Investigating the Effects of the Implementation of Open Access Publishing on the Roles of Academic Librarians

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Declaration

I declare that this dissertation that I have submitted to Dublin Business School for the award of the MSc in Information and Library Management is the result of my own investigations, except where otherwise stated, where it is clearly acknowledged by references. Furthermore, this work has not been submitted for any other degree.

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Abstract

This research study aimed to determine if academic librarians in Dublin have redefined their role after implementing open access publishing in their libraries. This was done through semi-structured qualitative interviews with 7 participants from 6 third level institutions based in Dublin. The study found that academic librarians had redefined their role due to the open access initiatives in their institutions and that this change in the role was due to the influence of the initiatives themselves, advancing technologies, the available resources, and external and internal influences. All participants in the study regarded this redefinition as a positive change and predicted that open access library publishing will become the predominant path for scholarly communication in the future.

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1. Introduction

1.1 Research Study Background

The introduction of open access publishing in academic libraries in Dublin has been embraced by academic library staff as the principles of open access share similarities to the values and mission of the library. The principle of open access to enable unrestricted access to scholarly research aligns with academic libraries' goal to disseminate information and ideas to their institutions without barriers. Likewise, the value of an academic library to promote and enable scholarly research through their services is similar to the open access value of allowing researchers to re-use accessible information to further their own research. Both open access initiatives and academic libraries treat "knowledge as a common good" (Ghamandi, 2018, p.2) and this treatment endorses the adoption of open access publishing into the services of academic libraries.

This alignment is further supported by the issues facing academic librarians who grapple with new technologies, the rising cost of commercial journals, and changing patron needs. The implementation of open access publishing programmes aids in learning new tools and software for information management, demonstrates alternative paths for disseminating research outputs, and responds to the changes in stakeholder's information-seeking behaviour. Taking this commonality into account, this research study will ask if the roles of library staff in academic libraries have been changed by the introduction of OA publishing in their libraries.

The researcher has utilised the following definitions for the purposes of the research study. Open access as a concept, or OA, is defined as "digital, online, free of charge, and free of most licensing restrictions" (Suber, 2015, p.4). These parameters are what the researcher

believes constitute the ethos of open access, and when open access or open scholarship is referred to in this document, this is its intended definition. Similarly, the definition of publishing in regards to this research is "the set of activities led by academic and research libraries and library consortia to support the creation, dissemination, and curation of scholarly, creative, and/or educational works," (LPC, 2017). In this document, library-led open access programmes such as institutional repositories, journal presses, and monograph presses are collectively referred to as publishing programmes as they adhere to this definition. Two approaches to open access publishing used within Dublin are the 'Green' approach; literature that is deposited into a repository, and the 'Gold' approach; literature delivered via a commercial journal. Some terms are also used interchangeably in this document, such as 'librarians' and 'library staff', and 'programmes' and 'initiatives'. Any further clarification of terminology will be provided in the relevant sections of the document that this terminology appears in.

Academic open access publishing in Ireland has blossomed over the last decade, with institutional repositories becoming commonplace in particular because Ireland "favours the 'Green' approach" (OpenAire, 2020). Taking the avenues of distribution within third level education and the growth of open access initiatives into account, this study will attempt to gauge if the impact of library-led publishing programmes has caused a change in the way that librarians work and, if so, how this change has manifested.

1.2 Research Question

Have Academic Library Staff in Dublin Redefined their Role After

Implementing Open Access Publishing in their Libraries?

In order to construct a question that contributes to the knowledge pool of the information management field, the scope of the research focuses on the role of library staff who work with open access publishing programmes. The geographic range of the question has been limited to the city of Dublin for the sake of making research into the topic feasible in the given timeframe. This is discussed further in the Methodology chapter.

By asking this question, it is hoped that the researcher can gain an understanding of the role of a publishing librarian. Investigating any change that has occurred since the introduction of OA publishing in academic libraries will aid in understanding the specific skills and duties that are necessary for library publishing, as any divergence from traditional library activity is indicative of how publishing librarians have adapted their abilities to work within these newer initiatives. The researcher will dissect this adaption by asking if it is beneficial for publishing librarians, asking how it operates in the larger structure of the library services, and asking what the future of OA publishing looks like. In doing so and in gaining this understanding, this study could be used to support library strategy and publishing policies within academic libraries.

As library publishing is still an emerging practice, providing an understanding of the skills necessary for inhabiting the role of a publishing librarian can act as a guide for further implementation of OA initiatives. An awareness of what is needed to enable these programmes will make the process of doing so more manageable. Furthermore, this

research could be used to explain why third level education institutions should invest in OA publishing. Demonstrating the benefits that OA publishing can have for the institution through this study can justify the position and resources provided to a dedicated publishing librarian. A librarian in this role could ensure that creating and maintaining a body of the institution's research outputs was a priority of the library.

The investigation of this research question will be conducted through a series of semi-structured, qualitative interviews with seven academic librarians from six different institutions based in Dublin. The data collected from these interviews will be analysed and coded through thematic analysis and these themes will be used to discuss the information provided in order to answer the research question.

1.3 Research Aims

The aims of this research study are as follows:

- To determine if the roles of academic library staff have changed with the implementation of open access publishing in their libraries.

- If this change exists, to determine if it is beneficial to library staff.

- If this change exists, to determine how it impacts on the daily responsibilities of library staff.

- If this change exists, to determine how it utilises library-specific skills and abilities.

- To understand how the implementation of OA publishing is carried out in an academic library.

- To understand the continuing processes of OA publishing in an academic library.

1.4 Structure of Research Study

Chapter 1 of this research study functions as an introduction and summarises the background of the topic of research to justify its investigation. It states the research question and aims, as well as detailing the structure that the thesis document will follow. Chapter 1 also contains the literature review which further contextualises the research study by looking at already existing research in this field. Through this review a knowledge gap can be identified.

Chapter 2 focuses on the methodology of the study. It will discuss how participants will be selected, the design of the research, the materials and procedures that will be used, the ethical considerations of the study, and how the collected data will be analysed. The researcher will justify their choice of methods as well as acknowledging the limitations inherent to these methods.

Chapter 3 contains the results of the research interviews and the analysis of the collected data. It details the steps that will be taken to code the data and how those codes are composited into themes. The six themes drawn from the analysis are listed in this chapter and the results of the research interviews are divided into these themes based on the analysis.

Chapter 4 is the discussion of these themes and results. It will provide a summary of the findings drawn from the analysis. It will discuss the six themes that come from the analysis, using the aims of the research study and the previous literature to provide context for the interpretations the researcher will make. The limitations and strengths of the research study will be discussed to reflect on the impact they might have on the results of the study. The researcher will highlight any possible avenues of future research that could

build upon the findings of this study, as well as the implications and application of these findings within the field. The researcher also offers a conclusion to the study at the end of this chapter.

1.5 Literature Review

1.5.1 Literature Review Introduction

Both library publishing and the introduction of open access programmes in third level institutions are new and growing fields. Due to this, there is a limited pool of literature to draw from in order to gain an understanding of the current discussion regarding these phenomena. Any literature that is reviewed here also comes from "an environment of continual learning and research" (LPC, 2020, p.4) and is focused more on the past and the future of the practice as opposed to its present reality.

This literature review looks at the probable causes of the rise of OA publishing in academic libraries in Dublin as well as the directions it may take as it continues to grow. This examination is done through three themes: changing trends within third level education libraries, the effect of OA growth on commercial publishing, and how the principles of OA publishing align with traditional library values. The review of these themes comprises of literature from the last four years as the practice of library publishing has only come into the fore with technological changes, and the writings regarding it are contemporary. This analysis seeks to reflect this. Furthermore, the research question and research aims are used to provide context for why these particular examples of literature and these themes are being discussed.

1.5.2 Literary Theme One – Changing Trends

A goal of the research project is to understand how open access publishing programmes were introduced into academic libraries and in order to do this, the researcher examined the changes that have taken place within academic libraries over the past few years, as the catalyst for any kind of growth is change.

The advent of information technology such as the internet, ebooks and online journals caused a change in the information seeking behaviour of library patrons, and libraries had to adapt to these new behaviours in order to retain their patrons. In the introduction of her monograph *Library as Publisher: New Models of Scholarly Communication for a New Era,* Sarah Kalikman Lippincott points to "shifts in technology, policy, scholarly practices, and the marketplace" (Lippincott, 2017) as the instigating factors that caused the development of library publishing programmes. The role of the academic library had been altered by external forces and lost relevance among the students and staff within their institution. Advancing technology served as both a bane and a blessing to academic libraries as, although this change threatened their relevance, it also enabled them to engage with projects that would not have been possible without this new information technology, such as open access institutional repositories which in turn grew from institutional databases of research. It was necessary for academic libraries to take on these new practices in order to remain viable competitors against the likes of massive search engines and for-profit publishers. The Library Publishing Coalition, an international venture, acknowledges that library publishing is "able to draw on a wealth of resources and expertise developed by more established players" (LPC, 2018, p.5), thanks to the "emergence of open source or low-cost technologies (LPC, 2018, p.5). This reliance on external technologies is embraced and used in order to adapt academic library practices to retain relevance.

Lippincott also suggested that using publishing structures that were already in place in a parent institution could support other forms of publishing. For example, if a library's institutional repository could be shown to be a necessity for preserving the research produced at the institution, then the library could make an argument to start a journal or monograph press as a way to further disseminate that research.

This dependence on change to incentivize libraries to instigate publishing

programmes has been noted with the information and library sciences profession as well.

During a talk to the IFLA Special Interest Group on Library Publishing in 2019, Aajay Murphy

notes that libraries are "constantly changing, evolving, leveling up, reshaping, transforming,

[…] and so on" (Murphy, 2019, p.2) due to the fluctuations in technology and funding.

