



Citation: Panahi S, Roostaei N, Nemati-Anaraki L. Using social media for marketing library services in libraries of Iran, Tehran, and Shahid Beheshti medical universities. J Med Libr Inf Sci. 2021;2:e18.



Original article

Using Social Media for Marketing Library Services in Libraries of Iran, Tehran, and Shahid Beheshti Medical Universities

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Abstract

Recieved: 9 Oct 2020 Accepted: 21 Feb 2021

Keywords:Marketing

Library Services Social Media

* Corresponding author Nahid Roostaei nroostaei73@gmail.com **Introduction:** The use of social media for marketing academic library services is growing day by day. This study aims to investigate the use of social media in marketing services of libraries of Iran, Tehran, and Shahid Beheshti universities of medical sciences, based on the 4P marketing mix.

Methods: The study used a descriptive survey method. The self-administered questionnaire, designed based on the literature, was used for data collection. The questionnaire's content validity was confirmed by seeking the opinions of nine faculty members of the medical library and information science. The reliability of the questionnaire was also confirmed with an alpha coefficient of 0.95. The study population included all librarians working in the libraries of Iran, Tehran, and Shahid Beheshti universities of medical sciences with at least a bachelor's degree in librarianship (115 librarians). Descriptive statistics were used to analyze the data using SPSS V.24 software

Results: The status of using social media for marketing library services in libraries of Iran, Tehran, and Shahid Beheshti universities of medical sciences, based on 4P marketing mix, was as follows: price (cost-benefit) with an average of 2.4, place (social media) with an average of 2.36, product (library services) with an average of 2.29, and promotion with an average of 2.27. Their level of use in all four components of the 4P marketing mix was relatively unfavorable.

Conclusion: Due to the unfavorable level of using social media for marketing library services in these universities, it is necessary to encourage more effective planning to hold retraining and in-service courses in the areas of marketing, social media tools, and content production in these media to encourage medical librarians to know and use these tools in library services.

Introduction

cademic libraries have a pivotal role in meeting the information needs of users by providing quality information services and facilitating access to scientific information resources (1). The belief in librarians that users should be automatically attracted to libraries and use library products and services is outdated now and no longer valid (2). Given that today there are various tools to meet the information needs of users, in order to be active in the highly competitive information market, libraries need to review the librarians'

viewpoints on how to attract users, as well as need to change traditional ways of providing services and introducing library services and products to potential and actual users (3).

Nowadays, marketing is considered as a missing link in the information process that can take libraries out of their frozen state to help reduce current costs and attract more customers in today's information competition world (4). Marketing is defined as a process that helps managers achieve their goals (meeting the users' needs), reduce running costs, and attract



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more customers in today's competitive information world (5). There are good reasons for applying marketing principles to service organizations such as libraries, including obtaining financial support, retaining existing users and attracting actual and potential users, and most importantly, the existence of information competitors such as the Internet (6). Certainly, efficient and effective marketing will lead to increased use and ultimately more productivity in libraries, which is the ultimate goal of establishing institutions such as libraries (7).

Marketing is the library's ability to display library collections, programs, and services that can play an essential role in library branding and make the library a dynamic and vibrant organization in the views of the users(8). On the other hand, technological changes have increased the need to use web-based tools such as social media in libraries. Using these new tools for marketing library services can have positive results, including reducing marketing costs using this method compared to the traditional marketing methods, receiving and analyzing user feedbacks, attracting more users, obtaining a reputation and branding for the library, removing time and space constraints, and collaborative relationships between librarians and users (9, 10). Other benefits of using social media in libraries include the potential of social media in getting more results from marketing activities, such as high content visibility as it can be seen by thousands or even millions, and also the ability to use and share multimedia content on social media, with a much lower cost (11).

On the other hand, the use of social media can be significant in medical universities because there has been a rapid acceleration towards evidence-based practice among medical and health care sciences in recent decades compared to other sciences. In this situation, it is impossible to access relevant information as quickly as possible without using information and communication technology (12). Every year, a large amount of money is spent on subscribing to medical science databases in Iranian medical university libraries. However, studies show that the use and awareness of medical students of subscribed databases in medical universities in Tehran are lower than the expected average. Therefore, the use of social media tools for marketing and promoting library resources and services can be one of the proper solutions to the problems mentioned above and maintain the survival and development of the current library market (13). Marketing using social media can create added value for libraries in terms of increasing the cost-effectiveness of purchased resources. This occurs as the users' awareness, and use of available resources will increase due to marketing library services on social media (12).

