social networking on the improvement of information services, directly from the perspectives of these directors. Third, we will analyze the variables *qualifications, academic specialization, age, or years of experience* statistically to find out their impact on the use of social networking sites. Finally, we will outline the difficulties faced by directors that limit the use of social networking in their libraries.

Booker and Bandyopadhyay (2017:1) conducted a thorough review of the literature related to using social networking in public and private universities' libraries. the paper revealed that "few libraries have incorporated a social networking strategy into their broader marketing strategy. By contrast, the users preferred method of communication with the libraries was flyers in the library. Nonetheless, library users below the age of 35 preferred to get information from the library webpage".

Al-Kharousiyya et al. (2019) studied seven private and public academic libraries in Oman. Fifty-three participants underwent face-to face individual interviews. The findings revealed that only two out of seven libraries use Facebook, and only one (private) library uses Twitter. The library of Sultan Qaboos University used YouTube channel and Instagram on its Beta web site. The results also revealed internal factors for the lack of using social networking in the libraries. These include lack of awareness and training, lack of communication between academic libraries and library staff and IT staff, and lack of employees in libraries. On the other hand, the external factors involved lack of policy and regulations and weakness and low speed of the internet.

Al-Sawwah (2019) sought to identify the role of social media sites in promoting the concept of social accountability. The study applied practice methods to 400 university youth, divided into 200 individual in public universities and 200 individual in private universities. The results showed that Facebook was the most used social media site that the Egyptian youth prefers. Instagram, Twitter and Google Plus come next. "The majority of the sample confirmed that their motivation for social networking sites is manifold, foremost, the desire to develop knowledge and information in various fields and topics, followed by a slight difference the

desire to know the different views and trends of the topics and issues on the scene, and then to monitor the opinions and attitudes of friends and family towards these topics. and finally the results showed a positive tendency to the use of social media sites as a means of monitoring and evaluating the overall performance” (p. 210).

Saturday, Omeluzor, Oyovwe and Abayomi (2016) investigated librarians’ use of Social Networking in 173 private and public academic libraries in South-East, Nigeria.. Finding showed that that SN will be beneficial and cost effective for academic libraries to adopt. The challenges ito using SN in academic libraries were abrupt cut of power supply, inadequate skill to manipulate SN and other ICT tools, technophobia, lack of awareness, insufficient bandwidth, apathy in using modern technologies and lack of internet connection.

Islam & Habiba (2015) tried to discover the use and problems of marketing through social media that the private and public libraries and information professionals in Bangladesh face. Seventeen public universities and 24 private universities (24) as well as (5) special libraries in Bangladesh participated in the study. The findings showed that Facebook and LinkedIn most were highly used by the libraries for marketing of library and information services. Most of the libraries use social media for marketing library products and services, sharing library news and events, video conferencing, advertisement, and research purpose.

2.2 Problem of the Study

A great number of previous studies pertain to the issue of the use of social media in libraries and information centers in various respects. However, the specialized studies that point out the use of social networking sites by private Jordanian university libraries, along with their impact on improving the provided information services from the perspective of directors themselves, are rare and small in number. Similarly, the studies that addressed the obstacles and difficulties that limit the use of social media sites in these libraries are also very rare and small in number. Therefore, this study aims to fill these gaps by finding out the extent of using social networking sites by private Jordanian university libraries, and how this can improve the information services. Moreover, the study that will address the obstacles and difficulties that limit the use of social media sites in the Jordanian private libraries.

2.3 Importance of the Study

The importance of the study emerges from the precise nature of the topic with which it deals. It can be categorized into the following groups:

Theoretic importance: its contribution to the enrichment of knowledge published in English, in the fields of libraries and information management.

Practical Importance: its capacity to alert the directors and administrators of private university libraries in Jordan of the importance of using their libraries to promote social networking sites and their impacts on the improvement of the provided information services. Furthermore, the study seeks to pinpoint the obstacles and difficulties that limit the use of those libraries for social networking, and working to find innovative and intelligent solutions to overcome them.