Another change that enabled the researcher to understand the introduction of OA

publishing into academic libraries was the implementation of Plan S. Plan S is a European

Commission initiative that began in 2018 which states that "With effect from 2021, all

scholarly publications on the results from research funded by public or private grants

provided by national, regional and international research councils and funding bodies, must

be published in Open Access Journals, on Open Access Platforms, or made immediately

available through Open Access Repositories without embargo," (cOAlition S, 2019, p.1). This

made the implementation of open access publishing within third level institutions a

requirement in order to procure funding for further research projects. Making OA a matter

of finances incentivizes third level institutions to invest in publishing programmes that can

support that requirement. If such a publishing programme is library-led, this can lead to a

higher level of cooperation between the academic library and the larger institution. This

manner of OA initiative that is implemented on a European-wide level, also speaks to the

recognition of open access publishing as a necessary investment for scholarly

communication.

This literature told the researcher that a library cannot be a static structure; it must

adapt to change which will more than likely be external, from within its parent institution

and beyond. An awareness of the wider societal spheres in which the library operates is a necessity in order to continue to grow.

1.5.3 Literary Theme Two – Effect of and on Commercial Publishing

Commercial academic publishing operates similarly to technological and social changes in regards to academic libraries, in that it can impact on how they operate. The costs of commercial journals and the reduced budgets of academic libraries may act as further incentive to start producing literature within the library itself. Examining this theme allowed the researcher to understand how publishing processes continue to operate within an academic library.

The guide to an ethical publishing framework provided by the Library Publishing Coalition states that library publishing should work without the incentive of a "profit motive" (LPC, 2018, p.5) as opposed to commercial academic publishing. If the goal of library publishing is "to increase the impact of scholarship created by faculty and students affiliated with an institution and to disseminate that scholarship as broadly as possible"(LPC, 2018, p.5), the goal of commercial academic publishing is instead profit-oriented. Dave S. Ghamandi turned this implication into an explanation, stating that commercial academic publishing is "a system based on exclusion and exploitation" (Ghamandi, 2018, p.2) that stifles research, and benefits from dismantling the principle of academic writing as a public good. Ghamandi claimed that it has been a failure in academia to allow commercial publishers to control scholarly communication, particularly in regards to research that is publicly funded, as private publishers earned a profit from publicly-funded research. Open access publishing has developed in part to combat this private consumption of public input, a non-profit reaction to a commercial action. However, as open access publishing ventures

can spring from commercial frameworks, Ghamandi also issued a warning for OA publishers

to be aware of relying too much on commercial publishing infrastructures in case they

replicate the same detrimental practices. This can already be seen in 'gold' OA publishing

which can charge authors or institutions article processing charges in order to make their

research open access.

Lippincott supports this viewpoint, stating that the "emergence of library publishing

can be directly correlated with perceived failures of and inequities in the contemporary

scholarly publishing ecosystem" (Lippincott, 2017). There is a recognized cause and effect in

regards to the relationship between commercial and OA academic publishing.

However, it should also be noted that this effect also works in the opposite direction

and growing OA programmes within academic libraries have impacted on the business

practices of commercial publishers. In February of 2020, Elsevier announced that they had

entered into a transformative agreement with the Consortium of Irish Higher Education

Institutions which would allow researchers in those institutions, "when publishing in

applicable Elsevier journals, authors will be able to choose to publish open access at no

additional cost to the author" (Elsevier, 2020). This pilot agreement shows that commercials

publishers are aware of the shift towards using open access programmes in third level

education institutions, and that these commercial publishers are willing to adapt their

business practices in order to retain their customers. This adaption effectively demonstrates

the cultural weight that open access carries, as for-profit publishers are willing to engage

with it. It shows an understanding that open access cannot be ignored by commercial

ventures but that they can try to assimilate it into their own practices. This assimilation

comes with its own issues as only "the corresponding author affiliated with an eligible

institution" (Elsevier, 2020) can benefit from this agreement. Through this agreement, Elsevier seeks to generate income, at the level of an institutional consortium instead of at an individual authorial level. By the definition of open access used for this research, this transformative agreement is not open, and a for-profit agreement should not be conflated with an open access initiative.

These critiques of commercial publishing make a case to introduce and invest in open access publishing in academic libraries as they bring to light the issues with commercial academic publishing. This reading of the texts also shows the OA is acknowledged as a competitive force by commercial publishers and is even employed by them in a limited capacity. The researcher believes that the approach that OA publishing offers is a more appropriate avenue for scholarly literature to take, due to the principles and values it embodies.

1.5.4 Literary Theme Three - Alignment with Library Values

To determine if the roles of academic library staff have changed with the implementation of open access publishing in their libraries, the researcher sought to take a closer look at these principles and values. The literature that has been read offers a consensus that these values are close in alignment to established library activities. Academic libraries already support the researchers that work in their institutions with "an existing portfolio of library activities," (Lippincott, 2017) as well as by providing materials, space and services that aid in the pursuit of research. The guiding principles of both open access and librarianship are committed to accessibility and equity.

In 2019, Aajay Murphy addressed the IFLA Special Interest Group on Library Publishing on the constant change in the library sphere. He noted that, regardless of any

changes, "the mission remains the same" (Murphy, 2019, p.2). This mission is identified as enabling the dissemination of the library's resources. Speaking to the same interest group, Suzanne Cady Stapleton also calls attention to this goal, adding that it aligns with the standards of open access publishing to "facilitate knowledge creation" (Stapleton, 2019, p.3), that is, academic research, in a way that is accessible to all.

Lippincott draws attention to the parallels between the OA publishing process and processes that the library already undertakes such as "data curation and undergraduate information literacy, institutional repository programs, and digital scholarship centers" (Lippincott, 2017). Integrating these processes into an OA publishing programme within an academic library would work to formalize and legitimize the duties that library staff already undertake to support the larger academic institution.

Ghamandi suggests that this alignment can combat the issues he believes have been created by commercial publishing. If academic libraries are able to "creatively decommodify knowledge" (Ghamandi, 2018, p.10) with creation of their own published material. In this way, academic library staff could take on a more active role in the research development cycle within their institutions by directly contributing to their library's collection.

The ethical framework produced by the Library Publishing Coalition is a document concerned with the values of both OA publishing programmes and academic libraries. It discusses the importance of maintaining "academic freedom" (LPC, 2018, p.55) within an institute's library and states that any publishing programme that is instigated by the library must be maintained by the library. Within these readings, these is the suggestion that there is a duty to upkeep the idea of information as a common good. This idea has been standard

practice within academic libraries, and if OA publishing is implemented this practice can be perpetuated.

1.5.5 Literature Review Conclusion and Research Rationale

The themes and literary readings above are by no means a complete understanding of the literature written on library publishing, particularly due to the rarity of documentation on this topic. However, the selection included reflects on the proposed research aims. By understanding the changes that prompt academic libraries to begin publishing, the role of a publishing librarian can be contextualized, and by understanding the values that the open access movement and libraries share, the processes of publishing can be aligned with the services that the library already provides.

Furthermore, in April of this year the Library Publishing Coalition put out a research agenda identifying unaddressed or under-researched areas in library publishing. One of these areas was labour and staffing, and the document encouraged researchers to engage in "investigating the labor makeup of these programs" (LPC, 2020, p.7), as well as highlighting the distribution of labour and understanding of library work as a field of potential research. As such, examining the possibility of change in the role of a publishing librarian has the potential to fill a knowledge gap in the current literature.

2. Methodology

This chapter will describe the methodology used for this research, including how participants were selected, the design of the research, the materials used and the procedure that was undertaken, as well as the data analysis method chosen, and the ethical considerations made during this process. The methodology of the research was dictated entirely by the research question. After asking if academic library staff in Dublin have redefined their role after the implementation of open access publishing, the researcher decided that both an exploratory and qualitative approach were determined to be the most appropriate methods of research. This determination is elaborated on within this chapter.

2.1 Participants and Sampling

The pool of possible participants for the research was naturally limited by the scope of the research question. Only academic librarians based in Dublin who already engaged with open access publishing within their libraries were eligible as participants. This is a purposeful sampling technique as the focus of the research question is on open access publishing in academic libraries.

In order to accurately select participants, the researcher started by studying a contemporary report on the landscape of Irish library publishing. A number of third level institutions listed in the 2020 report were members of the Library Association of Ireland's library publishing group (O'Neill and Buggle, 2020, p.10), and this membership was used as a jumping off point to identify suitable research participants. By doing this, six institutions were found that met the criteria set by the researcher. These were all institutions based in Dublin and by, conducting further study of their own websites, it was determined that these institutions were running current, active open access publishing programmes.

The process for selecting individuals as participants within these institutions was similar and overall, seven participants from six institutions were selected for the research. Non-probability sampling was used for selection as the pool of participants was not large enough, in the researcher's opinion, to randomly select participants. Instead, the criteria for selection involved "an element of discretion or choice on the part of the researcher" (Denscombe, 2014, p.52). These choices were based on factors such as availability and relevant experience with open access publishing. Neither age nor gender were factors that were considered in the selection process as they were not relevant to the research question. Qualifications were also not considered as the researcher did not consider them relevant to the question. Instead, the job titles of library staff within these institutions were considered as certain roles within the library were more likely to work with the available open access programmes then others. Most participants held roles within the research department of their institution's library or operated as systems librarians. The contact details for library staff that held these roles were found through their institutions' websites and a spreadsheet of these details was assembled for the researcher's access.

The size of this sample and the number of selected participants was consistent with other studies conducted at this level within Dublin Business School such as Ryan O'Dea's study of the role of school librarians in Irish Deis and fee-paying schools, which was based on seven interviews (O'Dea, 2016, p.31), and Pamela Doyle's study on how prepared South Dublin librarians were to handle patron's needs in regards to the Healthy Ireland initiative, which was based on six interviews (Doyle, 2019, p.31). These research projects also followed similar methods for conducting their interviews. Following these examples, it was believed that the sample size and number of participants selected was appropriate for a Masters level research project.