Various models have been designed and developed to assess organizations' marketing situation, among which the 4P marketing mix proposed by McCarthy is more prevalent among researchers, and this model is often used in libraries. This model includes four components of the product, place, promotion, and price (7). A product can be a physical product, an idea, or a service provided by organizations to their customers. In libraries, a product is an information service provided to users by librarians (14). Place in the marketing mix is a term used to describe the location where products and services are offered. This concept is not just about physical location but can be a telephone or a computer terminal. It is the place to distribute library products and services (15).

Promotion includes all the activities and works done by the library to communicate with user groups and increase their awareness of library services and ultimately increase the library's productivity. Price is the amount of money a customer pays to get a product (16). However, academic libraries are non-profit service providers and offer their products and services free of charge. The price in libraries is calculated based on intangible returns and immaterial profits gained by users due to the use of the library. Instead of the term price, used in the 4P marketing mix, the term cost-benefit is much suitable for libraries (17).

The results of many internal studies such as (5, 14, 16, 18, 19) show that the level of familiarity of managers and librarians of public libraries in Iran with the concept of marketing is medium to high. Marketing services provided in these public libraries were limited to copy services, document delivery, and running regular workshops. Nevertheless, the use of social media for marketing library services in Iran has received less attention. Meanwhile, studies show that the number of users using social networks such as Telegram in Iran is 44.9% and is ranked 29th globally. Thus, it seems that social media can be a good platform for marketing library services. In addition, the study of Abtin (20), which examined the role of Web 2.0 in medical science library services, showed that one of the purposes of using social media in libraries was the marketing and advertising of library services. Searching the database indicated that no in-house research had been conducted specifically to examine librarians' views on social media use in the marketing of medical academic library services. Research has often been done either in public libraries (7, 21) or theoretically reviewed the literature on the concept of marketing and its applications in libraries (22).

Therefore, this study seeks to identify the use of social media in marketing services of libraries of medical universities (based on 4P marketing mix) from the perspective of librarians and administrators of these libraries and provides the necessary solutions to improve it.

Methods

The study used a descriptive survey method. The study population consists of all librarians working in libraries and medical centers of Iran, Tehran, and Shahid Beheshti universities of medical sciences, who worked at least with a bachelor's degree in librarianship in Tehran. A total of 130 librarians were identified, including three from central libraries, 27 from faculty libraries, and 44 from hospital libraries. A selfcompleted questionnaire was used to collect data, which was designed based on the literature review. The questionnaire included questions about the participants' demographic information, views on library marketing, familiarity and use of social media in the library, and the current status of marketing using social media in the library based on four components of the 4P marketing mix, including product (library services), place (social media), promotion and price (cost-benefit). The questions were arranged based on the Likert scale ranging from one (very little) to five (very much).

To determine the content validity of the questionnaire, nine experienced medical library, and information science faculty members, particularly those who had experiences in the field of marketing in libraries, reviewed and approved the questionnaire. The questionnaire's reliability was also confirmed with an alpha coefficient of 0.95, which indicated the questionnaire's internal consistency as acceptable. Out of 130 questionnaires sent to the entire population of librarians working with at least a bachelor's degree in librarianship in the three universities, 115 questionnaires (equivalent to 88%) were completed by the study population, and 15 questionnaires (equivalent to 12%) were returned without answers.

Data analysis was performed in two stages using SPSS 24 software. In the first stage, descriptive statistics including percentage, frequency, mean and standard deviation were used to describe the data. Also, to determine the marketing situation of libraries in each component of the 4P marketing mix, the four-part Nunnally's rating scale was used. Based on this spectrum, the mean is zero to 1.99 unfavorable, between 1.99 to 2.99, relatively unfavorable, between 2.99 to 3.99 relatively desirable, and above 3.99, desirable. In the second stage, the normality of the data was examined using the Kolmogorov-Smirnov test, and then, since the distribution of data was not normal, a non-parametric test was used to analyze the data.

Results

81.8% of the study population was women, and 18.2% was men. Most of them had a master's degree (65.2%) or a bachelor's degree (29.6%). The age group of 31 to 40 years with 55 people (48.7%), and then the age group over 40 years (39.8%) had the highest frequency. 67% of participating librarians worked in the library for more than ten years and 20% between 5-10 years.

