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in Africa [Internet]. The Wellcome Trust; 1999 [cited 2 Feb 2006]. http://www.wellcome.ac.uk/assets/wtd003224.pdf. 2. Horton R. North and south: bridging the information gap. Lancet. 2000 Sep;355(9222):2231–6. DOI: 10.1016/S0140-6736(00)02414-4.

- 3. King DA. The scientific impact of nations: what different countries get for their research spending. Nature. 2004 Jul;430(6997):311–6. DOI: 10.1038/430311a.
- 4. Mathers CD, Bernard C, Iburg K, Inoue M, Ma Fat D, Shibuya K, Stein C, Tomijima N. The global burden of disease in 2002: data sources, methods and results [Internet]. World Health Organization [cited 23 Jun 2008]. http://www.who.int/healthinfo/paper54.pdf>.
- 5. World Health Organization. Countries [Internet]. The Organization [cited 3 Jun 2008]. http://www.who.int/countries/en/>.
- 6. The World Bank Group. Data and statistics: country classification [Internet]. The Group [cited 3 Jun 2008]. http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0, contentMDK: 20421402~pagePK: 64133150~piPK: 64133175~the SitePK: 239419,00.html>.
- 7. Gaillard J, Tullberg AF. Questionnaire survey of African scientists. MESA Impact Studies report no. 2 [Internet]. Stockholm, Sweden: International Foundation for Science; 2001 May [cited 21 Aug 2008]. http://www.ifs.se/Publications/Mesia/MESIA_2_Questionnaire_Africa_english-PDF">http://www.ifs.se/PDF
- 8. Paraje G, Sadana R, Karam G. Public health: increasing international gaps in health-related publications. Science. 2005 May;308(5724):959–60. DOI: 10.1126/science.1108705.
- 9. Perez-Iratxeta C, Andrade MA. Worldwide scientific publishing activity. Science. 2002 Jul;297(5581):519. DOI: 10.1126/science.297.5581.519b.
- 10. Pang T, Lansang MA, Haines A. Brain drain and health professionals. BMJ. 2002 Mar;324(7336):499–500. DOI: 10.1136/bmj.324.7336.499.
- 11. Hagopian A, Thompson MJ, Fordyce M, Johnson KE, Hart LG. The migration of physicians from Sub-Saharan Africa to the United States of America: measures of the African brain drain. Hum Resour Health. 2004 Dec;2(1):17. DOI: 10.1186/1478-4491-2-17.
- 12. Sodjinou R, Agueh V, Fayomi B, Delisle H. Obesity and cardio-metabolic risk factors in urban adults of Benin: relationship with socio-economic status, urbanisation, and lifestyle patterns. BMC Public Health. 2008 Mar 4;8:84. DOI: 10.1186/1471-2458-8-84.
- 13. Hofman K, Ryce A, Prudhomme W, Kotzin S. Reporting of non-communicable disease research in low- and middle-income countries: a pilot bibliometric analysis. J Med Libr Assoc. 2006 Oct;94(4):415–20.
- 14. Page J, Heller RF, Kinlay S, Lim LL, Qian W, Suping Z, Kongpatanakul S, Akhtar M, Khedr S, Macharia W. Attitudes of developing world physicians to where medical research is performed and reported. BMC Public Health. 2003 Jan;3(6), DOI: 10.1186/1471-2458-3-6.
- 15. Goehl TJ. Access denied. Environ Health Perspect. 2007 Oct;115(10):A482-3. DOI: 10.1289/ehp.10729.

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Use of Facebook in academic health sciences libraries

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INTRODUCTION

Originally founded to link students at Harvard University, the social networking application, Facebook, has evolved into the most visited social networking site in the world with over 90 million active users. Specializing in regional and scholastic networks, Facebook boasts an 85% market share at universities and colleges in the United States [1], and a recent study of more than 800 University of Florida medical students and residents determined that 44.5% use Facebook [2]. As academic health sciences libraries explore social networking technologies to create and market library services, Facebook provides a flexible space to interface with a large number of students. Homegrown applications for Facebook have been created by libraries to answer reference questions, search online public access catalogs, and host multimedia collections. For health sciences libraries, whose users are often widely dispersed, Facebook offers several opportunities for outreach and instruction. For example, self-organizing groups of users (i.e., medical student class of 2010, pharmaceutical sciences undergraduates) afford targeted marketing opportunities despite their distributed locations (i.e., teaching hospitals, rural clinics, commercial pharmaceutical laboratories). Additionally, Facebook encourages developers to create applications that could be useful in a health sciences setting (i.e., PubMed Search application), form affinity groups (i.e., Medical Library Association Facebook group), and fashion library fan pages.