2.2 Research Design

An exploratory approach was used when conducting the research. This approach was chosen as it is "a valuable means to ask open questions to discover what is happening and gain insights about a topic of interest" (Saunders, Lewis and Thornhill, 2019, p. 186), and this aligns with the intent of the research question. The research question is framed in such a way as to investigate if a change has taken place in the role of academic librarians since the introduction of open access publishing to their libraries. Exploratory research aids in understanding this as it is aims to discover new data through asking 'what' and 'how' questions. The approach is also inductive. Its goal is to discover if the introduction of OA publishing in academic libraries has any relation to a possible change in the work of library staff, any data gathered from the research will dictate the theories that are formed. From the beginning, the research question informed the design that the research would take.

The researcher also concluded that a qualitative method was the most suitable way to conduct the research. Within the context of this project, the researcher defined qualitative research as a study of "participants' meanings and the relationships between them" (Saunders, Lewis and Thornhill, 2019, p. 163). One of the given aims of the research is to collect the opinions of academic library staff in regard to their roles regarding open access publishing programmes. This is a subjective aim as the researcher was to document how library staff think and feel about the subject of the research. This is not a project that could be explored fully through quantitative research "that generates or uses numerical data" (Saunders, Lewis and Thornhill, 2019, p. 161), as finding numerical data was not an aim of the project and any numerical data found was used in inform and provide context for the opinions given by the participants.

As the research question is concerned with these opinions, the researcher decided to use semi-structured interviews as a method of data collection. This method of interviewing is well-suited to a qualitative approach to data collection as semi-structured interviews allow space for the researcher to deviate from their set questions to in order to allow participants "to explain, or build on, their responses" (Saunders, Lewis and Thornhill, 2019, p. 378), and speak freely. It is necessary to give participants this freedom so that their subjective thoughts can be documented. Questions in a semi-structured interview can be asked out of order and additional follow-up questions can be improvised based on the flow of the conversation. The questions offer a guiding structure for the conversation between interviewer and interviewee without operating on a strict standard that must be adhered to like in a fully structured interview. The interview questions are included in Appendix A.

When proposing this project, the researcher considered using document analysis as another method of data collection. Specifically, the researcher would use the skills and duties listed in job applications for academic libraries to compare and contrast the expectations for prospective librarians before and after the introduction of open access publishing to the library. The researcher would have used this method to provide evidence in order to potentially support, or disprove the answers given in interviews. However, the researcher ultimately decided to only collect data through semi-structured interviews as these documents for job applications were not easily accessible, particular in cases where open access publishing programmes had been run in libraries for over a decade. Furthermore, it was unclear if the researcher could use these documents for the purpose that they intended as the job titles that interview participants had were not always directly

related to the open access publishing programmes, therefore examining their job descriptions would not provide any further insight into answering the research question.

There are some limitations to the method of data-collection that the researcher has chosen. The subjective nature of semi-structured interviews means that any information presented will be shaped by the thoughts and opinions of participants. Furthermore, all data provided will be limited to the individual knowledge of the participants. Anything that they do not know, or are unaware of in regards to the questions asked, cannot be included as part of the data set.

Keeping these limitations in mind, the researcher has determined that semi-structured interviews remain the most appropriate method of data collection for this project. There is no intention on the part of the researcher to use quantitative research methods as they do not align with the intent of the research question. When proposing this research, the researcher argued that if they were to use a quantitative method, they would create a survey in which every answer to a proposed question would be ranked on a scale of 1 to 5, with 1 being strongly agree and 5 being strongly disagree. In this way, data could be and compared as higher or lower ranked than other data. However, if only ordinal data were used, while the researcher would be able to infer how strongly open access librarians felt about certain questions, they would not be able to infer why they felt that way. Ordinal data does not capture the complete scope of what the research question asks and therefore, was determined to be unsuitable for this research.

2.3 Materials

The materials used during the collection of data and throughout the research project were based on the research question and the research goals in order to maintain consistency. They include the set of questions given to interview participants, an information sheet, and a consent form. All materials have been made available in the appendices.

The design of the interview questions was informed not only by the research question and aims but also by the research design. In order to conduct a semi-structured interview with these questions, they were designed to be open and probing. Open questions were used "to encourage the interviewee to provide an extensive and developmental answer" (Saunders, Lewis and Thornhill, 2019, p. 391), whereas probing questions were "used to explore responses that are of significance to the research topic" (Saunders, Lewis and Thornhill, 2019, p. 392). These types of questions gave participants the space to add context to their answers and elaborate on their opinions. The questions were also designed so that the order in which they were asked could be adapted to suit the flow of the conversation and additional questions were improvised during certain interviews as the researcher and participant built on answers generated by set questions.

The information sheet was given to interview participants and contained a brief summary of the research project, including the research question and research aims. It also informed participants of who the researcher was and provided their contact details, as well as those of the project supervisor. The information sheet also informed participants of what they would be asked to do for the purposes of the research, their rights as a participant and the guarantee of confidentiality. Likewise, the consent form provided a brief summary of

the research project, and ensured that the participants both understood all information provided to them and that any questions they had regarding the research were sufficiently answered before they signed the consent form.

Both of these documents were distributed to the interview participants after their interviews were scheduled, in order for the consent forms to be returned before the scheduled interview and so that any questions that participants had regarding the project could be addressed. The interview questions were also sent to participants beforehand so that they could understand the structure of the conversation ahead of time.

2.4 Procedures

Research participants were initially contacted through their work emails with the researcher introducing themselves, explaining their research project and attempting to gauge the level of interest the individual might have in participating in the research. A draft of this email is included in Appendix D.

Participants then either expressed an interest in the research or passed on the contact details of colleagues that they felt would be better suited for the researcher's needs. These colleagues were also contacted. When contact was made with all participants, meeting times were negotiated and scheduled. Meetings were to take no more than an hour and take place over a video call through Microsoft Teams with the researcher's account provided by DBS. It was necessary to conduct these interviews through video calls as due to the current COVID-19 pandemic both the researcher and the participants were working remotely. In the interest of safety, the researcher decided that video calls were the best medium to conduct the interviews through. When the scheduled meeting times were confirmed, the participants were sent the information sheet, the consent form, and the list

of questions to read over ahead of time. It was at this point that any queries participants

had about the research were addressed.

When the meetings began, the researcher greeted the participants and ensured they

did not have any further queries about the research before proceeding to ask them the

questions they had been sent previously. Participants were also informed that the

interviews were being recorded. As the interviews continued, the researcher ensured that

all questions were addressed, as well as allowing participants to deviate from the structure

they established and explore the topic they were discussing further. Some questions were

addressed in the answers given for other questions meaning the researcher did not feel it

necessary to ask them again. The flow of the conversation dictated when and how questions

were asked. Participants also expressed interest in the scope of the research that was being

conducted and the researcher answered these questions.

When all questions were asked, the researcher inquired if the participant had

anything else they wished to discuss. Most did not and when the few that did had said what

they wanted to, the researcher thanked them, bid them goodbye, and ended the interview.

The researcher then immediately ensured that the interview had been successfully

recorded.

2.5 Ethical Considerations

Before, during and after the interviews, the rights of the participants and other

ethical considerations regarding how the research was conducted were taken into account.

Firstly, the informed consent of the participants was required in order to proceed with the

interviews. This was achieved by sending them both the information sheet and the consent

forms. The information sheet explained the purpose of the research, informed participants

that participation was voluntary, listed their privacy rights, and explained that they could

abstain from the research or withdraw their consent at any time. When the consent forms

were signed and returned to the researcher, informed consent was obtained. It was only

after this that interviews were conducted.

Due to the small sample size of participants, the names, job titles and institutions of

all participants were anonymized. This was done by giving each participant a codename in

the order that they had been interviewed, for example, Par1 for the first participant that

was interviewed. A similar process was used to anonymize their institutions, for example,

Inst1 for Par1's institution. If participants mentioned other names throughout their

discussion with the researcher, these were also anonymized. The anonymized transcripts

have been made available through the submission of this project, and the codenames for

the participants and their institutions are available in Appendix E. This process was done to

ensure that the rights of the participants were respected and that the research complied

with GDPR standards.

Privacy was also taken into consideration when the researcher decided on the tools

that they would use to handle the data that they collected. Any tools used for collecting or

storing the research data would need to be accessible only by the researcher in order to

protect it. The tool used to conduct and record interviews with participants was the video

call feature of Microsoft teams. This Microsoft account was given to the researcher by DBS,

which ensured not only that only the researcher could access this account, but that the use

of the tool was approved by DBS. Transcriptions of the interviews were initially planned to

be done through a downloaded piece of software, but as this was not supplied by DBS and

the researcher could not guarantee that it was safe to upload data to it, transcription was

instead done manually. The coding and analysis of the data was done through NVivo, another tool supplied and supported by DBS. At all stages of the research process, data was stored in two places. One was the online drive that was attached to the Microsoft account provided by DBS, and the other was a password-protected laptop that only the researcher was allowed to access. The purpose of making two copies of all data and documents, as well as storing them in two separate locations, was to ensure that there was a back-up of all research document in the event of an emergency. Interview data will be stored for potential review for two years before being confidentially destroyed.

2.6 Data Analysis

Although NVivo was used as a tool to analyze the interview data, the data analysis itself was conducted through thematic analysis. Thematic analysis is a process for "identifying, analysing and reporting patterns" (Braun and Clarke, 2006, p.79) within qualitative data. These patterns are referred to as themes and making a record of them aids in the comprehension of the data. By dividing the data into themes, it can be interpreted according to the researcher's understanding of the data. This analysis was done through an interpretivist lens in order to "to explore different interpretations of a phenomenon" (Saunders, Lewis and Thornhill, 2019, p. 652) both from the point of view of the participants who were asked to offer their interpretation on the effects of open access publishing on their own role, as well as from the point of view of the researcher who is interpreting the information they have received through these interviews. The analysis is also inductive, "the themes identified are strongly linked to the data themselves," (Braun and Clarke, 2006, p.83) and meaning is pulled from the bottom-up, from the data itself as opposed to a broader theoretical basis.

The researcher followed the procedure for thematic analysis as laid out by Braun and Clarke in their 2006 article on the method. This process begins with becoming familiar with the data. When transcribing the interviews, the researcher was able to read and re-read the answers given by the participants and gained a familiarity with the information they had gathered. They then began to code the data, applying descriptors to sections of the transcript in order to reduce the amount of information that needed to be analysed.