The current status of using social media in marketing library services of Iran, Tehran, and Shahid Beheshti universities of medical sciences was examined from the perspective of librarians working in the above universities based on the 4P marketing mix components, including product (services), place (social media), promotion and price (cost-benefit). Table 1 shows the frequency distribution, standard deviation, and mean score of using social media in marketing library services of Iran, Tehran, and Shahid Beheshti universities of medical sciences according to the product component (library services) of the 4P marketing mix. The total mean score for the product component was 2.29. According to Nunnally's rating scale, as this is between 1.99 and 2.99, the status of using social media for marketing library services of the mentioned universities in the product component of the 4P model is in a relatively unfavorable situation.

The product component's highest scores were related to the following items: Asking the librarian services (M=2.77, SD=2.04), consulting services on educational and research topics (M=2.58, SD=17.17), and responding to database search requests on social media (M=2.52, SD=1.11), respectively. The results also showed that the two items of renewal/reservation services (M=1.88, SD=0.99) and special services of particular groups (M=1.88, SD=1.02) had the lowest score in the product component of the 4P marketing mix. In other words, the status of using social media for providing these two product items was reported to be unfavorable.

Table 1: Frequency distribution, standard deviation, and mean score of using social media in marketing library services of the surveyed libraries based on the product component of 4P marketing mix (n= 115)

	Marketing status using social media based on the product (service) component of the 4P model	Frequ	ıency / (_]		Standard			
Rank		Very Little	Little	Medium	Much	Very much	Mean	deviation
1	Asking the librarian service using social media	32 (28.6)	14 (12.5)	41 (36.6)	17 (15.2)	8 (7.1)	2.77	2.04
2	Consulting services on educational and research topics using social media	31 (27.7)	11 (9.8)	50 (44.6)	14 (12.5)	6 (5.4)	2.58	1.17
3	Responding to database search requests on social media	27 (24.1)	23 (20.5)	42 (37.5)	16 (14.3)	5 (3.6)	2.52	1.11
4	Educational services about reference databases and information bases in the field of medicine using social media	24 (21.4)	31 (27.7)	42 (37.5)	11 (9.8)	4 (3.06)	2.46	1.04
5	Document delivery services using social media	29 (25.9)	30 (26.8)	39 (34.8)	12 (10.7)	2 (1.8)	2.35	1.03
6	Production of electronic educational content	33 (29.5)	29 (25.9)	32 (28.6)	14 (12.5)	4 (3.6)	2.34	1.13
7	Selective dissemination of information (SDI) using social media	36 (32.1)	29 (25.9)	31 (27.7)	16 (14.3)	0 (0)	2.24	1.05
8	Indexing services on social media	52 (46.4)	18 (16.1)	42 (37.5)	0 (0)	0 (0)	1.91	0.91
9	Renewal/booking services using social media	58 (51.8)	13 (11.6)	37 (33)	4 (3.6)	0 (0)	1.88	0.91
10	Special services for specific groups using social media	60 (53.6)	11 (9.8)	35 (31.3)	6 (5.4)	0 (0)	1.88	1.02
	Total						2.29	1.14

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Table 2 shows the status of using social media in marketing library services of Iran, Tehran, and Shahid Beheshti universities of medical sciences according to the place component of the 4P marketing mix. As shown, the total mean for the place component was 2.36. As the mean is between 1.99 and 2.99, the current status of using social media for marketing library services in the studied

universities is relatively unfavorable. From the perspective of the studied librarians, the possibility of using social media in different platforms such as computer, tablet, and mobile devices (M=2.57, SD=1.21) has the highest score in the place component. The lowest score was for easy access due to the filtering of some social media (M=2.25, SD=1.12).

Table 2: Frequency distribution, standard deviation, and mean score of using social media in marketing library services of the surveyed libraries based on the place component of 4P marketing mix (n=115)

