'What Factors Influence Subject Librarians' Promotion of Open Access Scholarly Resources?'

by

Donna Coventry

Submitted to the School of Information Management,
Victoria University of Wellington
in partial fulfilment of the requirements for the degree of
Master of Information Studies

October 2018

300128498

VICTORIA UNIVERSITY OF WELLINGTON
School of Information Management

Master of Information Studies

IMPORTANT DISCLAIMER

with respect to a MIS Research Project (INFO 580)

'What Factors Influence Subject Librarians' Promotion of Open Access Scholarly Resources?'

(hereafter referred to as 'The MIS Research Project')

being undertaken by

Donna Coventry

in partial fulfilment of the requirements of the degree of
Master of Information Studies,
School of Information Management, Victoria University of Wellington.

Topic Commencement: **5 March 2018**

1. Victoria University of Wellington and its Council, its members, staff, employees, students and agents undertake no duty of care in contract, tort, or otherwise, to users (whether direct or indirect) of the MIS Research Project and make no warranties or representations of any kind whatsoever in relation to any of its contents.

2. The MIS Research Project is only made available on the basis that all users of it, whether direct or indirect, must take appropriate legal or other expert advice in relation to their own circumstances and must rely solely on their own judgement and such legal or other expert advice.

3. Under no circumstances will Victoria University of Wellington and its Council, its members, staff, employees, students or agents be liable in any way whatsoever, whether in contract, tort (including negligence), for breach of any statutory or regulatory duty (to the fullest extent permissible by law), or otherwise, to any user (whether direct or indirect) of the MIS Research Project for any loss or damage whatsoever arising directly or indirectly as a result of the use in any way of the MIS Research Project.

4. Each exclusion in the clauses of this disclaimer and each protection given by it is to be construed as a separate exclusion applying and surviving even if for any reason any of the exclusions or protections are held inapplicable in any circumstance.

300128498

Acknowledgements

I would like to give thanks to, and acknowledge the support of:

300128498

Abstract

Research Problem: In the past twenty years, open access has grown as a movement in the dissemination of, and access to, academic research. This has been in the context of rising subscription costs and constraints in academic library budgets. It is also seen as a more ethical way to broaden access to information. Yet, there is still much ambiguity and misunderstanding around the topic. This study aims to explore the factors influencing New Zealand subject/liaison librarian decisions to promote open access scholarly resources to library clients.

Methodology: A quantitative survey was used to collect data. The target population was those who identified themselves as subject/ liaison librarians at a New Zealand university library. The questionnaire included checklist questions, Likert scales and opportunities for comments. Results were coded and descriptive statistics and correlations calculated.

Results: Fifty usable surveys were completed. Respondents were all aware of open access, although awareness of the different types was not strong. Over half of respondents had not had formal open access training at work. While most librarians supported open access, it was evident that there was still a lot of caution around it. Most respondents agreed that it was in the scope of their role to promote open access and these librarians were more likely to promote or discuss open access with clients. The requirements for scholarly impact and prestige were recognised as barriers for scholarly staff to publish open access however generally librarians who support open access still promoted it to academic staff.

Implications: The results show much ambiguity about open access types and concepts. A key recommendation is for academic libraries to address the training of librarians in open access. Few respondents had had formal open access training at work yet the results show that understanding open access underpins its frequent promotion.

300128498

Key Words

Open Access

Subject Librarians

Liaison Librarians

Academic Libraries

Institutional Repositories

New Zealand

300128498

Table of Contents

300128498

300128498

300128498

List of Tables

300128498

LIST OF ABBREVIATIONS

APC	Article publication charges
CONZUL	Council of New Zealand University Librarians
IF	Impact factor
IR	Institutional repository
OA	Open Access
p	P value
PBRF	Performance Based Research Funding
r	Spearman's Rho
STEM	Science, technology, engineering, mathematics
TA	Toll access
TELSIG	Tertiary Libraries Special Interest Group of the Library and Information Association of New Zealand Aotearoa

1. Introduction

Widely disseminated across scholarly communication, the subject of open access can be a cause of much confusion and debate. There is a considerable amount of literature available on the topic however very little empirical research explores the experiences, opinions and knowledge of those that work on the front line of scholarly information provision – academic librarians. In her 2010 book, librarian Laura Bowering Mullen stated that reference librarians on the frontline can influence library behaviour, potentially providing the impetus to the OA movement. This research project stems from this comment and looks at the topic of open access (OA) from the perspective of subject/ librarians working in New Zealand's university libraries. It explores what factors influence their decisions to promote open access scholarly resources to library clients.

1.1 Problem Statement and Rationale

Traditional publishing systems are costly for academic libraries with subscription costs to e-resources increasing while many libraries face budget cuts - this is often described as the 'serials crisis.' The EBSCO (2018, p.1.) report on serials price projection 2019 states that "the 2019 serials marketplace continues to see steady annual publisher price increases, with no indicators this will change. Library budget growth remains a top concern, with materials budgets lagging behind annual inflation in journal and e-journal package pricing."

Open access advocate Peter Suber (2003) coined the term 'permissions crisis' to describe the complicated issues of contracts, licensing agreements and digital rights management which prevent libraries fully using the resources they have paid for, including restrictions on access, use and the sharing. Authors often sign away copyright - including the ability to publish versions of their work on their institutional repository (IR).

In 2003, Suber argued that OA could solve both the serials and permissions crises, outlining that OA is free and that the copyright holder has consented unrestricted reading and sharing. There are many challenges to OA including misunderstandings about copyright and licensing terms and a culture that measures research impact by metrics including impact factor and citation counts. For example, the main research fund in New Zealand, 'Performance Based Research Funding' (PBRF) is largely focused on traditional metrics to assess what constitutes excellent research.

Open access can be seen as a more ethical way to broaden access to information than traditional academic publishing. Grant-Kels (2017) lists ethical cases in support of OA such as ensuring manuscripts are accessible to the widest audience of scholars and to the interested public worldwide and that research that is publicly funded should be made freely available to the public that paid for it. Barriers to access mean some have resorted to breaking copyright infringements as to access information. The economic costs of accessing pay-walled scholarly articles in developing countries can prevent researchers and students from accessing information. Some in developing (and developed) countries turn to pirated sites such as Sci-Hub to access free scholarly research. Of concern to libraries should be the number of students who access information via Sci-Hub due to convenience. Bohannon (2016) states that a quarter of the Sci-Hub requests for papers come from the wealthiest nations. The fight for access to information is happening with or without libraries. Library support for OA can not only 'open access', but also ensure legality and the rights of authors and institutions remain.

Mullen and Otto (2014) see OA as an opportunity to enhance a library's influence and the leadership capabilities of librarians by assuming responsibility for the institution's response to OA, "open access research and innovation provide new opportunities for any library organization. Librarians who are able to get out and lead open access policymaking and implementation efforts find themselves positioned in a central role in this exciting scholarly communication area" (p.296). They explain that incorporation of the scholarly communication mission can balance out other waning areas of librarianship such as collection development or cataloguing, by creating new library roles.

There is very little empirical research on librarian views or promotion of OA in New Zealand. Working in the scholarly communications team at a university library, I am aware that academic libraries place significant resourcing into OA so I am curious as to how the library staff working directly with researchers and students promote OA resources. In 2010, the Council of New Zealand University Librarians (CONZUL) set goals around open scholarship including collaborating with researchers to raise awareness of the principles, practice and benefits of open access publishing (Council of New Zealand University Librarians, 2010). It may interest library management to know what extent those staff members in a position to promote OA resources are doing and the factors influencing their decisions and actions. This could lead to staff training and possibly the changing of library policy or teaching methods so that OA resources are more actively promoted.

Finally, in his award-winning book 'The Atlas of New Librarianship,' renowned library advocate David Lankes (2011) stated, "the mission of librarians is to improve society through facilitating knowledge creation in their communities" (p.15). OA is about sharing knowledge, making it available to all communities - librarians working with their staff to promote OA encompasses this mission.

2. Definitions

Institutional Repositories (IR): "institutional repositories are digital spaces for presenting and accessing an institution's staff and student research. The purpose is to make this research more accessible for more people" (Unitec Library, 2018, What is an institutional repository?)

Open access (OA): "open access is the free, immediate, online availability of research articles combined with the rights to use these articles fully in the digital environment" (Scholarly Publishing and Academic Resources Coalition, 2018, Open Access, para. 5)

Scholarly communication: "the system through which research and other scholarly writings are created, evaluated for quality, disseminated to the scholarly community, and preserved for future use ... " (Association of Research Libraries, n.d., para. 1)

Scholarly resources: information vetted by scholarly experts in the field, include scholarly analysis, description or evaluation of events or ideas (Penn Libraries, 2013). For example, peer reviewed journal articles.

Subject/liaison librarians: Both terms refer to a librarian who can provide specialist subject and research help and information literacy instruction. The term subject librarian is used in this report.

Toll Access (TA): a term used to describe standard subscription-based journals.

3. Review of the Literature

Traditional publishing models present many challenges to academic libraries yet are ingrained in the research culture. OA is an alternative publishing model with many supporters in the library and information world yet the movement towards it has many obstacles to overcome. While there is much literature on the topic of OA, little of it focuses on the understandings and actions of academic librarians. New Zealand OA literature is predominantly concentrated on institutional repositories (IR) and there appears to be little by

way of research literature relating to New Zealand librarians' understandings, perceptions and promotion of OA scholarly resources in general.

Searching for literature about factors that influence subject librarians' promotion of OA scholarly resources, five main topic areas/ questions emerged:

1. An understanding of the reasons for OA are not universal in the library profession
2. Support for OA is not universal in the library profession while supporting the concept does not constitute librarian action towards promoting it.
3. Not all subject librarians perceive promoting OA is being part of their role.
4. Interdisciplinary scholarly publication cultures may pose issues.
5. A culture of traditional scholarly publication models and associated prestige measurements such as impact factor (IF) present challenges towards promoting OA scholarly resources.