With the analysis of qualitative data, the challenge can be to understand large amounts of data in a way that is of use to the research being conducted, and this is where the benefits of thematic analysis can be noted. Thematic analysis provides a framework that "offers a systematic yet flexible and accessible approach" (Saunders, Lewis and Thornhill, 2019, p. 651) that it can be adapted to the research question of the project. This can be seen in both the coding and the theming stages of Braun and Clarke's procedure. The descriptors applied during the coding stage were based on the research question and on the research aims. Any data that seemed as if it would help to answer the research question or help to fulfill the project's aims was coded. At the theming stage, these codes were collated into boarder terms that more accurately reflected on the larger aims of the research. For example, the code 'Costs' and the code 'Technology' were grouped into the theme of 'Resources'. The data gathered under this theme was used to fulfill the aim of determining how the implementation of OA publishing was carried out in an academic library, as material resources were a pertinent part of understanding this.

The flexibility of thematic analysis means that when a set of themes has been created, the next stage is to review them in order to ensure their compatibility with the research project's question and aims. This is done by "checking if the themes work in

relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis," (Braun and Clarke, 2006, p.87). Using NVivo, the researcher was able to generate these 'maps' in order to review the themes. Thematic maps for the transcripts are available in Appendix F.

This review process is repeated and refined until the themes are defined and explored to the researcher's satisfaction and they form the structure for the final stage. This is the discussion of the information gained from data analysis and the production of a report which use thematic samples to construct an argument and provide an answer to the research question. The analysis of data provides evidence to bolster this argument and is incorporated into a scholarly narrative in order to do so.

2.7 Limitations of Chosen Methodology

There are limitations to the methods used over the course of this research, with the biggest risk to the project being a participant withdrawing their consent at any point in the process. It was within their rights to do so as they had been informed, although ultimately, this did not come to pass. In order to prepare for the possibility however, the researcher created a pool of potential participants to contact to accommodate for this possibility. This pool was created using the same means as finding the participants that were interviewed.

There were also issues with conducting the interviews through video calls and there were sometimes connection problems in which the participant and researcher could not hear each other, or their connection froze. It was necessary to speak slowly and ask for some answers to be repeated. These unavoidable issues could sometimes disrupt the flow of the conversation.

It must be noted that the current global health crisis had to be taken into account when contacting participants to interview. It was necessary to accommodate the fluctuating timetables of participants when it came to scheduling meetings and acknowledging that they may not have access to all the resources necessary to answer the interview questions.

Due to the semi-structured form of data collection, the researcher was aware that asking open-ended questions may have led to answers that did not benefit the research or help to answer the research question. This information was recorded and included with this submission but not analyzed or discussed. The decision to use thematic analysis as the method of data analysis also had its limits. It is subject to the researcher's interpretation and measures such as multiple reviews of the codes and themes were conducted to ensure that the researcher accurately and appropriately analysed the data in accordance with the research question.

Taking these limitations into account was necessary in order to plan to counteract them or prepare to professionally handle them as they arose, as well as to ensure that the selected research methods were still able to function, despite any noted limitations, in a way that supported the research project.

With the application of these methods, and keeping ethical considerations in mind, the researcher was able to conduct the research interviews and collect the data they required. That research data, and how it was collated into informative themes, is presented in the next chapter, Results.

3. Results

This chapter is a report on the data that the researcher gathered through their interviews, as well as how that data was analysed. As discussed in the Methodology chapter, the researcher opted to dissect the data using thematic analysis, specifically using the steps set out by Braun and Clarke in their 2006 article on this method of analysis. This report details the researcher's process of following these steps, from initial coding of the data, to translating those codes into themes, to elaborating on and defining those themes. A sample map of the thematic data hierarchy is presented in this chapter based on the data provided by Par1. The thematic data hierarchy maps for the other six participants are available in Appendix F.

3.1 Coding the Data

The first step to analysing the data, according to Braun and Clarke, is to become familiar with the data. As the researcher conducted the interviews themselves, they have already "come to the analysis with some prior knowledge of the data, and possibly some initial analytic interests or thoughts," (Braun and Clarke, 2006, p.87). However, in order to fully become familiar with the data, repeated viewings of the interview recordings were necessary. These viewings were also active, that is, the researcher was keeping the research question and research aims in mind as they watched the recordings and looked for patterns and meanings that aligned with them. Notes were also taken at this juncture to preserve the researcher's initial thoughts on the data. Transcribing these recordings aided the researcher in becoming familiar with them, and additional readings were performed when the transcripts were available.

Using this familiarity, the researcher began to generate the initial codes for the analysis of the data. The researcher's awareness of the data as well as the notes that had been made during the first stage were used as a starting point to generate these codes. Codes are defined as "a feature of the data (semantic content or latent) that appears interesting to the analyst," (Braun and Clarke, 2006, p.88), and in this instance, the analyst's 'interest' would be how well these elements of the data align with the research question and research aims. Using this alignment as a guide, the researcher engaged with a further close reading of the data and organised it into eleven separate codes. The coding was data-driven as the themes that would be drawn from it would "depend on the data," (Braun and Clarke, 2006, p.89), that is, the final themes the researcher decided on were interpreted from the data. This coding was done through NVivo, a programme which allowed the researcher to separate each piece of data of an individual code into a separate document. This made the process of analysis simpler to track.

3.2 From Codes to Themes

If codes are individual elements of data, then themes are combined sets of codes that share similarities. The purpose of a theme is to "re-focuses the analysis at the broader level," (Braun and Clarke, 2006, p.89), from looking at information at a micro-level, to looking at information on a macro-level. The process of turning several codes into one theme was done through NVivo, with the researcher looking through the generated documents of each code and identifying similarities between them. These codes were grouped together under larger themes using criteria such as the same piece of data being entered into two codes. If the data was applicable to both codes, the codes shared a

similarity and could be grouped together. The researcher combined the transcripts this way until a preliminary set of themes was created and all codes had been sorted into this set.

The next stage is ensuring that "data within themes should cohere together meaningfully, while there should be clear and identifiable distinctions between themes," (Braun and Clarke, 2006, p.90). In order to achieve this, the themes must be reviewed. Similar to the process of becoming familiar with the data, the researcher conducted a close reading of the codes that had been put into each theme to actively examine them for compatibility and to see if they formed a pattern. When the suitability of the codes was determined, the suitability of the chosen themes was then reviewed in order to determine their validity to the research goals. The researcher examined the data that had been put into the theme categories on NVivo and determined whether or not it was in the correct category. Data was shifted from one theme to another that was deemed to be more suitable and themes were redefined as the researcher gained a clearer understanding of the data. The researcher also considered how well each theme fit with the other themes that had been identified into to produce a coherent narrative.

When the researcher was satisfied with their review of the themes, the next stage of the analysis was to name them. Naming a theme is also a matter of review, as the purpose of definitively applying a name to a theme is to "identify what is of interest about them and why," (Braun and Clarke, 2006, p.92). Themes were named based not just on summarising the contents of the codes, but on interpreting them through the researcher's lens, in this case the research question and aims. For example, the codes of 'Technology' and 'Costs' were grouped together under the theme of 'Resources', as understanding the resources provided to academic libraries will help the researcher to understand how open access

publishing could have been implemented in these libraries. The working names that the

researcher used for the themes throughout the other stages of the analysis process were

either set as the final names of the themes or edited to suit the criteria that the researcher

had decided on. Overall, six themes were produced. These were OA programmes, role and

responsibilities, resources, internal factors, external factors, and the future. Definitions of

these themes are presented below alongside the results of the thematic analysis of the

interview data. A hierarchical map of these finalised themes based on the data provided by

Par1 can be seen below in Fig. 1.
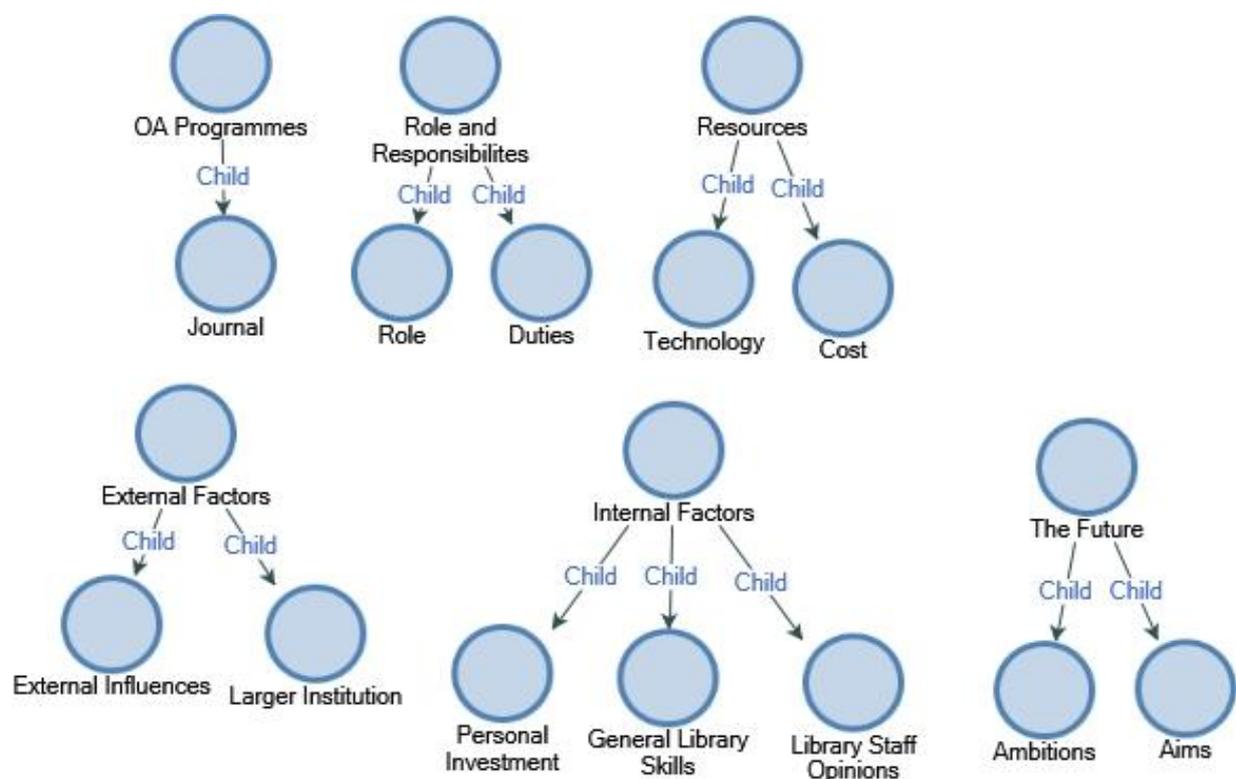
Fig. 1: Hierarchy Model showing Parent Themes and Child Codes Taken from the Data Provided by Par1.