Rank	Marketing status using social media based on the place component of the 4P model	Frequ	ıency / (p		Standard			
		Very Little	Little	Medium	Much	Very much	Mean	deviation
1	Using social media on various platforms such as computer, tablet, and mobile devices	32 (28.6)	10 (8.9)	54 (48.2)	6 (5.4)	10 (8.9)	2.57	1.21
2	Speed of action in responding to comments on social media	38 (33.9)	13 (11.6)	43 (38.4)	12 (10.7)	6 (5.4)	2.41	1.21
3	Sharing links to electronic resources on social media	36 (32.1)	19 (17)	43 (38.4)	12 (10.7)	2 (1.8)	2.33	1.09
4	Protecting the security and privacy of users on social media	42 (37.5)	14 (12.5)	38 (33.9)	16 (14.3)	2 (1.8)	2.30	1.16
5	Providing 24-hour services on social media	44 (40)	13 (11.8)	41 (37.3)	0 (0)	12 (10.9)	2.30	1.29
6	Easy access to social media sites	42 (37.5)	16 (14.3)	40 (35.7)	12 (10.7)	2 (1.8)	2.25	1.12
	Total						2.36	1.18

Table 3 demonstrates the status of using social media in marketing library services of Iran, Tehran, and Shahid Beheshti universities of medical sciences according to the promotion component of the 4P marketing mix. It shows that the total mean score of the promotion component was 2.27. Since this average is between 1.99 and 2.99, the use of social media for marketing library services in the studied universities according to the promotion component is in a relatively unfavorable situation. Among the items related to the promotion component, promoting services provided by the library (M=2.72, SD=1.58) and sharing library news on social media (M=2.71, SD=1.15) received the highest scores. However, the creation of special discussion groups for specific scientific and literary groups (M=1.93, SD=1.05) had the lowest rank in the component of promotion.

Table 4 indicates the status of using social media in marketing library services of Iran, Tehran, and Shahid Beheshti universities

of medical sciences according to the price component of the 4P marketing mix. The results showed that the total mean score of the price component was 2.4. Since this average is between 1.99 and 2.99, the status of using social media for marketing library services in the studied universities according to the price component is in a relatively unfavorable situation. Among the mentioned items related to price component, facilitating cooperation and promoting communication between librarians and users on social media (M=2.62, SD=1.36) and receiving users' feedback through social media (M=2.50, SD=1.23), respectively, received the highest scores.

Reducing the overdue fines due to the possibility of renewing the materials through social media (M=2.16, SD=1.27) and increasing visits and downloads of scientific library databases following the promotion of these services on social media (M=2.26, SD=1.23) also have the lowest score among the price component's items.

Table 3. Frequency distribution, standard deviation, and mean score of using social media in marketing library services of the surveyed libraries based on the promotion component of the 4P marketing mix (n=115)

Rank	Marketing status using social media based on the promotion component of the 4P model	Frequ	iency / (p		Standard			
		Very Little	Little	Medium	Much	Very much	Mean	deviation
1	Promoting services provided by the library on social media	24 (21.4)	25 (22.3)	41 (36.6)	14 (12.5)	6 (5.4)	2.72	1.58
2	Sharing library news on social media	22 (19.6)	18 (16.1)	52 (46.4)	10 (8.9)	10 (8.9)	2.71	1.15
3	Appropriate public relations and behavior of the librarian on social media	24 (21.4)	23 (20.5)	39 (34.8)	18 (16.1)	8 (7.1)	2.66	1.18
4	Sharing useful information on social media	30 (26.8)	15 (13.4)	43 (38.4)	18 (16.1)	6 (5.4)	2.59	1.19
5	Sharing particular information on databases and print resources on social media	24 (21.4)	28 (25)	42 (37.5)	12 (10.7)	6 (5.4)	2.53	1.10
6	Facilitating collaboration between employees on social media	30 (26.8)	24 (21.4)	37 (33)	19 (17)	2 (1.8)	2.45	1.11
7	Introducing the library and its services on social media	41 (36.16)	17 (15.2)	38 (33.9)	6 (5.4)	10 (8.9)	2.34	1.27
8	Sharing educational multimedia on social media	45 (40.2)	24 (21.4)	33 (29.5)	8 (7.1)	2 (1.8)	2.08	1.07
9	Holding book reading competitions on social media	52 (46.4)	14 (12.5)	40 (35.7)	2 (1.8)	4 (3.6)	2.03	1.10
10	Ability to register for library membership through social media	56 (50)	9 (8)	41 (36.16)	6 (5.4)	0 (0)	1.97	1.04
11	Creating special discussion groups for specific scientific and literary groups on social media	53 (47.3)	21 (18.8)	34 (30.4)	0 (0)	4 (3.6)	1.93	1.05
	Total						2.27	1.16

Table 4: Frequency distribution, standard deviation, and mean score of using social media in marketing library services of the surveyed libraries based on the price component of the 4P marketing mix (n = 115)