3.1 An Understanding of the Reasons for Open Access Are Not Universal in the Library Profession

Much of the evidence available indicates that not all academic librarians are fully aware of concepts of OA and that some may hold negative views towards it. Rodriguez (2015) conducted a case study of how an academic library without a designated scholarly communications team presented a series of OA training opportunities. Different OA training activities were conducted and staff surveyed to see if their knowledge of OA had increased. Comments made during discussions indicated opinions of OA had changed positively due to these events and librarians began submitting their research to the IR. Rodriguez concluded that practising librarians have little opportunity for in-depth scholarly communication training and providing opportunities to increase knowledge will enhance confidence and buy-in for outreach to academic faculties. While these results are informative, it would be of value to have a measure of the participants' attitudes prior to training as a comparison of before and after attitudes and behaviours allowing a more succinct view of effectiveness.

Bosah, Okeji, Baro (2017) found that only 43.3% of the academic librarians they surveyed in Africa had indicated that they were aware of their IR. In a study looking at New Zealand subject librarians' perceptions of IR, Dorner and Revell (2012) found that many of the participants were unaware of the content of their IR or of those at other institutions. Two librarians argued against IR fitting with contemporary methods of research with arguments

including an IR should not be cited as the researcher will access full text elsewhere and that an IR was a better place to present rather than form research.

In 2015, Kassahun and Nsala conducted a study on the awareness of academic librarians towards open access resources to support reference services at private institutions of higher learning in Gaborone, Botswana. A large number, 67%, were not aware of the concept while 50% of those aware of OA rarely used it (the other 50% used IR on a weekly basis).

3.2 Support for Open Access Is Not Universal in the Library Profession While Supporting the Concept Does Not Constitute Librarian Action Toward Promoting It
Research has found that many librarians support OA concepts however are not proactive in using OA resources themselves.

In 2011, Mercer asked whether librarian behaviours reflect a commitment to OA because of increased exposure to scholarly communication issues. Using Library Information Science Abstracts as a source of library focused articles she compared the numbers of OA articles written by academic librarians and those by all others. The results showed that under half of academic librarian's articles were OA, and that 58.5% of academic librarians' articles could have been made OA based on publisher policy. Mercer concluded that librarians face the same pressures as other faculty to publish to meet tenure/ promotion expectations. However, this conclusion of a global study is based on American library tenure systems whereas in New Zealand there is relatively little requirement for library staff to publish in high impact journals. In Botswana, Kassahun and Nsala (2015) concluded that while librarians are aware of OA, they were not actively using OA resources to support their reference services. In New Zealand, Dorner and Revell's (2012) study into subject librarians' perceptions of IR as an information resource found that five of nine librarians indicated not promoting IR as an information source citing - lack of content in specific subject areas and not promoting it as it was not an index. Some discussed the advantages of IR providing access to grey material as well as student research.

3.3 Is It Within the Subject Librarians' Role to Promote Open Access Scholarly Resources?
Some studies show that not all client-facing librarians believe promoting OA is within the scope of their role. Hansson and Johannesson (2013) asked; "how do academic librarians perceive their role in relation to the research community in everyday work?" (p.232).

300128498

Focusing on the facilitation of publication strategies, institutional repositories and OA, a qualitative approach was taken in the form of focus groups and subject logbooks at two universities and involving twenty-two librarians in Sweden over six months. Their findings included: librarians saw promotion of OA as best suited to specialist librarians (including repository specialists) not contact librarians; characteristics of different academic domains may affect the librarian's promotion of OA; and contact librarians saw themselves more as links between users and specialist librarians. However, these conclusions are limited as they are based on data from only two institutions (in one country) and librarian views may vary across libraries and nations depending on staff structure, policies or role descriptions. As there was no information on 'librarians' roles' within the libraries it is hard to tell if these librarians have similar roles to New Zealand subject librarians.

IR are a key OA resource funded by universities - in their 2012 study, Dorner and Revell asked New Zealand subject librarians if the promotion of IR might be influenced by concern of overloading clients. Eight of the nine stated that they had a large selection of information resources to promote and little time to do so; six of nine only promoted IR to post-graduate students and staff while the other three claimed to promote IR when they felt it was the most appropriate resource. This study was conducted in the early days of IR and Dorner and Revell promote the role of subject librarians as "being especially well located to act as change agents by working to convince their clients through demonstrations and trials to adopt IRs as an information resource" (p. 275).

Zhao (2014) argues that "scholarly publishing literacy should be treated as an extension of information literacy delivered through a broader research support framework" (p.3.). With the unfortunate presence of OA publishers with dubious practices (often coined predatory) and publishers charging 'article processing charges,' Zhao uses the term scholarly publishing literacy, initially coined by Beall (2012), to describe researchers understanding and taking advantage of the current scholarly publishing system. Zhao argues that academic librarians have the knowledge of open access, understand copyright and licensing, have expertise in bibliometrics and access to a range of resources and tools so are positioned to claim a proactive role in supporting scholarly publishing literacy. While some literature on this topic has pointed out that not all academic librarians are knowledgeable about OA, other sources have described successful training of librarians on the concept (refer Rodriguez, 2015). A scan of subject librarian services advertised publicly on most New Zealand university library websites shows that in general these librarians are required to teach workshops or plan

tutorials; provide research support and sometimes publishing support. As described by Zhao above, the teaching of scholarly publishing literacy can fit within the scope of this type of library role.

A basic, yet strong argument supporting the promotion of OA as part of the subject librarians' role comes from Folds (2016) who poses the question "why should librarians be involved with teaching faculty about open access publications?" Folds' answer "because it is what librarians do" (p.32). Folds argues that as the library landscape changes, libraries continue to offer different services so as to provide free access to information. OA being 'free information' in no way alters a librarian's role in promoting it.

3.4 Interdisciplinary Scholarly Publication Cultures May Pose Issues

Studies show that different academic disciplines can have different views on OA, which in turn provide different challenges for librarians. Partner (2009) researched how liaison librarians at a New Zealand academic institution perceive the role of the academic researcher in the relationship between agencies (publishers/ librarians). One key factor highlighted the differences between disciplinary trends and the publication of different types of academic work regarding relationships with liaison librarians. Of the librarians he interviewed, only liaison librarians attached to science faculties had fielded questions in connection to IR or OA journals. Comparatively, Dorner and Revell's (2012) study found that participants from three New Zealand universities perceived IR to hold greater value for humanities clients followed by social sciences and then science clients. A small number of participants limits both studies. Research by Cullen and Chawner (2011) found disciplinary differences within the depositing of research outputs to IR in a nationwide study across all eight universities with sciences and engineering being the most highly represented; social sciences and humanities being equivalent to each other; and health sciences the lowest.

In a more recent study, Zhu (2017) looked at gender, discipline, seniority and other factors associated with UK academics' OA practice. The conclusions reflect responses from over 1800 researchers. Zhu concluded that discipline norms and culture would have influenced opportunities and preference for OA publishing and found that 52% of arts and humanities academics and 49% social sciences had no experience with gold or green OA publishing. This is compared to 30% of medical and life sciences academics and 36% in natural sciences and engineering. Zhu stated that scholars in humanities and social sciences have fewer publications than in other disciplines and hence chances of publishing through OA channels

would also be lower; there is less availability of OA journals in humanities and that these academics were more likely to publish monographs.

However, the discussion of OA is still relevant to those subject librarians working within social sciences and humanities disciplines. In their 2017 article, Rowley, Johnson, Sbaffi, Frass and Devine used results from the 2014 Taylor and Francis Open Access Survey to analyse academics' behaviours and attitudes towards OA publishing, including science, technology, engineering and mathematics (STEM) and social science/ humanities subjects. They found that attitudes towards OA publishing were consistent across the academic community. Humanities academics who are strong proponents of OA are also pushing benefits and changes. As early as 2013, Eve was promoting OA humanities initiatives such as the Open Humanities Press and the Open Library of the Humanities. Even those more critical of OA such as David Crotty (2014) see OA as getting steadily more important (although Crotty doubts it will replace traditional models in the humanities and social sciences).

3.5 A Culture of Traditional Scholarly Publication Models and Associated Prestige Measurements Such as Impact Factor (IF) Present Challenges Towards Promoting Open Access Scholarly Resources

A reliance on traditional ways of the measuring research impact is providing a challenge for OA advocates. As part of his research, Partner (2009) looked at the influence of PBRF on liaison librarian relationships with academics. The liaisons interviewed indicated that they consult researchers on citation impact factors due to PBRF and that researchers generally are not keen to publish where the journal is not covered by major databases. Librarians felt that researchers did not appreciate the scope of IR, viewing them more as opposition to journals.

Suber (2008) explained that a large reason for OA journals not having the same prestige as toll access (TA) journals is that they are newer and younger; alternatively, TA journals with high prestige may be of less quality just older. Suber states that "universities tend to use journal prestige and impact as surrogates for quality (2008, point 8)," that it is easier to tell whether someone has published in high-impact or high-prestige journals than to tell whether the articles are any good. With the rise of unethical or predatory publishers - Beaubien and Eckard (2014) looked at faculty concerns with OA journal quality indicators and how librarians at an American university were addressing these. While senior faculty were supportive of OA, they still wanted their staff to publish where it would reflect well on the researchers' scholarship and department and asked the Library for the tools to do so. From

these tools, positive indicators of quality would be scope, audience, editorial board reputation and institutional affiliations and indexing on OA indices such as the Directory of Open Access Journals (DOAJ). The authors suggested education is paramount to prepare faculty in navigating the OA environment.