The final stage of thematic analysis is to produce a report on the data that the

researcher has gathered and the analysis that they have interpreted from it "which

convinces the reader of the merit and validity of your analysis," (Braun and Clarke, 2006,

p.93). That report is presented here, within the Discussion chapter of this document. Using

the themes that were created from the analysis process, the researcher has constructed a

narrative to answer the research question and fulfil the research aims. This narrative offers

the researcher's understanding and interpretation of the data that interview participants

provided, as well the evidence from these interviews that the researcher believes supports

the argument that they have constructed.

3.3 Themes

3.3.1 OA Programmes

For the purposes of this research, the definition of an open access programme is any

form of OA publishing that an academic librarian works with in their institution. This

includes institutional repositories, and journal and monograph presses. Par7, the seventh

participant that was interviewed, also considered transformative agreements with a

commercial publisher as a part of their suite of OA initiatives. There were a variety of OA

programmes present among the six institutions that were researched. All six institutions had

an institutional repository, while three institutions ran a journal press and one ran a

monograph press.

Four institutional repositories were set up through external funding, as Par3

informed the researcher, telling them that their institute "worked with the Irish universities

association, the IUA, and they got a large amount of funding to, to help partially fund a

position to coordinate an open access repository at all of these seven universities. And, um,

[Inst2], um, also participated so seven universities plus [Inst2] was the first group." The

other two IRs were projects that began internally within the library such as the repository in

Inst1. There was a marked difference between how much of an institution's content was put

into the repository. In Inst3, Par4 claimed that "about 80% of our intellectual output is in the

repository" while in Inst6, Par7 told the researcher that "I think we've got about of 20% of what [Inst6] have done in the last 10 years is in [Inst6 IR]."

As both Par1 and Par2 were from the same institute, Inst1, they both spoke about their library press which currently produces one journal and is run as a library venture. Par4 also produces journals through their IR, and they are currently "publishing about 11 or 12 journals" although these are introduced and maintained by students and other staff members of the institute, with the library providing oversight and access to the IR module. Par6 expressed an interest in publishing OA journals, informing the researcher to "watch this space as it were, uh, hopefully, um, know more about that by early next year," while Par7 had previously considered working with OA journals and decided against it claiming that "running a journal is really a big deal. And running a journal with some credibility is an even bigger deal."

Par7's institute, Inst6 was the only institute that the researcher examined that currently hosts a monograph press. Par7 considers it a university press as "we didn't want it to be seen as a library press. Right. Okay. We wanted it to be seen as [Inst6] press." However, other institutions, such as Inst1 have plans to introduce OA monograph publishing to their suite of OA programmes. Par1 told the researcher that "we have ambitions to go into monograph publishing" and Par2 confirmed this, although they could not provide any more details as "it's more Par1's baby than mine."

Par 7 also mentioned that transformative agreements as part of their consideration of their institution's OA programmes. They were not mentioned by any other participant. Transformative agreements are agreements between a third level education institute and a commercial academic publisher which gives the institute "X amount of gold open access

tokens to use" whenever a student or member of staff wants to publish an article in one of the publisher's journals. The gold open access token allows anyone to read the article for free as the institute has paid the APC, the article processing charges. Inst6's "first transformative agreement was with Elsevier", a multinational publisher.

3.3.2 Role and Responsibilities

The next theme, roles and responsibilities, encompasses both the positions that the participants told the researcher they held as well as the duties that they carried out in that position. These roles ranged from "senior editor" to "head of library services," and the list of duties that each participant carried out was lengthy and varied.

Par1 described themselves as both "the deputy librarian and I also look after the learner and support service" as well as the "senior editor" of the journal that their press publishes. Par2 is the "the research librarian in [Inst1]," who also oversees "some systems stuff, setting up the databases and everything as well". Par3's title is "Research repository librarian" and considers themselves a "sort of a service manager in a way" who also takes on "all of that technical work" at Inst2. Par4 is the "sub librarian for digital services and research" and the manager of the institutional repository for Inst3. Par5 is "involved with the area of Research information systems" although did not give the researcher an exact title, while Par6 is the "head of library services". Finally, Par7 described their role as the "research communications librarian". No participant gave the exact same answer to the researcher's question about their role and title.

The responsibilities that the participants held were just as different. Par1 in their editing role in the journal is responsible for putting out calls for papers for Inst1's journal as well as managing the submissions they receive from this call. They contact peer reviewers

and managed their progress as they review the papers for the journal. They undertake

"copy editing, you know, and copyright checking, all that kind of thing", as well as organising

live launch events for each issue of the journal as it is released. Par2, in contrast, works

more with the institutional repository in Inst1. They catalogue the incoming work in their IR

approximately four times a year. This is staggered to take place after each intake of students

throughout the year at Inst1 and includes both staff and student work. Par2 is also the

liaison for the company that manages the software that their library uses to host their IR.

They are responsible for contacting them if there are any issues with the system and "that

kind of maintenance stuff that goes on throughout the year." They also aid Par1 with their

copy-editing duties for the journal and the press.

Par3's duties for Inst2 encompass "kind of five different roles if that's not enough."

They manage and train the team that works under them, and they do technical modification

on DSpace, the system they use to host their IR. They also catalogue new entries into the IR

and answer any questions that users may have about it in a customer service capacity. This

cataloguing is seasonal, similar to Inst1, with "the lift in January, it goes lower during the

term, a lift again, right at the end of term, a dip again in summer, and then a huge lift right

at the end of summer."

The tasks of Par4 revolve around supporting Inst3's researchers as well as

"publicizing, um, promotion, um, helping people to get the material and everything, set up

journals and that kind of thing." In order to ensure content is uploaded to the IR, they

contact the institute's researchers about providing the fulltext of their papers to them as

well as the metadata about the data from their research projects. They oversee submissions

of papers to the IR and approve them for uploading. Provision of training for institute

researchers is a part of their duties as they "talk to them about data management and stuff like that," and answers any queries about the IR.

The duties of Par5 in their involvement with research information include interacting with Inst4's researchers and other staff members in order to train them in the research systems they use. They monitor the traffic on this system in order to compile evidence of their research outputs, "the bibliometrics" of the institute. They also run "the research evaluation systems" and check "publishers' copyright policies to make sure that the uploads" into the IR are not under any publishing embargos that would prevent them from being accessible within the IR.

Par6's title leads them to describe their duties as "responsibility for more or less everything that goes on in the library." This includes communicating with institute staff outside of the library, collaborating with them to aid with the "design of assignments and assignment briefs." They also plan class visits to inform the institute's students of the facilities that the library can provide to them as well as support skills classes. Par6 then uploads "the award year projects" to their institute's IR in accordance with the assessment rubric that they have helped to design.

Par7 acknowledges how broad their duties are, "um, deliberately so, um, so it means that I can be landed with anything that's, uh, basically research related in particular." They help their institute's researchers to set up their bibliometric profiles. They run the IR of their institution, uploading material to it, and ensuring that all submissions are viable to be uploaded. They also engage in advocacy work regarding the IR by getting "out to schools, tell them about OA, tell them about our institutional repository and get them to, you know, engage and build the repository." They are also the administrator for the transformative

agreements in their institution. They provide the gold open access tokens to their researchers and oversee the maintenance of that system. As well as this, Par7 is a member of the press executive for their institution's monograph press, which means that they "do all the executive work, that the advisory board have decided on; so that just means all the spade work that they say we should write this policy, we should come up with terms of reference for that." In this capacity, they also manage the peer reviewers for the press as well as acting as a liaison for the editorial committee.

3.3.3 Resources

The definition of resources in this study refers to material resources such as the costs that academic library OA programmes occur and the technology and software that the participants use to carry them out.

Par1 and Par2 told the researcher that the annual operating fee for their journal press cost about €1,500 for digital issues and, although they initially had a physical print run for some journals, these were discontinued as they were too expensive to maintain. Other financial costs included staffing costs and payment for the maintenance of DSpace, the software that Inst1 uses to host their institutional repository. Inst2 and Inst4 also use DSpace for their IRs, while Inst3 subscribes to Digital Commons to host their IR and the journals they publish.

Par3 spoke about the initial funding that Inst2 received from "the Irish universities association, the IUA, and they got a large amount of funding to, to help partially fund a position to coordinate an open access repository at all of these seven universities." Inst3, Inst4, and Inst6 would have also received this funding. However, Par3 also warned the researcher that they expected "something on the order of 15% budget cuts in the library for

the next five years." Par2 and Par4 also mentioned they now expect to face budgetary constraints due to the COVID-19 outbreak. Labour costs will be an issue for Par3 in the future as well as they mentioned that they will soon experience "doubling of our customer base" without additional staffing when they start uploading electronic theses into their IR.

Par7's awareness of cost as an issue was their incentive to advocate for their own institutional press as they could see that when their researchers got book deals, the cost of these deals would necessitate them to "charge 50 euros for these 100 copies each," and their research was not being adequately disseminated. Par7 also showed awareness of the labour costs of their OA initiatives.

Par2 and Par7 both mentioned that further funding for OA projects in third level education could come from intergovernmental bodies who provide research grants as "a lot of grants are pushing towards, a lot of post grads are pushing towards open access anyway." Par7 also insists that the APCs included in transformative agreements could be a method of recouping costs.