2.4 Objectives and Questions of the Study:

This study aims to achieve its objectives through answering the following questions from the library directors' perspectives:

1. What is the state of private Jordanian university libraries' use of social networking sites from the perspective of the library directors themselves?
2. What is the impact of these libraries' use of social networking on the improvement of information services, directly from the perspectives of these directors?
3. Are there any statistically significant differences at the level of ($\alpha > 0.05$) which are attributable to the variables of *qualifications, academic specialization, age, or years of experience*, with respect to libraries' use of social networking from the perspective of their directors?
4. What are the difficulties faced by directors that limit the use of social networking in their libraries?

2.5 Terminology:

The study employs a number of key terms, including:

University Libraries: Procedurally, the libraries intended for this study are private university libraries in Jordan. The libraries that meet this criteria are: World Islamic Sciences and Education University, Al-Ahliyya Amman University, Philadelphia University, University of Petra, Jerash University, Zarqa University, Amman Arab University (AAU), Jadara University, Ajloun National University, Aqaba University of Technology, Al-Hussein Technical University, Applied Science Private University, Al-Isra University, Al-Zaytoonah University of Jordan, Irbid National University, Princess Sumaya University for Technology (PSUT), Middle East University (MEU), and American University of Madaba (AUM) (Jordanian Ministry of Higher Education website, 2018).

Social Networking Sites: The social networking sites that this study will analyze are: Facebook, Twitter, and YouTube. Additionally, these are the most used social networking sites, according to a report published by the Jordanian newspaper Al-Ghad on 24/03/2015 at 1:00AM by Ibrahim Mubaideen¹.

Information Services: This study will analyze all of the information services that private Jordanian university libraries provide for the general public: Technical Services (direct and indirect), and User Services.

Statistical Processing: The study population consists of all private university library directors in Jordan for the 2019-2020 Academic Year; the sample includes 17 directors, 13 of which responded, which constitutes a 76.47% participation rate. Surveys and both historical approaches and case studies in this study as they are an appropriate method for studies of this kind.

¹ Although in the Social Networking Sites, there is a statistic in 'Al-Ghad newspaper' indicating that the number of WhatsApp user accounts in Jordan reached 6 million accounts against 4 million accounts on Facebook, the responses of the study sample indicated that they mainly use facebook for library services.

3. Methodology

3.1 Study population:

The study population consisted of all directors of private university libraries in Jordan for the academic year 2019/2020, which had a number of (17) directors. The researcher contacted them by email and telephone and explained to them how to fill in the questionnaire. The directors were given two weeks to get the questionnaires completed. They were also instructed that they can contact the researchers directly if they have any inquiries. Only (13) directors returned the questionnaires by email which made up (76.47%). For this survey, the historical approach and case study method were used.

3.2 The study tool:

In the light of the study's questions and objectives, a questionnaire was designed after reviewing related literature and benefitting from the researcher's practical experience. The study tool consisted of five main sections and was distributed as follows: The first section relates to demographics– personal information - (academic qualification, specialization, age, years of experience), while the second section included the objective determinants of the library that each director takes into consideration. This section included 7 specialized questions on social networking sites and the number of students of each university. The third section contained 19 paragraphs related to the state of the use of libraries by the study population for social networking sites. The fourth section included paragraphs related to determining the impact of the use of social networking sites for the provided library services, and this section included 23 paragraphs. The last section included paragraphs related to identifying difficulties that library directors face (members of the study population) in using social networking sites in their libraries, and this section included 10 main paragraphs.

3.3 Validity:

The content of the study tool was verified by presenting it to a group of reviewers from specialized faculty members who have experience in library and information science. The tool was also reviewed by specialists in management and social media; total number was (13). They were asked to judge each of the paragraphs of the questionnaire in terms of: clarity, wording, and relevance to the field under which it was classified. Then, some paragraphs were omitted, modified or added. Thus, based on the opinions of the reviewers and their comments, the tool was reformulated by deleting some paragraphs and adding paragraphs and merging some of them. The final draft consisted of (52) paragraphs. The views of the reviewers were a good proof of the validity of the tool content.