OA proponents are attempting to expand faculty views of scholarly publishing beyond the traditional, as Zhao described in 2014 – expanding their scholarly publishing literacy. The same year, Mullen and Otto (2014) stressed the important role of librarians in this movement. They claim as many scholars have "widely divergent ideas" on the topic and often associate OA with low quality journals or no peer review, librarians with expertise can help dispel myths and engage faculty on the topic.

4. Research Objectives / Questions

The main objective of this study is to determine the factors influencing subject librarians' promotion of open access scholarly resources.

The theoretical framework underpinning this study is built on key themes from previous empirical studies on the topic of librarians and OA. Five key themes have been identified and the research questions have been generated from these.

The main research question is "What are the main determinants for the frequency at which subject/liaison librarians promote of OA scholarly resources to library patrons?

Within this broad question, seven sub-questions are asked:

- To what extent do subject/liaison librarians understand OA concepts?
- What is the nature of subject/liaison librarian education and training in OA concepts?
- To what extent do subject/liaison librarians' own attitudes towards OA influence their promotion of OA scholarly resources?
- To what extent do subject/liaison librarians believe promoting OA is within the scope of their role?
- To what extent does the scholarly publication culture of a subject/liaison librarian's faculty influence librarian promotion of OA scholarly resources?
- To what extent do funding requirements imposed on faculty members influence librarian promotion of OA scholarly resources?
- How often do subject/liaison librarians promote OA resources and concepts?

300128498

5. Research Design and Method

5.1 Methodology

A quantitative survey was selected as it enabled wider and more inclusive coverage of subject librarians across the nation. With few studies available on this topic, the hard data collected via quantitative measurements could provide a clear overview of the barriers to subject librarians promoting open access scholarly resources.

A questionnaire was created based on the seven sub-questions (see Appendix A) and from these six variable combinations would be analysed as to answer the research question (refer Table 1). The sub-question "how often do subject librarians promote OA resources and concepts?" being the dependent variable in each combination.

Table 1

Variables to Be Analysed

Independent Variables	Dependent Variables
Knowledge and understanding	Frequency of promotion
Education and training	
Opinions and perceptions	
Is within the scope of the subject role	
Faculty influences	
Funding Requirements	

The survey was composed of 28 questions - 14 checklists, 13 Likert scales (5 point) and an open-ended comments section. Checklists and Likert Scales, according to Leedy & Ormrod (2015), simplify, and easily quantify people's behaviours and attitudes. This study is highly focused on perceptions, opinions, knowledge and their connections, "scales like this enable the researcher to measure a psychological attitude or disposition by converting it into a number: personal feelings and opinions on a topic get quantified" (Denscombe, 2017, p. 279). Leedy and Ormrod (2015) point out that open-ended questions are time consuming and

exhausting and those that like to answer yes/ no are few and far between. However, the opportunity to capture any thoughts the participants were willing to share was taken. Four questions had an optional comments section, three (questions 10, 11 and 14) to allow further options to be listed, one (question 18) to capture the participants' opinions in detail. Question 28, the final question, asked for further comments allowing participants to elaborate on any previous answers or provide any other pertinent information.

5.2 Specific Procedures

The questionnaire was created using the online survey tool Qualtrics. Participants accessed the survey via an anonymous link available by way of email sent through NZLibs, a general New Zealand Libraries discussion list, and TELSIG (Tertiary Education Libraries Special Interest Group) (see Appendix B). The link was shared on Twitter (see Appendix C). A covering letter was provided outlining the target participants, explaining the aim of the survey and emphasising the anonymity of the questionnaire. A brief instruction note was included along with a definition of the term 'open access scholarly resources - refers to peer-reviewed scholarly research and literature that is freely available online to anyone interested in reading it."

6. Research Population

The research population was those librarians identifying themselves as either a subject or a liaison librarian at one of New Zealand's eight university libraries in August/ July 2018 (when the questionnaire was distributed). Based on staff lists publicly available via library websites, the total number who fit this group is approximately 148 librarians. One of the eight libraries did not have a list of subject librarians publicly available, nor is there an indication that they employ any, however if so, the total number may be slightly higher than 148.

The sample population was drawn from professional email lists NZLibs, TELSIG and the social media platform Twitter.

Denscombe (2017) suggests tapping into social networking groups to conduct surveys. Twitter is one channel where New Zealand librarians have a strong online community. Denscombe (2017) describes snowball sampling as where the sample emerges through a process of reference from one person to the next. By sharing a link to the survey on Twitter, snowball sampling was used, respondents as well as other connections in academic libraries could pass the survey link on to their colleagues who work as subject librarians.

7. Pilot Study

The questionnaire was tested on a small group of librarians at one New Zealand university library, who did not work as subject librarians at the time but were familiar with open access scholarly resources. The purpose for this pilot study was to check for any bias in the questionnaire, clarity of questions and any wording issues. A few minor changes were made to the wording of some questions and the addition of a comments section was added to question 18 "would you advise a client to publish in an open access journal?" as an opportunity to seek respondent opinions.

8. Delimitations and Limitations

8.1 Delimitations

- The results can be generalised only to New Zealand University Librarians participating in the study. This is a purposeful decision based on the scope of this project and time and resources available.

- Whilst a qualitative approach would elicit more in-depth data, the aim of this study, as the first on this topic in New Zealand, is to get a broad picture of the factors influencing subject librarians' promotion of open access scholarly resources across the country. Given the resources and time available, it is not feasible to conduct a nationwide qualitative study.

8.2 Limitations

- It is possible that those librarians with an interest in OA were more likely to complete the questionnaire which may have resulted in the data reflecting a more supportive view towards OA.

- It is possible that people who are not actually subject librarians in a New Zealand university library also completed the questionnaire.

- An error was made in setting up the survey software concerning Question 18 "*Would you advise a client to publish in an open access journal?*" Where respondents were meant to be able to select between 'yes' or 'no' and leave a comment, if they made a comment, their 'yes' or 'no' answer disappeared. The statistical data collected from

this question was unable to be used although some of the comments can be used in isolation of these statistics.

9. Data Analysis

Qualtrics captured 69 responses. Of these, 17 were blank completions possibly the result of people looking at the full survey before they went back to complete it. Seven of these were deleted as the system had capped the number of completed questionnaires at 60 and space was needed to accommodate further completed surveys. Two people not fitting the target group completed questionnaires. Fifty usable surveys were completed. Of these, not all questions were answered - there were nine skipped response spread across the questionnaire, five of these coming from one participant.

The answers to checklist and Likert scale questions were coded using Qualtrics and downloaded onto an Excel spreadsheet. Excel was used to explore descriptive statistics such as frequencies, percentages and mean scores.

Where correlations were sought, coded ordinal data was transferred over to SPSS software where bivariate analysis was calculated. Bivariate analysis can investigate the nature of any apparent correlations and patterns of association between two variables (Denscombe, 2017). As the variables correlated were ordinal data, Spearman's Rank Correlation, used to find correlations between two sets of ranked data, was used. In analysing the correlation coefficient Spearman's Rho (r) was measured. This ranges in value from -1 to $+1$. The larger the value (closer to 1) the stronger the relationship. The p value, probability of receiving the result by chance (Fink, 2003), was also measured. Relationship values of .05 (less than one in 20 chance of being wrong) and .01 (less than one in 100 chance of being wrong) were used to determine significance.

10. Results

10.1 Frequency of Promotion of Open Access

Frequency of promotion is used as the key dependent variable in analysing barriers towards promoting OA. Data collected analyses frequency of promotion to undergraduate students, post-graduate students and academic staff; frequency of librarians having given OA publishing advice to prospective authors; and frequency of encouraging academic staff to publish versions of their research on their IR.

Table 2

Frequency of Promotion/ Discussion of Open Access Resources

Client Group	Frequency of promotion/ discussion					
	Never	Rarely	Sometimes	Often	All of the time	No answer
Undergraduate students	1	20	17	9	3	
	2%	40 %	34%	18%	6%	
Postgraduate Students	0	6	23	16	5	
	0%	12%	46%	32%	10%	
Academic Staff	0	6	28	11	4	
	0%	12%	56%	22%	8%	2%

Table 2 shows frequency of promotion to different library client groups. Frequency of promotion/ discussion to postgraduates and academic staff is much more frequent than promotion to undergraduates.

Table 3

Frequency of Respondents Encouraging Academic Staff to Publish Versions of Their Research on Their Institutional Repository

Answer	Count	%
Never	7	14%
Rarely	10	20%
Sometimes	17	34%
Often	9	18%
All of the time	5	10%
No answer	2	4%
Total	50	100%

Table 3 shows the frequency of respondents encouraging academic staff to publish versions of their research on their IR. The majority, 82% indicated doing so (to varying frequencies).

When asked if they had given open access publishing advice to prospective authors, 58% respondents answered yes.

10.2 Knowledge/ Understanding of Open Access

All respondents indicated being aware of the term open access before taking the questionnaire. Respondents were asked to indicate their level of familiarity with the concepts of gold, green and diamond/ platinum open access. The results are displayed on Table 4.

Table 4

Respondent Familiarity with the Types of Open Access

Level of familiarity	Count	%
Not at all familiar	2	4%
Slightly familiar	5	10%
Somewhat familiar	16	32%
Moderately familiar	21	42%
Extremely familiar	6	12%
Total	50	100%

The results depicted on Table 4 show that most respondents were either somewhat or moderately familiar with these concepts.

Table 5

Level of Familiarity of Types of Open Access/ Having Giving Open Access Publishing Advice to Prospective Authors

Has given OA publishing advice	Level of familiarity with types of OA				
	Not at all familiar with types of OA	Slightly familiar with types of OA	Somewhat familiar with types of OA	Moderately familiar with types of OA	Extremely Familiar with types of OA
Yes, has given OA advice		1	7	16	5
		3.45%	24.14%	55.17%	17.24%

No, has not given OA advice	2	4	8	5	1
	3.45%	24.14%	55.17%	17.24%	3.45%
No answer			1		
			100%		

Familiarity with types of OA and frequency of having given OA advice to prospective authors were matched and are displayed on Table 5. Most who had given advice, 96.6%, were 'somewhat familiar or more' with types of OA. Fewer of those who had not, 75.9% were 'somewhat familiar or more.'