The costs that the participants in different institutions spoke of were often similar as these institutions used the same types of software. As mentioned above, Inst1, Inst2 and Inst4 all use DSpace for hosting their institutional repositories. Inst3 is able to use Creative Commons as a host for both their IR and their journals, but Inst1 uses a separate system called OJS for the creation and maintenance of their journal press. OJS is also used at Inst4. Par2 told the researcher about the other kinds of software, programmes and online tools that they use to maintain Inst1's IR. Sherpa/Romeo is used to ensure that uploading material onto the IR does not violate any publisher embargos or restrictions while PlumX is used to check the alternative bibliometrics on individual materials. Platforms such as DSpace

and Creative Commons track the traffic that these IRs receive on both individual materials and as a whole, although Par5 was aware that "86% of our traffic comes from Google and Google scholar. It's all coming from the outside because the whole point of it is to push it out there." Other bibliometric tools include the Web of Science, Scopus and almetrics.com.

3.3.4 Internal Factors

An internal factor, as defined by the researcher for the purposes of this study, refers to a participant's personal thoughts and opinions on the topics that they were asked about, the general opinions of the academic library that they work in towards the OA initiatives that they are involved with, and the application of specific information and library science skills to these programmes. If any answer that the participants gave relates to these factors, it is considered an internal result.

General library skills can be used in the implementation and maintenance of OA programmes in academic libraries as "librarians have a lot of experience around managing platforms and doing a lot of the things, you know, apply metadata and everything." Cataloguing skills, research training and bibliographic management are all abilities mentioned that are applicable in both the general library duties and in specific OA programmes. Par3 noted that "the repository is just kind of a microcosm of a library," and many of the day-to-day duties of maintaining their OA repository required their library science skills. Par5 told the researcher that "there were international standards for the exchange of information" that librarians would be aware of and that they could apply to other programmes that dealt with information management.

The awareness and attitude of other library staff in regards to OA programmes was also gauged. Par1 and Par2 both marked that the attitude towards their IR and their journal

press was that they were "kind of passionate, it's kind of a passionate kind of project," and that while some members of staff were willing to be involved in these projects, others held no interest. Par3 stated that although their IR started as one of many projects, "it has become a part of the library" and is considered an integral service by library staff. In contrast, Par5 said that their library staff didn't hold much regard for their IR, "because it didn't appear in the library's strategic plan, [...] but it appears in the university's strategic plan." Similarly, Par7 felt that library staff regarded their IR as a side project unconnected to library activities. To combat this line of thought, they held an event on open scholarship to inform other library staff about "what OA advocacy is, what the difference between green and gold open access, why it's important, why subscription charges are gone off the scale." This proved to be a success when staff members became more invested in how the IR functioned.

Par1 believed that investment is critical when working with an OA programme, ", if you are somebody that brings a kind of passion to this, you don't mind going that extra mile, you know, to accomplish things." Par2 supports this belief and adds that they understand why it would be library staff in particular that would be invested in these types of initiatives as "it's kind of part of just like, In the librarians kind of mindset to share and disseminate information." Par3 believes in the importance of their IR to spread information that is not only accessible to academic researchers but also "people with, um, health. Chronic health problems, they want access to literature, and they will read, they will put themselves through reading, um, every single article written on a very rare condition." To Par4, providing open access to their institute's research is "a fine example of customer service" as everything they produce is made available to their patrons. For Par5, open access "isn't about, you know, to me about altruism [...] it's about impact; we're losing impact, leeching

our impact to other countries and other institutions." They believe OA initiatives recentre the library in discussions on scholarly communications. Par6 also wants to discuss OA research in terms of the standards that it holds itself to and to show that "the scholarship and the research done that is available to open access can be just as vital, uh, as any, uh, any other." Par7 agrees that a strong and successful series of OA programmes, "enhances the libraries um, um, perception and reputation in amongst other libraries, and amongst your own academic staff." All participants in the study agreed on the importance of the OA initiatives that they were involved in and expressed a belief in the larger ethos of open scholarship.

3.3.5 External Factors

In contrast to the above, an external factor, as defined by the researcher for the purposes of this study, refers to the influence and attitude of the larger third level institution that an academic library is a part of, as well as influences beyond the academic sphere such as funding bodies, local and multinational governments, and non-academic open access organisations. If a participant refers to any of these factors, it is considered an external result.

The investment of the larger institution in any library programme is vital and can be guaranteed if the aims of a programme align with the aims of the institutive. Par1 believes Inst1's investment in their IR and journal press came from the institute's imperative for their students "to be taught in a research active and research informed environment." Both the IR and journal press disseminate Inst1's research. Other members of faculty can also become contributing members of these OA programmes and this requires communication between the library and the larger institution. According to Par1, this collaboration brought

"a kind of better synergy across departments as well." Par2 adds that, as their IR also hosts the work of students, that "it's great for a student if they want to say, like, I have this piece of work and it's, they leave DBS, they can put it on their LinkedIn, but it's kind of a mark of quality as well," due to the standards of the IR.

Par4 deliberately sold the idea of an open access IR to the decision-makers at Inst3 "as a dissemination tool and a publicity tool" that could be of benefit to them, in order to ensure institutional buy-in. This pitch was successful to the point where if faculty with Inst3 "want one promotion, you have to have an [Inst3 IR] profile." The IR became embedded into the structure of the institution as a whole. Par5's IR was intentionally "built into the research information system" of Inst4 from its inception and has always been more integrated into the wider scope of the institution rather than in the structure of the library. It was understood from the beginning, according to Par5, that a librarian's skills were necessary to run it.

Par6 maintains that a smaller institution in particular needs to acknowledge and support OA initiatives "because, uh, for one thing, it's a great opportunity for, um, researchers, including students to, to, uh, get their work recognized" in an accessible environment. The faculty of Inst5 also work with their library to design assessments and to help train students in research skills. Par6 told the researcher that Inst5 has "a flat structure in terms of all the roles are quite interlinked so we work closely with admin, we work closely with faculty and the head of enhancement, um, and the Dean of academic affairs and the college president."

Par7 earned their institution's investment when they spoke to "the postgraduate studies office and convince them that the best thing they could do for research at masters

and PhD thesis was to mandate their deposit in the IR." Making the upload of material to the IR mandatory helped to embed it in the research cycle of Inst6. Inst6's press is also considered an institutional press even though it was a library-led initiative as the aim of Par7 and other advocates of the project was to "be seen as [Inst6] press in the same way that you've got Cork University press or Oxford University press." Integration into the larger institution was a priority.

Similar to the larger environment of each institution in the study, each participant was aware of the influence of factors outside of their own academic sphere. Par1 stated that "we were keeping an eye on what was going on in the States and what kind of really current developments were" when they first starting to plan OA initiatives themselves. Organisations such as the Library Publishing Coalition, the Directory of Open Access Journals, and the Library Association of Ireland are all cited by Par2 as influences on internal OA policies and programmes. These acted as incentives and guides for implementation. Funding from the IUA for Inst2, Inst3, Inst4 and Inst6, as mentioned above, would also act as incentive for OA programmes. It is noted by Par1 that the introduction and continuation of these OA programmes has created "networks with people in other institutions and, uh, and a sort of goodwill in between" them. The third level institutions can connect to each other by allowing access to their research.

Commercial publishers have had their influence on academic OA publishing, as has been discussed in their study's literature review. However, Par7 does mention how their foray into transformative agreements with commercial publishers does indicate "that they've started to diversify, and what I mean by that is [...] they're doing is shifting their goalposts and saying, okay, we do need to add value to this." The recognition of the value of

open access by for-profit publishers has led to new contracts and negotiations with third level institutions.

Another large influence was Plan S, the European Commission's initiative for open scholarship in Europe. Par2, Par4, and Par5 all mention that the declaration of Plan S aided their OA initiatives. Par5 claims it did so by acting as "a smack in the teeth for the researchers" who began to recognise the importance of open access after it was stated on a multi-national level.

3.3.6 The Future

This theme is concerned with how the OA initiatives within academic libraries will continue to progress and consists of both aims that participants stated they would carry out going forward, and the ambitions that they want to carry out at some point.

Par2 stated that encouraging researchers to promote their own material at an item level, as well as encouraging students to submit more work to the journal press were both aims that they intended to pursue with Par1 speaking about the rough plans that are in place to start experimenting with monograph publishing. Within the next academic year, Par3 will begin the process of uploading "research theses that's research, masters and PhD thesis" into their IR which will expand their academic output. Par4 has been attempting to convince Inst3's researchers to make their research data open as well as their final write-up although "it's not working really to tell you the truth so far, but we'd have to start a campaign on that fairly shortly." Par7 aims to expand their institute's press. Their first monograph is due to be launched in the near future and they are confident that when that launch is complete, they will be able to "do number two and let's do it twice as fast." All

these aims focus on building on the structures that already exist and expanding them to include new OA ventures.

The ambitions set out by the participants differ from the aims above as, for the moment, there are no established plans to implement them. Par1 would like to replace their instance of DSpace with a Digital Commons platform so their IR and journal press could be hosted on the same software. Par2 echoes this ambition although they do not specify using Digital Commons, rather they believe what is "somewhat immediate is upgrading the journal platforms." Par6, who already uses Digital Commons for their IR, also speaks of using it "as an actual publishing platform for a journal." Par3's ambitions extend to increasing their staff as they are aware that their planned aims will increase their workload. However, they are pessimistic that that is an ambition they will be able to achieve for some time and for now they "have to really fight to keep what we have and that's just to keep our head above water." Par4 previously proposed the implementation of an academic press in Inst3 but it was not funded at that time. For now, they are focused on procuring research data from their institution. If a press is ever funded however, they would like to focus on publishing OERs, open educational resources and hopes that they "would be considered a research output for staff" in order to incentivise them to produce them. Par5 looks beyond the current faculty of the academic library and wishes to educate incoming librarians in order "to bring on hopefully a new generation of library staff who will be very well versed in" OA initiatives and an open scholarship ethos.