Rank	Marketing status using social media based on the price component of the 4P model	Frequency / (percentage of frequency)						Standard
		Very Little	Little	Medium	Much	Very much	Mean	deviation
1	Facilitating collaboration and promoting communication between librarians and users on social media	32 (28.6)	22 (19.6)	28 (25)	16 (14.3)	14 (12.5)	2.62	1.36
2	Receiving users' feedback through social media	32 (28.6)	22 (19.6)	32 (28.6)	20 (17.9)	6 (5.4)	2.50	1.23
3	Reducing library costs through the use of social media	38 (33.9)	20 (17.9)	30 (26.8)	12 (10.7)	12 (10.7)	2.46	1.34
4	Increasing visits and downloads of articles from the library's scientific databases following the promotion of the above services on social media	43 (38.4)	20 (17.9)	31 (27.7)	12 (10.7)	6 (5.4)	2.26	1.23
5	Reducing overdue fines due to the possibility of renewing the materials through social media	54 (48.2)	8 (7.1)	34 (30.4)	10 (8.9)	6 (5.4)	2.16	1.27
	Total						2.4	1.28

Discussion

Based on the findings of the study, the status of using social media for marketing library services of Iran, Tehran, and Shahid Beheshti universities of medical sciences was in a relatively unfavorable situation in all components of the 4P marketing mix, including in price component with an average of 2.4, place with an average of 2.36, the product with an average of 2.29, and promotion with an average of 2.27. This indicates that the use of social media in the marketing of library services has not yet found its place in the above universities, and most librarians tend to have traditional methods of communication with users. Moqiseh et al. (23), who studied the general marketing situation of medical libraries based on the 4P model and without focusing on social media's role in library marketing, also reported similar results.

A study by Tafreshi and Sedigh (16) on marketing in libraries without focusing on social media's role reported similar results. Ghazi Mirsaeed et al. study (24) also showed that the marketing situation in the selected libraries of Tehran and Shahid Beheshti universities of medical sciences based on the 7P model is unfavorable, which is in line with the results of the present study. It showed that the mentioned libraries were not in a good position to use 4P marketing mix components.

The results of the current study in evaluating the product component of the 4P model showed that librarians working in the libraries of Iran, Tehran, and Shahid Beheshti universities of medical sciences viewed asking the librarian services and consulting services on educational and research topics using the social media as the first and second services provided in the context of social media. However, renewal and booking services through social media in these libraries had a low score. While, the results of the Haftadi Yam's study (25) showd that document reservation services had the highest score among the items of the product component in marketing library services without using social media. Moqiseh et al.(23) also showed in their study on medical libraries that the possibility of using computers and the Internet for users have the highest score among the items of the product component in the marketing of library services, without considering the use of social media.

In the place component of the 4P marketing mix, the present study's results indicated that the marketing situation using social media in the libraries of Iran, Tehran, and Shahid Beheshti universities of medical sciences is relatively unfavorable. The results showed that the ability to use social media on different platforms received the highest score, and the lack of easy access to social media due to filtering issues received the lowest score in the place component. As some social media are filtered by government agencies, and as the studied libraries are affiliated to the government agencies, librarians' use of some social media tools was limited. Also, the content created on these social media might be lost. This was one of the weaknesses of social networks as a place for library marketing from librarians' perspective. Using internal social media is the best way to prevent the loss of content created by librarians in these universities' libraries. The study's results were in line with the results of Tafreshi and Sedigh's (16) study. In the study of Mogiseh et al. (23) on medical libraries, easy access to the sections inside the library had the highest score among the items of place component in marketing library services, without considering the use of social media.

The present study results indicated that the marketing situation using social media in the libraries of Iran, Tehran, and Shahid Beheshti universities of medical sciences is also relatively unfavorable in terms of the promotion component of the 4P marketing mix. The study results showed that from the point of view of the studied librarians, the possibility of promoting the services provided by the library on social media had the highest score in this component. In contrast, in the study of Tafreshi and Sedigh (16), the highest score was related to holding book reading competitions on different occasions, and in the study of Moqhiseh et al. (23), the highest score was related to the introduction of new materials and events. The results of the present study are not in line with the results of the above studies. It should be noted that the above studies studied the marketing of libraries in general and without particular focus on the use of social media in marketing. Therefore, the results of the above studies are in many cases different from the results of the present study.