Respondents were asked to indicate any open access resources they were aware of and to indicate any open access resources that they had used with clients.

Table 6

Open Access Resources That Respondents Are Aware of and Open Access Resources They Promote

OA Resource	Number of participants aware of this resource	Number of participants that have used this resource with clients
Your institutional repository	49	47
Directory of Open Access Journals (DOAJ)	49	43

OA Resource	Number of participants aware of this resource	Number of participants that have used this resource with clients
Directory of Open Access Books (DOAB)	26	13
nzresearch.org.nz	43	35
arXiv.org	32	17
Plos Collection	28	18
Open Access Button	8	2
Creative Commons	46	29
Others not listed	bioRxiv	bioRxiv
	Digital Library of the Commons, Paperity<NCBI Bookshelf, Global Text Project	MedNar, Core.ac.uk
		NZLII
	Figshare	Publisher specific journals; open access articles witihn subscription journals
	Heaps of disciplinary pre-print servers and open day repos too - more my area due to work responsibilities MedNar, Core.ac.uk	PubMed
		Repec
	NZLII	ResearchGate
	Publisher specific journals; open access articles within subscription journals	Heaps of disciplinary pre-print servers and open day repos too - more my area due to work responsibilities including Figshare.com
	PubMed	www.nzlii.org.nz

OA Resource	Number of participants aware of this resource	Number of participants that have used this resource with clients
	Repec	Just in reference to your use of the term Creative Commons - This is not a resource rather a set of guidelines used to determine how an item may be used
	ResearchGate	
	SocXiv, Figshare, NZGOAL	
	Unpaywall	

Table 6 shows the large majority were aware of their IR and of the Directory of Open Journals (DOAJ), Creative Commons and research.org.nz. Most had used the IR with clients and 43 had used DOAJ.

Table 7

Respondents' Familiarity with Content Available in Their Library's Institutional Repository

Level of familiarity	Count	%
Not at all familiar	1	2%
Slightly familiar	2	4%
Somewhat familiar	8	16%
Moderately familiar	32	64%
Extremely familiar	7	14%
Total	50	100%

Table 7 shows respondent levels of familiarity with their IR content. Most, 64% of respondents, were moderately familiar with this content.

10.2.1 Correlations

Spearman's Rank Correlation coefficient was computed to assess relationships between knowledge and understanding of OA and frequency of promotion. Knowledge of types of OA was measured against frequency of promotion to undergraduates, postgraduates, academic staff and frequency of encouraging academic staff to publish versions of their research on their IR. No correlations were found. Librarian knowledge of IR content was measured against frequency of encouraging academic staff to publish versions of their research on their IR. There was a positive correlation between the two variables, $r = 4.13$, $p = .004$, a significant correlation at the .01 level (2-tailed) meaning the probability of a relationship between the two variables is very high (more than 99%). Awareness of OA scholarly resources was correlated against the use of these resources. There was a positive correlation between the two variables, $r = .671$, $p = .00$, a significant correlation at the .01 level (2-tailed) indicating the probability of a relationship between the two variables is very high.

10.3 Education and Training in Open Access

Participants were asked if they had had on the job training in OA, 52% replied no. Respondents were asked to indicate whether they had had OA training elsewhere, the results are displayed on Table 8.

Table 8

Other Sources of Open Access Training Identified

Sources of training	Number of participants
No training	12
As part of coursework when studying towards a library qualification	11
Voluntary via online courses/ blog sites or webinars	17

300128498

Sources of training		Number of participants
Via conference presentations		22
Informal discussions with friends/ colleagues interested in this area		34
Other answers (as stated by respondents)		
	Cc NZ email list	N/A
	In preparation for specific researchers consultations where I know the researcher is interested in open science/ open access I investigate options to be able to discuss with them	N/A
	Reading academic literature on the topic	N/A
	Promotion from publisher reps	N/A
	Through independent research	N/A
	As part of formal staff development	N/A

Table 8 shows most had received some form of training/ education through informal

discussions with friends/ colleagues interested in this area. Twelve of the 50 librarians (24%)

selected having had no training, although two people who selected this option had also selected other training options as well.

Table 9 displays frequency of promotion to client groups compared with level of training on OA concepts.

Table 9

Open Access Training/ Frequency of Promotion of Open Access Resources

Patron Group	Frequency of promotion					
	Never	Rarely	Sometimes	Often	All of the time	No answer
No training at all						
Promotion to Undergraduate Students	0.0%	42.9%	28.6%	14.3%	14.3%	
Promotion to Postgraduate Students	0.0%	28.6%	28.6%	14.3%	28.6%	
Promotion to Academic Staff	0.0%	42.9%	28.6%	14.3%	14.3%	
Some level of training						
Promotion to Undergraduate Students	2.3%	39.5%	34.9%	18.6%	4.7%	
Promotion to Postgraduate Students	0.0%	9.3%	48.8%	34.9%	7.0%	
Promotion to Academic Staff	0.0%	7.0%	60.5%	23.3%	7.0%	2.3%

Equal numbers with and without training promoted OA to undergraduates 'sometimes or more'; more librarians with training promoted to postgraduates 'sometimes or more' and significantly more librarians with training promoted to academic staff 'sometimes or more'

Results concerning the encouragement of academic staff to publish versions of their research on their IR showed that 28.6% of those with no training and 62.2% of those with training indicated having encouraged staff 'sometimes or more.' Similarly, 25% of those with no OA training and 62.15% of those with OA training had given OA publishing advice.

10.4 Opinions/ Perceptions of Open Access

When asked about their level of agreement (support) with OA, 60% of respondents agreed, 34% strongly agreed and 6% (three librarians) neither agreed nor disagreed. Participants were asked if they believed academic libraries should be pro-active in promoting open access resources, 54% agreed, 28% strongly agreed and 18% neither agreed nor disagreed.

Table 10

Respondents' Comparisons of the Average Quality of Open Access Scholarly Resources Compared to Toll Access Resources

Level of quality	Count	%
Much lower quality	0	0%
Lower Quality	10	20.4%
About the same	37	75.5%
Higher	2	4.1%
Much Higher	0	0%
No answer	1	2%
Total	49	100%

Table 10 shows respondents' views of the average quality of OA scholarly resources compared to TA resources. The majority answered, 'about the same.'

Unfortunately, due to an error in setting up the survey software, Question 18 *"Would you advise a client to publish in an open access journal?"* The results 'yes/no' answers could not be accurately analysed. However, some relevant comments were made including:

"If applicable yes. Would depend on context and type of publication and what their intended purpose and audience was. If they needed high impact factors for PBRF then probably not. if they wanted exposure to a wide audience probably yes."

"Would strongly suggest that they thoroughly research journal & publishers and editioral team credentials as well as any peer review process, costs to author, and any copyright agreements"

 "Yes, understanding caveats around their desire for ranking journals, their potentially having to pay an APC."

"if they feel confident and understand it; if journal is widely indexed in scholarly databases such as Scopus for discoverability and citation counting"

"Yes, BUT I would explain the implications of doing so - e.g., potential costs, potentially lower visibility, 'predatory' open access journals, etc. I would generally start by discussing traditional journals around their topic area, and would mention open access as an aside - unless they specifically ask for advice on it."

"Depends if it is best for his topic, is not predatory and has good metrics"

10.4.1 Correlations

Using Spearman's Rank Correlation, a positive correlation was found between the level of support for OA and frequency of promotion to postgraduate students with $r = .295$ and $p = .037$, a correlation at the .05 level (2-tailed) indicating the probability of a relationship between the two variables is relatively high. Correlations were not evident with other client groups.

Correlations were calculated between the level at which respondents agree that academic libraries should be pro-active in promoting open access resources and frequency of promotion. Positive correlations were found in regard to postgraduate students $r = .287$ and p

= .043, a correlation at the 0.05 level (2-tailed); and academic staff $r = .314$ $p = .028$, a correlation at the 0.05 level (2-tailed) indicating the probability of a relationship between the two variables is relatively high.

Participants were asked how 'in general' they would compare the average quality of open access scholarly resources to TA resources. Results were correlated with frequency of promotion. Correlations can be seen between perceptions of quality and frequency of promotion to undergraduates $r = .306$ and $p = .032$, a correlation at the 0.05 level (2 tailed); and postgraduates $r = .364$ and $p = .010$, a correlation at the 0.05 level (2-tailed) indicating the probability relationships between these variables is relatively high.

10.5 Opinions on the Promotion of Open Access Being Within the Scope of the Role

The next set of data looks at how subject librarians perceive OA as within the scope of their role.

Table 11

Respondents' Opinions on Whether Promoting Open Access Is Within the Scope of Their Role

Level of agreement	Frequency	%
Strongly disagree	0	0%
Disagree	1	2%
Neither agree nor disagree	16	32%
Agree	27	54%
Strongly agree	6	12%
Total	50	100%

Table 11 shows respondent level of agreement that OA is within the scope of their role. Most, 66%, agree that it is.

Table 12

Respondent Agreement on Whether the Number of Demands and Duties Placed on Them as Subject/ Liaison Librarians Present a Challenge to Promoting Open Access Scholarly Resources

Level of agreement	Frequency	%
Strongly disagree	1	2%
Disagree	13	26%
Neither agree nor disagree	21	42%
Agree	13	26%
Strongly agree	2	4%
Total	50	100%

The results on Table 12 show 42% of respondents neither agreed not disagreed that the demands and duties placed on them as subject librarian presented a challenge to promoting open access scholarly resources, 30% agreed to some extent and 28% disagreed to some extent.