It should be noted that a number of participants mentioned that, with the impact of the current COVID-19 pandemic, "everything's a bit kind of on hold" and the repercussions of institutional closures and new health regulations will be felt in all aspects of academia.

       The collected interview data has been presented above in six themes that were created from the thematic analysis conducted by the researcher. The interpretation and exploration of these themes is presented in the following Discussion chapter.

4. Discussion

This discussion of the interview data is intended to provide a definitive answer to the research question of have academic library staff in Dublin redefined their role after implementing open access publishing in their libraries.

Based on the research conducted, the short answer to this appears to be yes, academic library staff have redefined their roles after the implementation of OA publishing in their libraries. The researcher drew this conclusion based on the six themes extrapolated from the data and listed in the results chapter. These themes are discussed in conjunction with the research aims and the related literature mentioned in the literature review in order to contextualise them in the body of the research study and the broader field of literature. The aims of this research study include determining if this change of roles had occurred since OA implementation, to see how it manifests in the duties of the research participants, and to understand how these OA programmes are going to continue to function. The limitations and strengths of the study are also discussed, along with recommendations for future research in this field, the implications and applications of the results of the research study, and the researcher's concluding remarks.

4.1 Summary of Findings

The findings that the researcher came to over the course of their data analysis were based on the six themes listed in the results chapter and which are discussed in further detail below. A number of these findings aligned with the current literature reviewed in this study. The unanimous agreement between the research participants that external factors had an influence on their OA initiatives echoes Sarah Kalikman Lippincott's suggestion that "shifts in technology, policy, scholarly practices, and the marketplace" (Lippincott, 2017) are

factors to be taken into consideration when considering the development of library publishing programmes. Likewise, the Library Publishing Coalition's assertion that the goal of library publishing is to "increase the impact of scholarship created by faculty and students affiliated with an institution and to disseminate that scholarship as broadly as possible," (LPC, 2018, p.5) is supported by the research participants' own perceptions of the purpose of their OA initiatives.

Other findings include an emphasis on the importance of an institutional repository as a gateway programme for introducing other OA initiatives, how the role of a librarian working with OA publishing has changed and how exactly it has changed, the myriad skills and abilities that are required to implement OA programmes, the types of resources these programmes use, the personal opinions of the participants, as well as the reception of OA programmes in their own libraries, the attitudes of wider third level institutions and external organisations towards these programmes, and what the future looks like for open access in third level education going forward.

These findings are detailed below and aim to not only to discuss the results of this research study but to add to the discussion regarding the status and understanding of labour in library-led open access publishing.

4.2 Discussion of Themes

4.2.1 OA Programmes

Institutional repositories have existed within third level colleges in Dublin for at least a decade, with Inst1's IR now about "10 years old, 11 years old," according to Par2, and although every institute that was included in this research had an IR, there was a noticeable difference between how they were implemented. Inst2, Inst3, Inst4, and Inst6 all received funding from the Irish University Association to build their repositories, whereas Inst1 and Inst5 were funded internally by their institutions. This difference in the establishment of the IRs is shows that Inst1 and Inst5's library-led publishing programmes that institutional buy-in from their beginnings, while Inst2, Inst3, Inst4 and Inst6 initially did not, as their investment came from an external source. The support of the larger institution is vital in order to secure further funding and other resources. In order to gain this, the IR needs to be embedded into the structure of an institution. The research participants managed to do this in a number of ways. Par1 and Par2 in Inst1, and Par7 in Inst6, all require the deposit of post-graduate theses into their IRs as a part of a student's submission of their award-year project, embedding the IR into the design of the assessment. Similarly, if academics in Inst3 want to be eligible for promotion, it is mandatory to have a profile in Inst3's IR. Although Par4 mentioned to the researcher that the head of research at Inst3 "decided that without telling anybody anything." This showcases the value that the IR holds within Inst3 as faculty outside of the library choose to integrate it into their systems.

This researcher believes that proving the value of an IR is also the best way to introduce the idea of library-led OA publishing into the wider context of an institution. By establishing a repository as an integral disseminator of academic output in an institution,

library staff can introduce other benefits that OA publishing can provide such as reaching a larger audience, removing prohibitive licensing barriers, and compliance with funder requirements. This awareness of OA initiatives is also of benefit to academic libraries as, if "the library, uh, sections of the library, sort of siloed," or separate from the rest of the institution as Par5 claimed, the implementation and integration of IRs and other OA programmes will create a collaborative workflow between library staff and other members of faculty.

Journals and journal presses were only present in two of the six institutions studied and they were run in varying ways by the research participants. For Inst1, the press was implemented as a library-led publishing programme with the belief that "the unique selling point of the journals that we've been involved with to date has been that, we publish the work of undergraduate and postgraduate students alongside the faculty," according to Par1. In contrast, the journals published at Inst3 have "always operated with a kind of partnership approach. The academics edit it, but we will do the physical, um, setting up with the journal and uploading necessary," according to Par4. Where Par1 and Par2 are on the management board for their library press and play an active role in copy-editing their journal outputs, Par4 enables other faculty and academics to use their journal-hosting software. This difference shows the variety of forms that OA publishing can take in a library. Library staff can operate in a managerial capacity or merely facilitate its implementation. The researcher favours the approach of Inst1 as they believe the active involvement of the library in projects that include other members of faculty aids in integrating the library into the wider scope of the institution. It should be noted however that the ability to make and host journals in Inst3 was only made possible due to the software that the library used to host its

IR, Digital Commons. Even without direct participation in the creation of these journals, a library-led OA initiative was essential for their creation.

These library-published journals highlight the work of students and faculty, and act as another way to disseminate the research outputs of an institution. However, these library-published journals can also be used as a tool to draw attention to the "perceived failures of and inequities in the contemporary scholarly publishing ecosystem," (Lippincott, 2017). Journal publishing is a traditional standard for academics looking to promote and circulate their research, and the majority of this publishing is done through commercial publishers. The rising costs of journal subscriptions, restrictive access licenses and limited authorial rights are all issues within scholarly communication as they prevent dissemination and create an academic atmosphere of "exclusion and exploitation," (Ghamandi, 2018, p.2) designed to generate profit as opposed to providing access to academic research. If library staff can demonstrate to other faculty in their institution that they can be published in journals that have institutional buy-in without the limitations imposed by commercial publishers, it can incentivise the use of library-led OA publishing programmes.

As discussed in the Results chapter, only one institution currently has a monograph press, Inst6, although Par1 and Par2 from Inst1 have expressed interest in producing monographs and have discussed this possibility with faculty members. Notably, Par7 stresses that Inst6's press is not "a library press. Right. Okay. We wanted it to be seen as [Inst6] press", despite the fact that the press was initially proposed by library staff during a discussion on open scholarship. This conscious decision to disconnect the library from this OA initiative shows the division between the library as an insular entity and the wider institution. The library is regarded as separate to the rest of Inst6 and there seems to be a

fear that if the press were associated with the library, the rest of the institution's faculty would not interact with it. The researcher believes that if the library's involvement in this press were to be highlighted, it would aid in bridging that perceived gap between the library and the rest of the institution and encourage further collaboration between library staff and other members of faculty.

It should be noted at this juncture that Par7 also mentioned the transformative agreements in place at Inst6 as a part of their suite of OA initiatives. Due to the definition of open access that the researcher emphasised at the start of this document, they are of the belief that this type of contract between commercial publishers and third level institutions should not be considered open access. If OA is "free of charge, and free of most licensing restrictions" (Suber, 2015, p.4), then transformative agreements do not fit into this definition as, even though there is no publishing charges for individual authors who wish to publish in these journals, these charges are being paid at an institutional level and the licensing restrictions of these commercial publishers are still applicable. This researcher thinks transformative agreements must be regarded with caution as, even though they appear to support the principles of open access, they are still a privatisation of publicly funded research.

4.2.2 Roles and Responsibilities

The question of the role of library staff in regards to open access publishing is at the heart of this study and the central research question. The answer that the researcher received over the course of conversing with the research participants was a recognition that there was a change in the roles they held, but how these roles changed varied from one participant to another.

There is not one defined role of an open access publishing librarian. Of the seven participants, four were involved with research services and their titles reflected that while the other three had 'librarian' in their titles. None of these roles were called the same thing. In a talk to the Library Publishing Forum in 2014, John Unsworth mentions the concept of "professional identity and how we think of ourselves in our professions," (Unsworth, 2014, p.69). Taking into consideration the titles that the research participants hold, they have been identified as research partners, as editors, and as service managers, with a wide range of tasks and responsibilities assigned to them. This disparity between roles shows the depth of what skills and abilities are needed to run OA initiatives. How these roles are named also demonstrates how they are perceived by the institution that assigns them. A "deputy librarian" such as Par1 could be seen as operating and implementing OA initiatives as library-led services, whereas Par5 who is "involved with the area of Research information systems" may be seen as more removed from the library structure.

Although their titles are disparate, the responsibilities that the participants hold are similar. In some capacity all participants maintain and upload material to their institution's IR, train staff and students in scholarly communications skills, and market their OA services to other members of faculty, among other duties. Par3 described their repository as "just kind of a microcosm of a library. We have all the same functions of any other library," and this researcher would extend that definition to the other OA initiatives that the participants in this study run. The responsibilities that these participants carry out involve cataloguing, customer service, copy-editing, and other duties that would be considered the purview of an academic librarian. This reflects how open access principles and traditional library values align and share the same "commitment to equity and access," (Lippincott, 2017). In this

way, OA programmes in third level institutions can sometimes function as a miniature library.

The issue with this function is that it can cause both other library staff who are not involved with these projects, and members of faculty at a wider institutional level to disengage with OA initiatives. Librarians such as the research participants need to strike a balance between these separations by reminding other library staff that they are, as Par3 phrased it, "getting more engagement in ways outside of the library, deep within academia," and by showing researchers and academics how library-led publishing can benefit their careers. The role of an OA publishing librarian can hold a position of influence in a third level institution, but this position must be understood accurately in order to use that influence. Through this study, this researcher has learned that this role exists under many titles and although the responsibilities it holds are similar to that of traditional academic librarianship, it operates under a different identity, straddling the line between library service and larger institutional resource.