The Five-Likert scale was used for each paragraph in the tool related to the use of the study population of social networking sites. The aim of using this scale was to determine the impact of the use of social networking sites on the library services provided. Notably, this scale gives the respondents more space to give their answers precisely. The scale was as follows:

5 Strongly agree, 4 Agree, 3 Neutral, 2 Disagree, 1 Strongly disagree

While a Three-Likert scale was used for each paragraph in the tool related to the difficulties faced by library directors in employing social networking sites in their libraries. This scale enables the researchers to have precise results as there may exist very little difference

between *Strongly agree* and *Agree*, and *Disagree* and *Strongly disagree*. Thus, the three main categories are: 3 *Agree*, 2 *Neutral*, 1 *Disagree*.

3.4 Reliability:

To verify the reliability of the study tool, the researcher used the Cronbach Alpha Coefficient test on the study data that consisted of 17 respondents and 52 paragraphs. The results indicated that the value of the Cronbach Alpha Coefficient is excellent as shown below.

Table 1 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.401	.636		2.205	.092
	Library usage	.225	.281	.372	.801	.468

a. Predictors: (Constant), libraryusage

b. Dependent Variable: imp

Table 2 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.115	1	.115	.642	.468 ^b
	Residual	.719	4	.180		
	Total	.835	5			

4. Results:

Question 1: What is the state of private Jordanian university libraries' use of social networking sites from the perspective of the library directors themselves?

The statistical analysis of the responses collected from the study population shows that the use of social networking sites by the libraries' study sample is very weak, with an average score of 2.17, where only 6 libraries of the entire study sample have pages on social networking sites, which constitutes only 46.1%. Facebook is the only social networking site used by these libraries. Further, there are 7 libraries that do not have a page on a social networking site, which constitutes 53.8%, as shown in Table 3: This finding is not surprising as using social networking sites like Facebook by the Jordanian libraries is still novel and not mandatory. The library directors are not aware of the importance of the social networking sites. This result is in agreement with Jones and Harvey (2019) who confirmed that libraries are indeed struggling to foster interest in their social media activities. On the other hand, the present result is in disagreement with Bataineh et al, (2021); Mishra and Maharana (2019); AlAwadhi, and Al-Daihani (2019) who pinpoint that the academic librarians have a positive perception toward the use of social media.

Table 3 Using of social networking site

With a social networking site	Without a social networking site
6	7
46.1%	53.8%

Question 2: What is the impact of these libraries' use of social networking on the improvement of the provided information services, also directly from their own perspectives?

The results of statistical analysis of individual responses directly from library directors of the study sample shows that there is no impact of private Jordanian university libraries' use of social networking sites upon the improvement of the provided information services. The total impact score reaches only 0.468%, which is the expected result where the use of these sites by the libraries in question is very weak, as is evident in the results for Question 1. This finding consents with Jones and Harvey (2019) who confirmed that libraries are indeed struggling to foster interest in their social media activities. The libraries of the study population that have social networking pages use them for the purposes listed in Table 4, in descending order according to mean.

Table 4 Descriptive Statistics

Descriptive Statistics					
Uses of Social Networking Sites	N	Minimum	Maximum	Mean	Std. Deviation
Book reservation purposes	6	3	4	3.67	.516
Renewing book loans.	6	1	4	3.17	1.169
Allowing followers to add educational posts.	6	1	4	2.83	1.329
Displaying excerpts and indicators on the sites.	6	1	4	2.83	1.169