Regarding the giving of OA publishing advice to prospective authors, of the 16 that neither agreed nor disagreed that promoting OA was within the scope of their role – the majority, nine, had not given any publishing advice. Of those that did agree that OA was within the scope of their role 16 of the 27 had; and out of those who strongly agreed – all six respondents had given OA publishing advice.

Table 13

Agreement Level That Promoting Open Access is Within the Scope of the Subject/ Liaison Librarian Role/ Frequency of Promotion

Client Group	Frequency of promotion to patron groups					
	Disagree					
	Never	Rarely	Sometimes	Often	Always	No answer
Undergraduate students			100%			
Postgraduate students			100%			
Academic Staff			100%			
	Neither Agree/Disagree					
Undergraduate students		37.5%	25%	25.0%	12.5%	
Postgraduate students		18.8%	31.3%	37.5%	12.5%	
Academic Staff		25%	50%	12.5%	12.5%	
	Agree					
Undergraduate students	3.7%	40.7%	40.7%	11.1%	3.7%	
		11.1%	55.6%	25.9%	7.4%	

Postgraduate students				
Academic Staff	7.4%	66.7%	22.2%	3.7%

Strongly Agree				
Undergraduate students	50%	16.7%	33.3%	
Postgraduate students		33.3%	50%	16.7%
Academic Staff		16.7%	50%	16.7%	16.7%

Regarding the statement 'promoting OA is within the scope of my role' (Table 13), it is to be noted that only one person replied 'disagree' so the results pertaining to the section of the table may not be reflective of all that disagree. Regarding those who neither agreed nor disagreed, 37.5% were likely to promote to undergraduates 'often or more,' 50% to postgraduates 'often or more,' and 25% to academic staff 'often or more.' For those agreeing with the statement, 14.8% were likely to promote to undergraduates 'often or more,' 33.3% to postgraduates 'often or more,' and 25.9% to academic staff 'often or more.'

10.6 Faculty/ Discipline

Of respondents, 64% indicated that the broad subject area they worked in was social sciences/ culture/ arts/ humanities (referred to as 'other') and 36% worked with STEM subjects. One respondent indicated working within both broad subject areas.

Respondents were asked for their opinions on the general level of support within their broad faculties for OA. The results can be found on Table 14.

Table 14

Respondents' Opinions on What the General Level of Support of Academics in Their Subject Area Towards Open Access

Subject group	Opinion of academics' level of support for OA					
	Strongly Oppose	Somewhat oppose	Neutral	Somewhat favour	Strongly favour	No answer
Science/ Technology/ Engineering/ Mathematics	0	3	10	5	0	0
	0%	16.7%	55.6%	27.8%	0%	0%
Social Sciences/ Culture/ Arts/ Humanities	0	2	19	7	3	1
	0%	6.3%	59.4%	21.9%	9.4%	3.1%

Table 14 shows that most respondents from both broad subject areas indicated academics in their area had a neutral level of support for OA. Of librarians from STEM subjects, 16.67% indicated that their academics somewhat opposed to OA while 6.3% of other librarians indicated likewise.

Asked if they had ever been approached for information about OA scholarly resources by someone from their school/faculty, 77.8% of STEM subject librarians and 68.8% of other librarians answered yes.

Asked if they had ever been approached for open access publishing advice by someone in their school/ faculty, 55.6% of STEM subject librarians answered yes compared to 50% of other librarians.

300128498

Table 15

Faculty/ Subject Area/ Frequency of Promotion

	Never	Rarely	Sometimes	Often	Always	No answer
Promote/ discuss with undergraduate students						
STEM		66.7%	16.7%	5.6%	11.1%	
Other	3.1%	25%	43.8%	25%	3.1%	

	Never	Rarely	Sometimes	Often	Always	No answer
Promote/ discuss with postgraduate students						
STEM		27.8%	27.8%	27.8%	16.7%	
Other		3.1%	56.3%	34.4%	6.3%	

	Never	Rarely	Sometimes	Often	Always	No answer
Promote/ discuss with academic staff						
STEM		27.78%	33.33%	27.78%	11.11%	
Other		3.13%	68.75%	18.75%	6.25%	3.13%

300128498

Table 15 shows frequency of promotion matched to broad subject area. Few librarians from both areas promoted OA to undergraduates and academic staff 'often or more.' Just under half from both groups promoted to postgraduates 'often and more.'

10.7 Research Funding's (PBRF) Influence on Promoting Open Access

It is to be noted that different libraries provided different levels of support through the 2018 PBRF process. Librarians were asked if during preparation for the 2018 PBRF round, they had fielded any PBRF inquiries related to open access outputs. Of respondents 76% indicated they had not.

Table 16

Respondents' Opinions on What Influence PBRF Requirements Have With Academic Staff in Their Faculty Opting Not to Publish Open Access

Level of Influence	Count	%
Not at all influential	4	8%
Slightly influential	4	8%
Somewhat influential	22	44%
Very influential	16	32%
Extremely Influential	3	6%
No answer	1	2%
Total	49	100%

Table 16 shows respondent opinions on the influence PBRF has on the choice to publish OA. All but four respondents believed that PBRF funding requirements had some influence.

300128498

Table 17

Frequency of Giving Open Access Publishing Advice/Librarian Opinion on the Level of Influence Performance Based Research Funding Has on Publishing Open Access

Has given OA publishing advice	Librarian opinion on the level of influence PBRF has on publishing OA				
	Not at all influential	Slightly influential	Somewhat influential	Very influential	Extremely Influential
No	1	2	14	3	0
	5%	10%	70%	15%	0
Yes	3	2	8	13	3
	10.34%	6.90%	27.59%	44.83%	10.34%

Table 17 shows respondent opinions on the influence PBRF matched with whether they had given any publishing advice. Of respondents, 59.3% that have given OA publishing advice indicated PBRF is 'very influential or more' while 15% that have not given OA publishing advice believed likewise.

10.7.1 Correlations

No correlations between frequency of promoting/ discussing OA with academic staff and librarian opinions on whether PBRF funding requirements influence staff publishing OA, none were found.

10.7.2 Relevant Comments

Below are comments made in the comments section of the questionnaire relevant to the topic of research funding and traditional measures of prestige:

"...many academics in my faculty do choose open access journals, but then they can miss out on evaluation metrics (journal rankings, citation counts, FWCI, etc.) when applying for promotion or submitting for PBRF."

"While open access is the ideal the reality is that the desire for citations trumps the philosophical ideal of making all research open access..."

"... Recognition and citation counts are the biggest influence for "success" as an academic author and for the university so open access options within existing prestigious journals are preferred to fully open access niche journals."

"... For their own publications, often the main concern is the rating of the journal, as this in turn affects PBRF reporting...."

Most of the comments indicated that PBRF poses a challenge toward encouraging academics to publish openly.

11. Discussion

11.1. To What Extent Do Subject/Liaison Librarians Understand Open Access Concepts?

Every respondent was familiar with the term open access and all had promoted OA (to some extent). Of the listed OA resources, 49 of the 50 respondents indicated awareness of 'their' IR and the Directory of Open Access Journals (DOAJ). There were some resources that few were aware of including the OA button. Correlation measurements indicated a significant relationship between knowledge of OA resources and the promotion of those resources – the more resources known, the more resources promoted - highlighting the importance of educating library staff on the OA resources available.

OA scholarly resources are split into types including gold, green and diamond/ platinum. There can be misconceptions of OA, one being that most OA journals charge article publication charges (APCs) for example, comments were made relating to APCs: *"who pays for open access publishing is a big hurdle for academics as authors,"* or *"depends on the journal and the funding required."*

However, APCs are associated with gold OA. A search of DOAJ (September 2018) shows while 3208 OA journals charged APCs, most - 8878 did not. Of librarians who had given OA publishing advice to prospective authors, 96.6% were 'somewhat familiar or more' with types of OA, (75.9% of those who had not given advice indicated likewise) suggesting more familiarity with OA types could lead to more promotion of OA publishing options.

300128498

In 2017, Bosah, Okeji, Baro found that only 43.3% of the academic librarians surveyed in Africa had indicated that they were aware of their IR. Comparatively, this study found that New Zealand subject librarians are much more aware with 98% indicating awareness. This is also a significant increase on Dorner and Revell's 2012 study where many New Zealand subject librarians were unaware of IR content. This suggests that librarians are becoming more aware of their IRs and the more aware librarians are of the content on the IR, the more likely they are to encourage academics to publish there, in fact the correlation of familiarity of IR content and frequency of encouraging academic staff to publish versions of their research on it indicated the probability of a strong relationship - the more aware on the IR, the more it is promoted.

In summary, the data shows that while all respondents were aware of the term open access, most were only somewhat or moderately aware of the different types of OA. The results suggest that while knowledge of the types of OA may have little influence over the use of OA resources with clients, it can influence whether a librarian advises clients to publish OA. Most respondents were aware of key OA resources, but there were several pertinent resources many were unaware of.

11.2 What Is the Nature of Subject/Liaison Librarian Education and Training in Open Access Concepts?

In her 2015 case study, Rodriguez concluded that practising librarians have little opportunity for in-depth scholarly communication training. These 2018 results support Rodriguez's statement as 52% of respondents indicated not having any on the job training in OA. In fact, 'informal discussions with friends/ colleagues interested in this area,' was the most common form of 'training.' Seven respondents indicated that they had had no training in OA and their frequency of promotion of OA to patrons was considerably less compared to those who had identified having some training. In fact, the results show that frequency of promotion/ discussion with postgraduates and academic staff was much higher if some form of training was had. These librarians were more likely to give OA publishing advice (62.2% compared to 25% with no training) or encourage academic staff to submit versions of their work onto their IR (62.2% compared to 28.6% with no training).