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Despite an abundance of literature about the social networking site Facebook in newspapers, magazines, and other popular publications, Facebook as a topic in the library literature is scarce. A review of the literature revealed that the majority of published articles provided an introduction to the application and social networking in general. Particularly lacking were research-based articles on Facebook's use in libraries. Searching specifically for research relating to the presence of health sciences libraries on Facebook yielded no results. To partially fill this void, this study was designed to determine the extent and nature of institutional Facebook use by academic health sciences libraries. Secondarily, the authors sought to gauge the perceived success of institutional Facebook pages. The authors recognized that many librarians used Facebook personally and professionally; however, these types of individual use were not the focus of this study.

Omitting descriptive and editorial communications, this literature review summarizes some representative research-oriented studies on libraries and Facebook found in the database, Library Literature. Mack et al.'s article, "Reaching Students with Facebook: Data and Best Practices," discussed a librarian's use of Facebook as a means to collect and answer reference questions [3]. The lead author promoted his Facebook profile during subject-specific library sessions with undergraduates, along with his availability for consultation via Facebook. During the fall 2006 semester, reference inquiries were counted by email, telephone, instant messenger, and Facebook and in person. Out of the 441 received reference questions, the most reference questions were collected through Facebook (126), followed closely by email (122) and in-person consultations (112). The authors recommended that libraries create a Facebook group as a "fun way to find out who your library fans are out there."

In "Internet Reviews: Social Networking Software Follow-up: Facebook and MySpace (and more)," Greenwell and Kraemer discussed their strategies for using Facebook to bolster student awareness of library services [4]. Creatively, the authors scanned student group conversations on Facebook (i.e., "Class of 2011") to answer a variety of questions that surfaced in the course of those conversations. Additionally, they paid to advertise a freshmen event on Facebook, noting that while the advertising was inexpensive, its effectiveness was difficult to evaluate.

Charnigo and Barnett-Ellis conducted a survey of academic librarians to ascertain perspectives on Facebook and its implications in libraries [5]. Reporting on their findings in "Checking out Facebook.com: The Impact of a Digital Trend on Academic Libraries," they noted their sample of librarians (n=123) were aware of Facebook and its use on campus. In terms of Facebook's potential as an academic tool, 54% of those surveyed said there was no academic use, 34% were unsure, and 12% felt that such promise existed. This latter minority suggested the use of Facebook in academic settings to promote library

services, set up book clubs, and create online study groups. Survey data found that most librarians were neither "enthusiastic nor disdainful" of Facebook.

Mathews's article, "Do You Facebook?", chronicled his experience using the social networking site as an outreach tool [6]. In his role as a library liaison Mathews contacted 1,500 students in the school of mechanical engineering via a messaging application in Facebook. While some students simply responded "thanks," others initiated questions. Other positive results of this outreach included his being "friended" by students and being recognized outside of the library at other campus locations. Mathews encouraged librarians to embrace social networks to increase visibility and "let students know what the library is all about."

Most recently, Chu and Meulemans provided insight into how students were using Facebook and MySpace in their article, "The Problems and Potential of MySpace and Facebook Usage in Academic Libraries" [7]. Data gathered through a survey and focus group revealed that 67% of surveyed students discussed their schools and professors on these two sites. Students reported a reluctance to communicate with professors via these means and indicated that email was a more appropriate means to communicate with faculty. Despite the hesitation of some students, the authors pointed out that many other campus entities such as athletics, student associations, and fraternities and sororities have a MySpace or Facebook presence. They concluded that having a library page can be a useful promotional tool.

METHODOLOGY

The investigators designed and distributed a survey to analyze academic health sciences libraries' use of the popular social network, Facebook. The first question, "Does your library have a Facebook page?", determined the questions received by the respondents. Respondents answering "yes" were directed to questions regarding uses and future uses of Facebook, promotion, user feedback, quantity of fans, and general comments on social networking. Respondents answering "no" or "I don't know" were directed to questions that investigated reasons for not having a presence on Facebook.