According to the present study, sharing useful information on social media obtained a relatively low score from the perspective of the librarians, which indicates the weakness of librarians in content production. In fact, the 80/20 rule has not been considered in marketing library services using social media by the librarians of the mentioned academic libraries. According to this rule, 80% of the information shared on social media should be related to creating and providing attractive information and content, and only 20% of the content presented on social media should be related to the marketing of library products and services (5). In addition, the creation of special discussion groups for specific scientific and literary groups on social media received the lowest marketing score in the component of promotion from librarians, which indicates the low level of public relations in establishing continuous communication with the educational departments of the above universities. In general, promotion and persuasive activities in the libraries are done in order to create effective communication with users. Given the current situation, librarians of these universities must have more effective communication with their users.

The present study results indicated that the marketing situation using social media in the libraries of Iran, Tehran, and Shahid Beheshti Universities of medical sciences in terms of the price component of the 4P marketing is also relatively undesirable. Because academic library libraries are non-profit organizations, price in the marketing mix means cost-effectiveness of library resources and services. The result of performance in other marketing mixes is revealed in the price component. If the library services are well-introduced, the benefits of social media are appropriately used, and the promotion activities are integrated with the other components of the marketing mix; thus, the costbenefit of library resources will be realized, as well as the use of library resources will considerably increase. Given that the current state of marketing library services using social media in the other three components of the marketing mix were reported relatively unfavorable, the state of this component (price) was also predictable and reported in a relatively unfavorable situation. The results are in line with the findings of Jalilpour and Farajpahlou's study (26) on the Khuzestan province libraries and the results of the study of Moqiseh et al. (23) on medical libraries in which they also reported the unfavorable state of the studied libraries in the price component

Conclusion

If libraries' best products and services are not promoted, advertised, and informed to users, they would be of little value.

In this regard, the use of social media for marketing is one of the ways that can be very effective in the growth and development of library products and services. In addition, librarians can identify the weaknesses and strengths of the library's services in the context of social media from the users' point of view and take necessary steps to improve the library services according to the daily needs of users.

This makes the library more dynamic and brings library services closer to users' needs, which not only improves the relationship between librarians and users but also increases the cost-effectiveness of the resources purchased for the library. The basis of library marketing depends on the services provided by librarians. If this component is undesirable, other components of the marketing mix will also be affected. The present study's findings showed that librarians working in Iran, Tehran, and Shahid Beheshti universities of medical sciences consider using social media tools to improve the marketing process of libraries effectively. However, the results showed that the use of social media in the marketing of the above libraries, according to the four components of product (library services), place (social media), price (cost-benefit), and promotion are in a relatively unfavorable situation. Due to the unfavorable marketing situation using social media in the above libraries, the following practical suggestions are proposed, which, if implemented, can significantly affect the performance of these libraries and other similar libraries:

- Upgrading and developing marketing facilities and activities using social media in the central libraries of Iran, Tehran, and Shahid Beheshti universities of medical sciences as the primary institution supervising the marketing process in the subordinate libraries.
- Holding training courses on library marketing using social media to increase librarians' awareness to use them effectively in libraries.
- Develop codified and written rules and policies for using social media for library marketing.
- Holding workshops on content production on social media to increase librarians' ability to market using social media.
- · Inclusion of library marketing courses in library and information science courses.

This research was done among librarians working in three major medical sciences universities located in Tehran. Therefore, it has limitations in terms of generalizing the results to other libraries. Also, due to some universities' opposition and the commitment not to compare the results between universities when obtaining permission to collect data, no comparison was made between the libraries of the above universities.

Finally, it is suggested that more research be done to examine the quality of marketing using social media in academic libraries, especially from the perspective of users, as well as the content analysis of the posts shared in these media from a marketing perspective.

Declarations

Acknowledgement

We would like to thank the librarians working in the libraries of Iran, Tehran, and Shahid Beheshti universities of medical sciences

Conflicts of Interests

The authors have no conflict of interest in this article.

Ethical statement

The data extracted from the questionnaire were used in full and without any interference and bias with full observance of ethical principles.

Funding and support

This article is the result of a part of the dissertation entitled "Survey of librarians' views of libraries of Iran, Tehran and Shahid Beheshti universities of medical sciences regarding the use of social media in marketing library services at the master's level," supported by Iran University of Medical Sciences with code IR.IUMS.REC.1398.227.

Authors' contributions

All author contributed in designing, running, and writing all parts of this study.

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