11.3 To What Extent Do Subject/Liaison Librarians' Own Attitudes Towards Open Access Influence Their Promotion of Open Access Scholarly Resources?

Most respondents supported OA. The majority agreed positively with the concept although 6% neither agreed nor disagreed. Likewise, most agreed that academic libraries should be proactive in promoting OA resources (18% neither agreed nor disagreed). Correlations were found between levels of support for OA and frequency of promotion to postgraduate students (but not undergraduates nor academic staff) – showing the more librarians agree with OA the more likely they will promote it to postgraduates. Correlations between the 'level of agreement that academic libraries should be pro-active in promoting OA' and the 'frequency of promotion' showed positive correlations with promotion/ discussion with post-graduates and with academic staff – the more librarians agree that academic libraries should be promoting OA, the more likely they will promote it to postgraduates and academic staff. Correlations between 'perceptions of the average quality of OA scholarly resources compared to TA resources' and 'frequency of promotion' showed positive relationships between promotion/ discussion with all students (but not academic staff) – indicating the higher the perception of OA quality the more likely to promote/ discuss OA with students.

Dorner and Revell's (2012) study into New Zealand's subject librarians' perceptions of IR as an information resource found that five of nine librarians indicated not promoting IR as an information source citing - lack of content in specific subject areas and not promoting it as it was not an index. The results of this 2018 study show that 64% of the librarians encouraged academic staff to publish versions of their work on the IR - a large increase on 2012's results. Comments made were supportive of IRs:

"While open access is the ideal the reality is that the desire for citations trumps the philosophical ideal of making all research open access. However the use of repositories is enabling academics to do both where possible."

Although the challenges faced by librarians were evident:

"I mainly promote the university research repository as the open access option, but this involves submitting a 'lesser-version' accepted manuscript (as academics perceive it)".

In 2011, Mercer asked whether librarian behaviours reflect a commitment to OA because of increased exposure to scholarly communication issues. She found that only 48.8% of academic librarians' articles were published OA. While the 2018 librarians were not asked about their own publishing, they were asked whether they would advise prospective authors

to publish OA. Opinions given generally showed an awareness of scholarly communication issues such as quality assurance and APCs:

"Would strongly suggest that they thoroughly research journal & publishers and editorial team credentials as well as any peer review process, costs to author, and any copyright agreements"

"if they feel confident and understand it; if journal is widely indexed in scholarly databases such as Scopus for discoverability and citation counting"

"Depends if it is best for his topic, is not predatory and has good metrics"

A number of comments showed caution around OA:

"Depends, may not be helpful in terms of career advancement for an early career researcher"

"I find open access problematic in regards to the financial side of things and the motivations of the publishers and contributors."

In summary, the results indicate that a more positive perception of OA is reflected in more frequent promotion/ discussion with library patrons (although more so with students). It is possible, that many academic staff members have their own opinions about OA and librarians are more hesitant to introduce their own beliefs on the concept. Librarians with positive perceptions of OA are more likely to encourage authors to submit versions of their work to IRs. Comments made about advising authors to publish OA were mixed and just as Mercer's results show, while librarians have much more exposure to scholarly communication issues, there is still much caution surrounding OA publishing.

11.4 To What Extent Do Subject/Liaison Librarians Believe Promoting Open Access Is within the Scope of Their Role?

From their 2013 Swedish case study, Hansson and Johannesson stated that front –facing librarians saw promotion of OA as best suited to specialist librarians (including repository specialists) not contact librarians. In contrast, 66% of the 2018 New Zealand subject librarians surveyed agreed with the statement 'promoting OA is within the scope of my role.'

Results indicate that those who agree that promoting OA is within the scope of the role are more likely to promote it. Most of these librarians had given OA publishing advice

contrasting with those that neither agreed nor disagreed with the statement and who were less likely to promote/ discuss OA with postgraduates and with academic staff (however they were more likely to promote OA resources to undergraduates 'often or more.')

Of interest is that while the larger proportion of respondents believed OA was in the scope of a subject librarian's role, the large majority also indicated that the number of demands placed on the role presented a challenge to promoting OA or they neither agreed nor disagreed. A scan of subject librarian services advertised publicly shows, in general these librarians are required to teach workshops or plan tutorials; provide research support and sometimes publishing support. Folds (2016) states 'free information' in no way alters a librarian's role. Based on Fold's statement, OA should not be promoted differently to TA resources, however, the results indicate that it is.

Many respondents neither agreed nor disagreed that the number of demands placed on the role presented a challenge to promoting OA. This could be indicative of the ambiguity surrounding OA regarding perceptions of quality, indicative of a low level of on the job training or ambiguity surrounding the New Zealand library sector directions in OA. CAUL has a Statement on Open Scholarship and of the eight universities, five have open access mandates/ policies (Refer Appendix D). If there is formal policy in place, why were so many respondents ambiguous as to whether it is in their role to promote OA? It is possible that a larger proportion of respondents represent the three universities without policies.

In answering the sub-question, most respondents felt promoting OA was within the scope of their role. These librarians were much more likely to promote/ discuss OA with postgraduate students and academic staff. Most respondents either felt that the number of demands placed on the role presented a challenge to promoting OA or were ambiguous about it. This could be due to ambiguity about OA in the sector or due to other factors such as training or perceptions of OA.

11.5 To What Extent Does the Scholarly Publication Culture of a Subject/Liaison Librarian's Faculty Influence Librarian Promotion of Open Access Scholarly Resources?

Most of the literature including research by Partner (2009), Cullen and Chawner (2011) and Zhu (2017) indicate that researchers in the STEM subjects are more supportive of OA however Dorner and Revell's 2012 study perceived IR to hold greater value for humanities

clients followed by social sciences clients. This 2018 study found there was little difference between the responses of STEM subject librarians and those working with other subjects, with most respondents from both broad subject areas indicating the academics (in their area) had a neutral level of support for OA followed by 'somewhat favouring' OA.

Slightly more STEM respondents reported having been approached by their school/faculty for OA scholarly resources (77.8% compared to 68.8% other) and more had been approached for OA publishing advice (55.6% compared to 50% other).

STEM librarians were more likely to discuss OA with postgraduate students and staff 'often of more' while other librarians were more likely to promote/ discuss with undergraduates 'often or more,' although these numbers were low (28% compared to 16.7% STEM librarians). Other librarians were more likely to encourage staff to publish versions of their work in their IR 'sometimes or more.'

In answer to the sub-question, the results of this study show that disciplinary differences have little influence on whether subject librarians choose to publish OA. This fits with conclusions made by Rowley, Johnson, Sbaffi, Frass and Devine's 2017 that attitudes towards OA publishing were consistent across the academic community. While there are some differences between the two broad subject areas, it is possible that since previous studies, OA resources and attitudes toward OA in other areas have caught up to those in the STEM subjects.

11.6 To What Extent Do Funding Requirements Imposed on Faculty Members Influence Librarian Promotion of Open Access Scholarly Resources?

In New Zealand, favourable traditional metrics such as IF are still seen as necessary for scoring well in PBRF. Partner (2009) looked at the influence of PBRF on liaison relationships with academics back in 2009. The liaisons interviewed indicated that they consult researchers on citation impact factors due to PBRF and that researchers generally are not keen to publish where the journal is not covered by major databases. Nearly ten years later, in 2018, subject librarians are still making similar comments:

"While open access is the ideal the reality is that the desire for citations trumps the philosophical ideal of making all research open access..."

"... For their own publications, often the main concern is the rating of the journal, as this in turn affects PBRF reporting...."

300128498

The different libraries approach PBRF support in different ways so it is likely that some respondents had had little involvement in the 2018 process. When asked if they had fielded any PBRF inquiries related to open access outputs only 22.5% of respondents answered yes so it is not surprising that when asked whether PBRF funding requirements had some influence with academic staff not publishing OA, all but four respondents believed that it was. Interestingly, no correlation was found between frequency of promoting/ discussing OA with academic staff and librarian opinions on whether PBRF funding requirements influence staff publishing OA.

In summary, the results indicate that while PBRF funding requirements are not so much a barrier to librarians promoting/ discussing OA, librarians perceive PBRF requirements as a barrier for academic staff to publish OA. Academics want/ need to publish in journals with prestige and impact and it is a challenge for librarians to promote alternative OA publications. In a positive for OA, 59.3% of librarians that felt PBRF is 'very influential or more' had still advised on OA publishing.

12. Conclusion

This study stemmed from a comment made by OA supporter Laura Bowering Mullen (2010) explaining that reference librarians on the frontline can be the impetus to the OA movement. This research has been designed around the factors influencing the frequency that New Zealand's subject librarians promote/ discuss OA resources with library clients. With little empirical research on this topic, themes were taken from what literature there was, and research questions built around these.

Theme: An understanding of the reasons for OA are not universal in the library profession. While every respondent was aware of term OA, the awareness of types of OA was not strong. Few librarians had had formal OA training. The results show that the better the understanding and the more training had, the more frequent the promotion of OA resources.

Support for OA is not universal in the library profession while supporting the concept does not constitute librarian action towards promoting it.

Most respondents supported OA, however it was evident that there was still a lot of caution around it influencing the extent to which librarians advised on publishing OA.

Is it within the subject librarians' role to promote OA scholarly resources?

Most respondents agreed that it was and these librarians were more likely to promote/discuss OA with clients. However, most respondents found other demands of the role presented a challenge to promoting OA.

Interdisciplinary scholarly publication cultures may pose issues.

The results of this research have shown that this is not currently an issue in New Zealand.

A culture of traditional scholarly publication models and associated prestige measurements such as impact factor (IF) present challenges towards promoting OA scholarly resources.

Librarians have identified the requirements for impact and prestige as barriers for academic staff to publish OA. Librarians who support OA will generally still promote it, even with this challenge.