Advertising urgent and important events.	6	1	4	2.50	1.378
Allowing administrators to share sources of information.	6	1	4	2.50	1.049
Producing an objective analysis of various sources of information.	6	1	4	2.50	1.225
Holding conferences, webinars, and meetings.	6	1	4	2.33	1.366
Holding cultural events and competitions.	6	1	4	2.17	1.472
Exchanging opinions and perspectives on sources of information.	6	1	4	2.00	1.095
Allowing admins to facilitate one-on-one conversations.	6	1	3	2.00	.894
Exchanging data and bibliographic records.	6	1	3	2.00	1.095
Establishing “friends of the library” discussion groups.	6	1	3	1.83	.753
Issuing electronic library subscriptions.	6	1	3	1.67	.816
Introducing and advertising the provided services.	6	1	3	1.50	.837
Offering guidance and advice.	6	1	2	1.50	.548

Answering questions and queries from page followers.	6	1	2	1.50	.548
Introducing newly acquired sources of information to the community.	6	1	2	1.50	.548
Advertise activities and events at the library.	6	1	2	1.33	.516
Use	6	1.42	3.26	2.175 4	.67456
Valid N (listwise)	6				

Question 3: Are there any statistically significant differences at the level of ($\alpha > 0.05$) attributable to the variables of qualifications, academic specializations, and ages, or years of experience, with respect to the libraries' use of social networking from the perspective of their directors?

Statistical analysis of the individual responses of the study shows that there are no statistically significant differences at the level of ($\alpha > 0.05$) that are attributable to the variables of qualifications and ages. However, there *are* such differences with regard to the variables of *academic specializations* and *years of experience*, where the percentage of those non-specialized in library and information sciences is 53.8%, and the percentage of directors with over 10 years of experience is 67.8%. This result indicates the direct, significant impact on the results of Questions 1 and 2, in which the directors were specialized, and fully trained and knowledgeable in library and information sciences in terms of: the services they are obligated to provide; the goals of establishing them; the functions they are obligated to perform; their need to be fully aware of the clients' needs and how to communicate with them; the recent establishment of these social networking sites; and the need for advanced computer skills in order to use them. Many directors with more than 10 years of experience may miss these services, since they studied in universities at a time before the need to use social networking sites, and may fail to understand the importance of investing in them in order to improve the quality of existing information services, as shown in Table 5:

Table 5 Variables of qualifications, academic specializations, ages, and years of experience

Qualifications	Bachelor's Degree	Higher Diploma	Master's Degree	Doctorate
	6	0	2	5
	42.85 %		15.3%	35.71%
Academic Specialization	Libraries		Not Specialized	
	6		7	
	42.85%		53.8%	
Age	30-40	41-51	Above 52	
	4	4	5	
	30.7%	30.7%	35.71%	
Years of Experience	1-5	6-9	More than 10	
	5	0	8	
	42.2%	0	67.8%	

Question 4: What are the difficulties faced by directors that limit the use of social networking in their libraries?

The statistical analysis of the responses to this study shows that there are some prominent difficulties that limit the use of social networking sites by the libraries in question, despite that the responses indicate that there is no deficit in technological infrastructure that guides the establishment of social networking pages, which have a mean of 53.8%. However, their largest obstacle is in the weakness of their systems and the instructions used to guide the establishment of social networking pages. This difficulty, again, has a mean of 53.8%. This finding concurs with AlAwadhi, and Al-Daihani (2019) and Hamidat (2009) who approved that the academic librarians have no clear systems and the instructions to guide them. The second difficulty is that “there are no specialized individuals to manage these pages,” a view held by 46.2% of the study population, as shown in Table 5. This result is in agreement with AlAwadhi, and Al-Daihani (2019) who found that management support for the use of social media for libraries was found poor.

The aforementioned results emphasize the importance of social networking in supporting the work of the libraries. These concur with the previous studies like Al-Hajji and Al-Busaidi

(2018); Hamidat (2009); Albosaidi, Al-Kindy, and Al-Saqri (2016); Al-Suraihi and Al-Shihri (2014); AlAwadhi, and Al-Daihani (2019) and Jones & Harvey (2019).