The population for this study consisted of department heads of reference or public services, outreach librarians, or library directors at member libraries of the Association of Academic Health Sciences Libraries. The investigators identified the department head of reference at each library via a search of the libraries' websites. If the authors did not find a head of reference, they contacted the department head of public services, outreach librarians, or library directors, in that order. In late February 2008, the Facebook survey was sent to 144 librarians via email. The link to the survey, which used the web-based survey software EFM Continuum, remained live for two weeks. A reminder email was sent out after the first

Table 1Facebook uses in Association of Academic Health Sciences Libraries member libraries (n=72)

Response	Number of responses*
To push out library announcements to users or to market the	
library	6
To post photos	6
To provide a presence on Facebook ("to be where users are")	6
To provide chat reference (Meebo, etc.)	5
To provide a forum for library users to communicate	4
To RSVP for library events	2
To provide online public access catalog search	2
To provide database search	2
To push out library announcements to employees	1
To provide a forum for library employees to communicate	1
To administer a course	0
To provide educational tutorials	0
To post audio	0
To post video	0
To podcast	0
Other (please specify)	0
Library does not maintain a Facebook page	61

^{*} A single respondent could list more than one use.

week of the survey. EFM Continuum compiled the survey data, ran cross-tabulations, and filtered the data by specific criteria. As a backup, the raw survey data were exported to an Excel file.

Seventy-two librarians responded to the survey, resulting in a 50% response rate (n=72/144). Only 12.5% (n=9/72) reported that their libraries' maintained a Facebook page, whereas 85% (n=61/72) stated that their libraries did not maintain a library-specific Facebook page. The remaining 2 respondents (3%, n=2/72) answered, "I don't know." All respondents reported that they were familiar with the brand name, "Facebook."

RESULTS

Libraries that maintain Facebook pages

Respondents were given the option to list multiple ways their libraries use Facebook. Table 1 illustrates how academic health sciences libraries use their Facebook pages: mainly to market the library, push out announcements to library users, post photos, provide chat reference, and have a presence in the social network. Libraries reported that they used Facebook in four different ways on average, with the high and low number of uses reported as seven and one, respectively.

Three respondents cited announcements on their websites and informational emails, and 2 listed word-of-mouth advertising as the most common ways to promote their Facebook page. Four libraries did not promote their Facebook account at all. The time spent maintaining and updating a library Facebook page ranged from no weekly maintenance to 20 minutes a week. Respondents were asked to assess the current and possible future success of their library's Facebook page. Six of 9 librarians did not have strong feelings regarding the current success or failure of their library's Facebook page. Librarians felt more positive about the future success of their library's Facebook page than its current success. If Facebook users like a

certain page on Facebook, they can become its "fan." Fans have the option to receive news feeds from these pages. The number of fans of the surveyed libraries ranged from 0 to 61 fans. The survey also asked how many of those total fans were employed by the library. For all 9 libraries, 34% of the total fans (n=47/139) were employees of the same library.

Libraries that do not maintain Facebook pages

As noted, the vast majority of the respondents (85%, n=61/72) reported that their library did not maintain a Facebook page. The 2 most-cited reasons why academic health sciences libraries did not have a presence on Facebook were the lack of time to set up and maintain a Facebook page (36%, n=22/61) and the belief that Facebook demonstrated little to no utility in an academic setting (28%, n=17/61).

Almost half of these librarians answered "other" (49%, n=30/61) and provided qualitative rationales for not developing a Facebook page. In addition to the 2 reasons cited above, other themes obtained from free-text comments included: library users did not use Facebook; institutional or library administration discourages Facebook or social networking use (16%, n=10/61); and staff lacked knowledge of how to set up a Facebook page (11%, n=7/61). Eighteen percent, (n=11/61) noted that their library was in the process of investigating a Facebook page. Other comments indicated the idea of a Facebook page had not been discussed or considered; respondents were uncertain about how Facebook could be used; librarians had personal Facebook pages; librarians did not think Facebook was appropriate; and the undergraduate library on campus had a Facebook page. Substantiating possible arguments for nonparticipation, Thompson demonstrated that as medical students and residents progress through their academic preparation, their use of Facebook waned[2].