Reflecting on past literature, the good news for OA advocates is that subject librarians understanding and perceptions of OA have improved in a positive direction however there a still a number of challenges both at library and university levels that need to be addressed in order for these librarians provide greater impetus to the OA movement.

13. Suggestions for Further Research

- A key theme from this research was that the frequency of promotion of OA to undergraduate students was very low. Many librarians with a strong grounding in OA promoted it much more to postgraduates and academic staff. It would be of interest to know why this is and the role OA plays in information literacy instruction.

- A more in-depth qualitative study building on any of key themes of this research would provide more comprehensive data on issues such as specific resources are used.

14. Suggestions for Practice

Increased training in OA is needed:

- Five universities have moved towards OA mandates/ policies (refer Appendix D) yet the results show there are few opportunities for librarian training in OA. They also show that those with a better understanding of OA promote it more frequently. Providing more opportunities for OA training could improve understanding of OA concepts and in turn increase OA promotion - better supporting OA policies.

- Not all librarians are aware of OA types and resources and misunderstandings exist. If approached by library clients on the topic, (the results show most librarians had been approached), it is important that library staff can provide information. Educating librarians via professional development or by way of OA concepts taught as part of librarian qualification courses is one way to address this issue.

300128498

15. References

Association of Research Libraries. (n.d.). *Scholarly communication*. Retrieved October 14, 2018, from http://www.arl.org/focus-areas/scholarly-communication#.Wsgw6Yhua70

Beall, J. (2012). *Predatory publishers and opportunities for scholarly societies*. Paper presented at the meeting of the American Educational Resarch Association, Washington, DC.

Beaubien, S., & Eckard, M. (2014). Addressing faculty publishing concerns with open access journal quality indicators. *Journal of Librarianship and Scholarly Communication, 2*(2). https://doi.org/http://doi.org/10.7710/2162-3309.1133

Bohannon, J. (2016). Who's downloading pirated papers? Everyone. *Science, 352*(6285), 508-512. https://doi.org/10.1126/science.352.6285.508

Bosah, G., Okeji, C. & Baro, E. (2017). Perceptions, Preferences of Scholarly Publishing in Open Access Journals: A Survey of Academic Librarians in Africa. *Digital Library Perspectives, Advance online publication*. https://doi.org/https://doi.org/10.1108/DLP-03-2017-0011

Council of New Zealand University Librarians. (2010). *Statement on open scholarship*. Retrieved from http://www.universitiesnz.ac.nz/sites/default/files/uni-nz/documents/CONZUL%20Open%20Scholarship%202010%20Final.pdf

Crotty, D. (2014). Open Access in the Humanities and Social Sciences: An Interview with Chris Wickham - *The Scholarly Kitchen*.

Cullen, R., & Chawner, B. (2011). Institutional Repositories, Open Access, and Scholarly Communication: A Study of Conflicting Paradigms. *Journal of Academic Librarianship, 37*(6), 460-470. https://doi.org/10.1016/j.acalib.2011.07.002

Denscombe, M. (2017). *The good research guide : for small-scale social research projects (6th ed.)*. London, England: Open University Press.

Directory of Open Access Journals. (2018). *Search.* Retrieved September 23, 2018, from
https://doaj.org/search#.W6cfOfaxU2w

Dorner, D. G., & Revell, J. (2012). Subject librarians' perceptions of institutional repositories
as an information resource. *Online Information Review, 36*(2), 261-277.
https://doi.org/https://doi.org/10.1108/14684521211229066

EBSCO. (2018). *2019 Serials Price Projections 2019.* Retrieved from
https://www.ebscohost.com/promoMaterials/2019_Serials_Price_Projections.doc.pdf

Eve, M. P. (2013). *Open access and the humanities: reimagining our future*. Retrieved
October 14, 2018 from http://www.theguardian.com/higher-education-
network/blog/2013/mar/25/open-access-humanities-future

Fink, A. (2003). How to managem analyze, and interpret survey data. In *The Survey Kit* (2nd
ed). Thousand Oaks, CA: Sage Publications.

Folds, D. (2016). "Free" to all: The role of the academic librarians in institutional open access
initiatives. In K. L. Smith & K. A. Dickson (Eds.), *Open access and the future of
scholarly communication: Policy and infrastructure*. Lanham, MD: Rowman &
Littlefield Publishers.

Grant-Kels, J. (2017). The ethical arguments in support of open access journals. *International
Journal of Women's Dermatology, 3*(1), 4-5.
https://doi.org/10.1016/j.ijwd.2017.01.002

Hansson, J. J., K. (2013). Librarians' views of academic library support for scholarly
publishing: an everyday perspective. *The Journal of Academic Librarianship, 39*(3),
232-240. https://doi.org/10.1016/j.acalib.2013.02.002

Kassahun, K., & Nsala, C. (2015). *The awareness of academic librarians towards Open
Access resources to support reference services: A case of private institutions of higher
learning in Gaborone, Botswana*. Paper presented at the meeting of the IFLA RISS

Satellite Gaborone, Botswana. Retrieved from
https://www.ifla.org/files/assets/reference-and-information-services/publications/5-
kassahun-en-doc.pdf

Lankes, R. D. (2011). *The atlas of new librarianship* (9780262515665). Cambridge, Mass.:
MIT Press.

Leedy, P., & Ormrod, J. (2015). *Practical research: Planning and design* (11 ed.). Essex,
England: Pearson Education Limited.

Mercer, H. (2011). Almost halfway there: an analysis of the open access behaviors of
academic librarians. *College & Research Libraries, 72*(5), 443-453.

Mullen, L. B. (2010). *Open access and its practical impact on the work of academic
librarians: Collection development, public services, and the library and information
science literature* Oxford, England: Chandos Publishing.

Mullen, L. B., & Otto, J. J. (2014). Open access policymaking: roles for academic librarians
as "change agents" in research institutions. *Qualitative and Quantitative Methods in
Libraries*(1), 295-307.

Partner, B. (2009). *The perceptions of liaison librarians at a New Zealand academic
institution on the role of researchers in the electronic journal environment*.
Wellington, New Zealand. (Available from the Victoria University of Wellington)

Penn Libraries. (2013). *Scholarly and popular resources*. Retrieved August 12, 2017, from
http://gethelp.library.upenn.edu/PORT/infotypes/scholarly_popular.html

Rodriguez, J. (2015). Scholarly communications competencies: open access training for
librarians. *New Library World, 116*(7-8), 397-405.
https://doi.org/https://doi.org/10.1108/NLW-12-2014-0140

Rowley, F. J., Sbaffi, L., Frass, W., & Devine, E. (2017). Academics' behaviors and attitudes
towards open access publishing in scholarly journals. *Journal of the Association for*

Information Science and Technology, 68(5), 1201-1211.
https://doi.org/doi:10.1002/asi.23710

Scholarly Publishing and Academic Resources Coalition. (2018). *Open access*. Retrieved
October 14, 2018, from https://sparcopen.org/open-access/

Suber, P. (2003). Removing the barriers to research: an introduction to Open Access for
librarians. *College & Research Libraries News, 64*. Retrieved October 14, 2018, from
http://eprints.rclis.org/4616/

Suber, P. (2008). Thinking about prestige, quality, and open access. *SPARC Open Access
Newsletter, 125*. Retrieved October 14, 2018, from
http://legacy.earlham.edu/~peters/fos/newsletter/09-02-08.htm#prestige

Unitec Library. (2018). *Open access and institutional repositories*. Retrieved October 14,
2018, from http://libguides.unitec.ac.nz/researchandmore/openaccess

Zhao, L. (2014). Riding the wave of open access: Providing library research support for
scholarly publishing literacy. *Australian Academic & Research Libraries, 45*(1), 3-18.
https://doi.org/10.1080/00048623.2014.882873

Zhu, Y. (2017). Who support open access publishing? Gender, discipline, seniority and other
factors associated with academics' OA practice. *Scientometrics, 111*(2), 557-579.

300128498

16. Appendices

16.1 Appendix A

<div align="center">

Questionnaire

</div>

What factors influence subject librarians' promotion of open access scholarly resources?

Q36 **Participant Information Sheet**

<u>Research Project Title</u>: What factors influence subject librarians' promotion of open access scholarly resources? <u>Researcher:</u> Donna Coventry, School of Information Management, Victoria University of Wellington I am a student at Victoria University of Wellington and am currently completing a Master in Information studies. I am required to undertake a small-scale research project as part of this programme. This research will gather data using an anonymous questionnaire that asks a variety of questions relating to open access scholarly resources. In 2010, the Council of New Zealand University Librarians (CONZUL) set goals around open scholarship including collaborating with researchers to raise awareness of the principles, practice and benefits of open access publishing. Academic libraries resource a number of open access initiatives, so it is of interest how those librarians who work directly with staff and students are promoting open access. The results of this research will provide information about the factors that influence the promotion of open access resources. This questionnaire is targeted at those who consider themselves to be a subject/ liaison librarian (or very similar) at a New Zealand university library. This survey is anonymous and no data will be attributed to individual participants or organisations. Your consent to participate is implied in your completion and submission of the questionnaire. This project has been granted ethics approval from the Victoria University of Wellington Human Ethics Committee. All material collected will be kept confidential and secure. No other person besides myself and my supervisor, Dr Brenda Chawner, will see the questionnaires. The final results of this research will be published on the University Library website and may be published and presented at conferences or in academic or professional journals. Data provided will be destroyed within two years of the completion of the project. If you have any questions or would like to receive further information about the project, please contact me at

coventdonn@myvuw.ac.nz or telephone 09 9219999 ext. 7522 or you may contact my supervisor Brenda Chawner at Brenda.chawner@vuw.ac.nz or telephone 04 4635780. **Please click here to proceed to the survey.**

End of Block: Block 2

Start of Block: Block 1

 Please fill out the questionnaire by ticking the appropriate checkboxes and adding your comments. **Please note: the term 'open access scholarly resources' refers to peer-reviewed scholarly research and literature that is freely available online to anyone interested in reading it.   Library users – staff and students are referred to as clients for the purposes of this questionnaire**

End of Block: Block 1

Start of Block: Default

Q1 Are you a subject/ liaison librarian (or similar) in a NZ university?