Table 6: Difficulties faced by directors

1. Weakness of systems and instructions used to guide the establishment of social networking pages. VAR00001					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7	53.8	53.8	53.8
	2	2	15.4	15.4	69.2
	3	4	30.8	30.8	100.0
	Tota l	13	100.0	100.0	
2. Weaknesses of the technological infrastructure used to guide the establishment of social networking pages. VAR00002					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	23.1	23.1	23.1
	2	3	23.1	23.1	46.2
	3	7	53.8	53.8	100.0
	Tota l	13	100.0	100.0	
3. Lack of awareness of university management of the importance of social networking in library management work. VAR00003					

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	30.8	30.8	30.8
	2	5	38.5	38.5	69.2
	3	4	30.8	30.8	100.0
	Total	13	100.0	100.0	

**4. Lack of qualified individuals to administer social networking pages.
 VAR00004**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	46.2	46.2	46.2
	2	3	23.1	23.1	69.2
	3	4	30.8	30.8	100.0
	Total	13	100.0	100.0	

**5. Limited services provided by the library, and the lack of the need to establish social networking pages.
 VAR00005**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	15.4	15.4	15.4
	2	4	30.8	30.8	46.2

	3	7	53.8	53.8	100.0
	Tota l	13	100.0	100.0	

6. Avoidance of the problems occurring between followers of the pages as a result of the different tendencies and scientific and cultural trends.
VAR00006

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	38.5	38.5	38.5
	2	2	15.4	15.4	53.8
	3	6	46.2	46.2	100.0
	Tota l	13	100.0	100.0	

7. Conviction of lack of effect of use of social networking sites upon the improvement of the quality of services.
VAR00007

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	30.8	30.8	30.8
	2	3	23.1	23.1	53.8
	3	6	46.2	46.2	100.0
	Tota l	13	100.0	100.0	

8. University community's lack of interaction on official library social media sites, and its reliance on traditional communication.
VAR00008

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	15.4	15.4	15.4
	2	1	7.7	7.7	23.1
	3	10	76.9	76.9	100.0
	Total	13	100.0	100.0	

9. Maintenance of privacy of libraries and their users
VAR00009

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	15.4	15.4	15.4
	2	1	7.7	7.7	23.1
	3	10	76.9	76.9	100.0
	Total	13	100.0	100.0	

10. Fear of hacking.
VAR000010

		Frequency	Percent	Valid Percent	Cumulative Percent
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Valid	1	3	23.1	23.1	23.1
	2	1	7.7	7.7	30.8
	3	9	69.2	69.2	100.0
	Tota l	13	100.0	100.0	

5. Findings and Recommendations:

5.1 Findings:

1. The use of social networking sites by Jordanian private university libraries is very weak.
2. From the perspective of directors themselves, there is no significant impact of the use of such sites by university libraries on the improvement of the provided information services.
3. There is a statistically significant difference, at the level of ($\alpha > 0.05$), among libraries' use of social networking. This difference is attributable to two of the four variables of the study: *academic specialization* and *experience*.
4. There is a significant weakness in the systems and the instructions used to guide the establishment of these social networking pages. From the directors' own perspectives, this is the biggest challenge that impedes their use by library directors.

5.2 Recommendations:

In light of the results, the study recommends the following:

1. Private Jordanian university libraries' urgently need to use social networks to improve the provided information services to the general public and to all of the organizations and individuals who may benefit from such services.
2. Universities need to reformulate their systems and their instructions used to guide the establishment of these social networking pages by Jordanian private university libraries.
3. Library directors have to appoint people specialized in library and information sciences, fully aware of the goals and function of university libraries and their provided services, provided they have the technological skills to best invest in such technology that may help improve their services.
4. Private Jordanian university libraries do need to appoint technologically qualified individuals to establish and administer social networking pages, in order to achieve their goals, implement their functions, and improve the provided services.

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