Current Facebook uses

At this point in time, Facebook use by health sciences academic libraries is still evolving. Most libraries with a Facebook presence use it for promotional purposes rather than for hosting research applications. A small number of health sciences libraries currently offer chat reference and communication forums via Facebook. Although it offers the ability to share media, Facebook is not yet being employed as a channel for broadcasting multimedia by health sciences libraries, except for still images. Other potential uses, not employed by health sciences libraries, include searching databases and catalogs and hosting short tutorials. Possibly because of these potential uses, 28% of the responding libraries have, or are considering, a presence on Facebook.

Obstacles to use

Among libraries already using it, the majority did not have a strong opinion on the current or future success of their libraries' Facebook presence. This point corroborated the general attitude of librarians' indifference toward Facebook proffered by Charnigo and Barnett-Ellis[5]. Presently, most survey respondents indicated that they did not see a need or a use for a library Facebook page, with the exception of marketing the library or promoting library events. Although a small number of respondents indicated that they were uncertain how to set up a Facebook page, a significant number of respondents answered that they did not have the time to set up and maintain a Facebook page. The perception that a large time commitment is required is belied by the fact that respondents who have existing Facebook pages spent under four hours per week maximum maintaining and monitoring their sites. In addition, clinical sites, which typically have stringent network security measures in place, might block access to Facebook and other social networking sites, thus undercutting its effectiveness as a health sciences library tool. As the comfort level and facility with this product increases, applications become more robust, and actual maintenance time is understood, it may be likely that more libraries will establish a Facebook presence.

CONCLUSION

Those libraries that are using Facebook are using it mainly to market the library, push out announcements to library users, post photos, provide chat reference, and have a presence in the social network. These libraries feel positive about the future success of their Facebook presence. However, the investigators believe that due to the small number of actual libraries using Facebook, the data collected at this point in time provide usage benchmarks but are inconclusive in determining whether or not Facebook is a useful and effective application for health sciences libraries. If Facebook becomes a more prevalent application, this question can be revisited in the future to make a more accurate determination.

REFERENCES

- 1. Facebook.com. Facebook statistics [Internet]. Palo Alto, CA: Facebook [rev. 2008; cited 5 Aug 2008]. http://www.facebook.com/press/info.php?statistics.
- 2. Thompson LA, Dawson K, Ferdig R, Black EW, Boyer J, Coutts J, Black NP. The intersection of online social networking with medical professionalism. J Gen Intern Med. 2008 Jul;23(7):954–7.
- 3. Mack D, Behler A, Roberts B, Rimland E. Reaching students with Facebook: data and best practices. Electron J Acad Spec Libr [Internet]. 2007 Summer;8(2), [cited 1 Jul 2008]. http://southernlibrarianship.icaap.org/content/v08n02/mack_d01.html
- 4. Greenwell S, Kraemer B. Internet reviews: social networking software follow-up: Facebook and MySpace (and more). Ky Lib. 2007 Fall;71(4):11–5.
- 5. Charnigo L, Barnett-Ellis P. Checking out Facebook.com: the impact of a digital trend on academic libraries. Info Tech Lib. 2007 Mar;26(1):23–34.

6. Mathews BS. Do you Facebook?: networking with students online. Coll Res Libr News. 2006 May;67(5):306–7. 7. Chu M, Meulemans YN. The problems and potential of MySpace and Facebook usage in academic libraries. IRSQ. 2008 Spr;13(1):69–85.

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The information-seeking behavior of clinical staff in a large health care organization

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INTRODUCTION

Internet-based tools are easily accessible and can assist busy health professionals who cannot be expected to know the answer to every clinical question [1]. Some variability appears to exist in how Internet-based resources are used by different groups of health professionals [2].

A postal survey was undertaken to assess the information-seeking behavior and needs of a wide range of hospital-based staff including allied health professionals in one large organization to inform training and resource planning. The study was undertaken at the Canterbury District Health Board (CDHB), the main health funding and provider organization serving 500,000 people in the center of the South Island of New Zealand. The main hospital site provides approximately 1,000 beds and includes a medical library with librarians who are available to assist with searching and training. Staff have access to computers with high-speed Internet; however, their formal training in evidence-based medicine varies.