◯ Yes (1)

◯ No (2)

Q2 How often do you promote/ discuss open access resources to/with undergraduate students?

○ Never (1)

○ Rarely (2)

○ Sometimes (3)

○ Often (4)

○ All of the time (5)

Q3 How often do you promote/ discuss open access resources to/with postgraduate students?

○ Never (1)

○ Rarely (2)

○ Sometimes (3)

○ Often (4)

○ All of the time (5)

300128498

Q4 How often do you promote/ discuss open access resources to/with academic staff?

○ Never (1)

○ Rarely (2)

○ Sometimes (3)

○ Often (4)

○ All of the time (5)

Q5 Have you ever given open access **publishing** advice to prospective authors?

○ Yes (1)

○ No (2)

Q6 Is it mandatory at your University for staff to publish versions of their research on the institutional repository?

○ Yes (1)

○ No (2)

○ Don't Know (3)

Q7 How often do you encourage academic staff to publish versions of their research on your Institutional Repository?

○ Never (1)

○ Rarely (2)

○ Sometimes (3)

○ Often (4)

○ All of the time (5)

Q8 Prior to taking this questionnaire, were you familiar with the term open access?

○ Yes (1)

○ No (2)

300128498

Q9 How familiar are you with the concepts of gold, green and diamond/ platinum open access?

○ Not at all familiar (1)

○ Slightly familiar (2)

○ Somewhat familiar (3)

○ Moderately familiar (4)

○ Extremely familiar (5)

300128498

Q10 Tick any box that indicates open access resources that you are **aware** of

☐ Your institutional repository (1)

☐ Directory of Open Access Journals (DOAJ) (2)

☐ Directory of Open Access Books (DOAB) (3)

☐ nzresearch.org.nz (4)

☐ arXiv.org (5)

☐ Plos Collection (6)

☐ Open Access Button (7)

☐ Creative Commons (8)

☐ Others not listed (9) _____

300128498

Q11 Tick any box that indicates open access resources that you use/ have **used** with library clients

☐ Your institutional repository (1)

☐ Directory of Open Access Journals (DOAJ) (2)

☐ Directory of Open Access Books (DOAB) (3)

☐ nzresearch.org.nz (4)

☐ arXiv.org (5)

☐ Plos Collection (6)

☐ Open Access Button (7)

☐ Creative Commons (8)

☐ Others not listed (9) _____

Q12 How familiar are you with the different types of content available in your library's institutional repository?

○ Not at all familiar (1)

○ Slightly familiar (2)

○ Somewhat familiar (3)

○ Moderately familiar (4)

○ Extremely familiar (5)

Q13 Have you had any on the job training in open access?

○ Yes (1)

○ No (2)

Q14 Have you had training on open access concepts/ resources elsewhere? (please select any applicable answers)

☐ no training (1)

☐ as part of coursework when studying towards a library qualification (2)

☐ voluntary via online courses/ blog sites or webinars (3)

☐ via conference presentations (4)

☐ informal discussions with friends/ colleagues interested in this area (5)

☐ other (please state) (6) _____

Q15 I support open access

○ Strongly disagree (1)

○ Disagree (2)

○ Neither agree nor disagree (3)

○ Agree (4)

○ Strongly agree (5)

300128498

Q16 Academic libraries should be pro-active in promoting open access resources

○ Strongly disagree (1)

○ Disagree (2)

○ Neither agree nor disagree (3)

○ Agree (4)

○ Strongly agree (5)

Q17 In general how would you compare the average quality of open access scholarly resources to subscription based resources?

○ Much lower quality (1)

○ Lower Quality (2)

○ About the same (3)

○ Higher (4)

○ Much Higher (5)

Q18 Would you advise a client to publish in an open access journal?

○ Yes (1)

○ No (2)

○ Why?/ Why not? (optional) (3) _____

Q19 Promoting open access is within the scope of my role.

○ Strongly disagree (1)

○ Disagree (2)

○ Neither agree nor disagree (3)

○ Agree (4)

○ Strongly agree (5)

Q20 The number of demands and duties placed on you as subject/ liaison librarian presents a challenge to promoting open access scholarly resources.

○ Strongly disagree (1)

○ Disagree (2)

○ Neither agree nor disagree (3)

○ Agree (4)

○ Strongly agree (5)

Q21 Which broad subject area do the Faculties/ Schools you work with belong?

○ Science/ Technology/ Engineering/ Mathematics (1)

○ Social Sciences/ Culture/ Arts/ Humanities (2)

Q22 Have you ever been approached for information about open access scholarly **resources** by someone from your school/ faculty?

○ Yes (1)

○ No (2)

Q23 Have you ever been approached for open access **publishing advice** by someone in your school/ faculty?

○ Yes (1)

○ No (2)

Q24 In your opinion, what is the general level of support of academics in your subject area towards open access?

○ Strongly oppose (1)

○ Somewhat oppose (2)

○ Neutral (3)

○ Somewhat favour (4)

○ Strongly favour (5)

Q25 During preparation for the 2018 PBRF round, did you field any PBRF inquiries related to open access outputs?

○ Yes (1)

○ No (2)

300128498

Q26 In your opinion what influence do PBRF requirements have with academic staff in your faculty opting not to publish open access?

○ Not at all influential (1)

○ Slightly influential (2)

○ Somewhat influential (3)

○ Very influential (4)

○ Extremely Influential (5)

Q27 Are you aware of any researchers in your subject area that have had open access publishing requirements as part of research funding?

○ Yes (1)

○ No (2)

Q28 Please make any comments you feel relevant to the topics in this questionnaire (optional)

_____

_____

_____

_____

_____

End of Block: Default

300128498

16.2 Appendix B

Email sent via NZ-libs and TELSIG Mailing Lists

Donna Coventry

From:	telsig-request@list.auckland.ac.nz on behalf of Donna Coventry <coventdonn@myvuw.ac.nz>
Sent:	Tuesday, 24 July 2018 1:16 PM
To:	nz-libs@lists.vuw.ac.nz; telsig@list.auckland.ac.nz
Subject:	[TeLSIG NZ] Research Project Questionnaire: What factors influence subject/ liaison librarians' promotion of open access scholarly resources?

Apologies for any cross posting

Hi, my name is Donna Coventry, I am a student at Victoria University of Wellington and am currently completing a Master in Information Studies. I am required to undertake a small-scale research project as part of this programme.

My research is looking at what factors influence subject/ liaison librarians' promotion of open access scholarly resources. There has been very little empirical research on the topic of open access and academic librarians done in New Zealand and the aim of this research is to provide an overview of what is happening locally.

This questionnaire is targeted at those who consider themselves to be a subject/ liaison librarian (or very similar) at a New Zealand university library.

If you fit this description and are able to participate:
The questionnaire is completely anonymous and does not ask for your name or institution
The questionnaire is online The questionnaire will take about 10 minutes to complete

 A participant information sheet with more information is provided.

Please copy this link and past it into a browser
to complete the questionnaire:

http://vuw.qualtrics.com/jfe/form/SV_da6waU6yZbteLA1 Thank you

for participation and support, please feel free to circulate this

invitation.

Donna Coventry

300128498

16.3 Appendix C

<div align="center">

Twitter Post

</div>

Donna Coventry
@donna_cov

Hey NZ subject or liaison librarians, could you please help me out and take part in my questionnaire exploring the factors influencing the promotion of open access scholarly resources? Click on the link to take part and please share:
vuw.qualtrics.com/jfe/form/SV_da...

> Studies. I am required to undertake a small-scale research project as part of this programme.
>
> My research is looking at what factors influence subject/ liaison librarians' promotion of open access scholarly resources.
> There has been very little empirical research on the topic of open access and academic librarians done in New Zealand and the aim of this research is to provide an overview of what is happening locally.
>
> This questionnaire is targeted at those who consider themselves to be a subject/ liaison librarian (or very similar) at a New Zealand university library.
>
> If you fit this description and are able to participate:
> The questionnaire is completely anonymous and does not ask for your name or institution
> The questionnaire is online
> The questionnaire will take about 10 minutes to complete
>
> A participant information sheet with more information is provided.
>
> Thank you for participation and support, please feel free to circulate this invitation.
>
> Donna Coventry

8:13 PM - 24 Jul 2018

300128498

16.4 Appendix D

New Zealand Universities with formal open access mandates

Lincoln University

Lincoln University. (n.d.). *Open access*. Retrieved from

https://ltl.lincoln.ac.nz/advice/copyright/open-access/

University of Auckland

University of Auckland. (2015). *Open access guidelines*. Retrieved from

https://www.auckland.ac.nz/en/about/the-university/how-university-works/policy-

and-administration/research/output-system-and-reports/open-access-guidelines.html

University of Canterbury

University of Canterbury. (2018). *Introduction to the UCRR*. Retrieved from

http://canterbury.libguides.com/c.php?g=243264&p=1618112#mandatory%20deposit

University of Otago

University of Otago. (2017). *Open access policy*. Retrieved from

https://www.otago.ac.nz/administration/policies/otago664881.html

University of Waikato

University of Waikato. (n.d.). *Open access*. Retrieved from https://www.waikato.ac.nz/open-

access/

300128498

Name: Donna Coventry

Date: 17/10/2018

Course: INFO 580

Word Count: 10853 (including citations but excluding references, appendices, title page, contents and acknowledgements)