4.2.3 Resources

The resources that these library publishing programmes use and the costs that they incur will not be recouped. Library initiatives are not, and should not, be considered for-profit ventures as this is contradictory to a library's value of unrestricted access to information. However, recognising these costs is necessary for understanding how these initiatives are implemented and continue to grow.

As mentioned previously, Inst2, Inst3, Inst4 and Inst6 all received external funding in order to start to build their institutional repositories, while Inst1 and Inst5's initial funding was internal. This shows that there were different types of investment in these programmes

when they began. However, the costs that these programmes incur as they currently operate should also be considered. Par7 states that it's a mistake to consider the software that host IRs as mere "eprint software and eprint software is free." There are maintenance costs to upkeep and improve the software and online tools that the participants use. These costs should not be conflated with the costs associated with transformative agreements and commercial publishers, as they are not charging for accessing the material but rather charging for the systems that are used to display this material. This outsourcing of an aspect of the open access pipeline is seen as a necessity by many of the participants as they do not have the time or enough of the technical skill to maintain this upkeep by themselves. This necessity can vary by participant as, for example, Par3 is able to "do small bug fixes, um, small modifications that need to be done. I do database work. Um, and I, I liaise with our third party contractor who is a service provider," but this is not an ability available to every research participant.

The material costs of these OA programmes cannot be earned back as their function is not to generate profit. In order to justify continued investment in these programmes, the library staff that work with them must show the non-material value that they produce for their institutions. Par4 told the researcher that they "have, um, uh, online maps that show the downloads they're all live, so in a Friday afternoon when I'm exhausted or, or depressed, I look at the live downloads and you can see people from all over the world coming into [Inst3's IR] to get material." Metrics such as these can be used to track the impact of an institute's research outputs, and this impact can show how successful an institutional repository is at dissemination. Building a database of measurable, visible evidence of the value of an OA programme can be a vital aid when marketing these services to funders.

The function and usage of the software that research participants use overlaps in many ways, with Inst1, Inst2, and Inst4 using DSpace to host their institutional repositories, and Inst3 and Inst5 using Digital Commons. Although these pieces of software serve similar functions, it should be noted that while DSpace is open source and free to download, Digital Commons requires a subscription to use. This raises the question of should open access programmes be using open source software? Should the library principles that align with an OA ethos extend to the tools that are used to support their OA programmes? Par4 is unsure as their "experience of open source is you need a suite of developers working all the time, so don't really have the time for that." Their concerns for the usage of open source software cite labour and time costs that they do not seem certain that they can currently afford. However, this researcher believes that advocating for the use of open source software is in line with pursuing an open scholarship agenda in third level education. This then becomes a question of accessing open source software that performs the same function as subscription-based software and, more pertinently, making a case to stakeholders in OA programmes that would justify the costs, time and work that would need to be invested in order to change to another system.

4.2.4 Internal Factors

As defined in the Results chapter, the word 'internal' in this study refers to factors within the academic library such as applied library skills, the attitudes among library staff regarding OA initiatives, and the personal opinions of the study participants. Examining these factors has been done to understand the effect of the implementation of OA initiatives on library staff.

The application of general library and information management skills is an essential part of why the alignment between academic librarianship and publication is so harmonious. Lippincott states that library staff have "extensive knowledge of the processes and products of scholarly communication and have experience managing content," (Lippincott, 2017), which aids in the publishing process, and this statement was corroborated within the interviews for this study. Par1 told the researcher that "it was obviously something that was very beneficial, you know, because librarians have a lot of experience around managing platforms and doing a lot of the things, you know, apply metadata and everything." The use of library skills in OA programmes demonstrates the necessity for these skills to be used outside of traditional library duties and responsibilities. For example, Par5 works within the physical library building itself in their current role and they engage in "day to day reporting to the librarian with day to day things but with direction from the Dean of research, from that whole college research agenda." They operate in a hybrid role where they are technically not library staff but use their librarianship training within the context of their work, and they reason they were assigned that role was due to that training. The recognition that library skills are vital to implementing OA initiatives shows that publishing ventures in third level institutions should be library-led as the library has the most applicable and appropriate abilities for managing such programmes.

This raises a question of how invested academic libraries are in overseeing these publishing programmes. The opinion of the research participants regarding library staff who are not currently involved in such programmes was summarized by Par1 who told this researcher that "those who were interested, got involved and those weren't didn't." The OA programmes are regarded a passion project for the library staff who are involved with them. Par5 adds that these programmes were "looked upon in a very benevolent way and that the

library was very supportive and provided office space and secretarial support and also being enthusiastic in supporting training of subject librarians and others, so all of that was there, but was a bit like, you know, being interested and not really being involved." There is a belief that there is disconnect between the general library and library-led publishing programmes among the research participants. In order to reconnect, the benefits of OA programmes need to be marketed to general library staff. One benefit is the level of engagement from the wider institution that these programmes receive. Par3 noted that when they kept a list of enquiries regarding Inst2's IR and they showed this list to their co-workers, "they were like, wow, you're getting, they didn't say this but the feeling was, you're getting more engagement in ways outside of the library, deep within academia that we're not getting." OA initiatives can bridge the gap between a siloed library and the larger institution it is a part of by making the work of its own institution's researcher part of the library's collection.

To this end, this researcher believes the idea of the library as the base of OA initiatives, and the necessity of library skills in maintaining these initiatives, needs to be reinforced. Par7 stated that the reason that Inst6's monograph press is considered Inst6's press and not a library press despite being implemented through the library, is that they wished for the press to be regarded like "Cork University Press or Oxford University Press and so on, or UCL press," implying that associating the library with the press would cause it to not be regarded on the same level as the presses given as examples by Par7. However, this researcher believes there is value in emphasising the connection that OA programmes have to the library as, not only is it not possible to fully separate them, but because doing so aids in elevating the visibility of the library. Rather than being perceived as separate and siloed, raising awareness of how involved library staff are in the creation and upkeep of

valuable OA services can act as a bridge that connects the library to the larger context of the institution.

The research participants' own opinions regarding the service they provide is that, as Par2 phrases it, "it's kind of part of just like, in the librarian's kind of mindset to share and disseminate information." There is an implicit understanding of how library principles and open access values align, as well as a recognition that OA is a growing field of academic publishing within third level institutions with Par4 stating that "library-led publishing will become very important in the coming years." There is also an awareness that the role of library staff in the context of this field is changing. Par5 told this researcher that they would like to see the work that they do "become a recognized specialism with really well identified a set of competencies and skill sets that these people […] will be recognized for what they, what they bring into this." Overall, the research participants show an insight into the importance of OA initiatives as developing scholarly communications services that reflect and embody the values of their profession.

4.2.5 External Factors

The word 'external', in the context of this research project, refers to the influence and outlook of the larger institution that an academic library belongs to, as well as non-academic funders, organisations and governmental bodies. Discussing these factors is done to gain an understanding of the effects of academic OA programmes on these external stakeholders and, in turn, their effect on these programmes.

The importance of institutional investment for the library and the library's open access ventures has already been stated in this document. However, this investment is also important to the institution itself. Investing in OA initiatives, particularly institutional

repositories, aids in disseminating research outputs, fulfilling KPIs related to academic

output, and growing the research culture of the institution. Communication between library

staff and other faculty is aided by collaborating through these programmes, and Par1

believes that this communication has also "helped kind of create more of a respect for

library services, to be honest with you, there's a lot of the time with library services that

they're sort of invisible to faculty." This increase in visibility can make other faculty

members aware of the capabilities of the library that they may not have previously known

about. Developing the relationship between the library as an academic entity and the wider

institution is aided by involving faculty members in library-led projects.

This increased visibility is also of benefit to the students of the institutions included

in the study. Specifically, in Inst1 and Inst6, there is a mandate for post-graduate students to

submit their award-year projects to their institutions' IRs, and this type of theses collection

will also be implemented in Inst2 in the upcoming academic year. Par1 thinks "that if you

are an undergraduate student and you leave college and you have a piece of peer reviewed,

a peer reviewed article published, you know, um, that's a nice calling card," that speaks to

the quality of a student's work as well as giving them an easy way to start to build their own

body of academic work. There is also a desire in Inst1 by the staff that work with their

library press to get students more involved in contributing to the journals they produce. This

is another avenue for students to gain experience with scholarly communications, as well as

introducing them to open access journal publishing.

Further investment in OA and library-led publishing comes from a number of

external organisations at both national and international levels. Within Ireland, the Library

Association of Ireland runs a special interest group on library publishing which some of the

study participants are members of and that featured in a report of the current state of

library publishing in Ireland this year. In 2012, the National Steering Committee on Open

Access Policy published their statement on the National Principles for Open Access Policy.

Internationally, the Library Publishing Coalition which acts as "a robust network of libraries

committed to enhancing, promoting, and exploring this growing field," (LPC, 2020) provides

guides on standards and best practice for library-led publishing, while the European

Commission proposed Plan S in 2018. This plan states that, regarding scholarly

communication, the aim of the commission is that "all scholarly publications on the results

from research funded by public or private grants provided by national, regional and

international research councils and funding bodies, must be published in Open Access

Journals, on Open Access Platforms, or made immediately available through Open Access

Repositories without embargo." Plan S makes open access a central and mandatory

consideration for researchers who apply for European Commission funding.

The effect that commercial academic publishing has had on scholarly

communications has been mentioned previously in this document as the contributing to a

"crisis in scholarly communication" (Ghamandi, 2018, p.2) due to growing subscription

costs, authorial rights issues, and restrictive access to materials. However, the growing field

of open scholarship has also affected the business practises of commercial publishers.

Elsevier has entered into transformative agreements with third level institutions in order to

maintain control over the research pipeline while still adhering to the funding mandates

that institutions must abide by. Elsevier also own Digital Commons, the institutional

repository and publishing platform that is used by Inst3 and Inst5 for their OA programmes.

Par4, working at Inst3, suspects that "Elsevier are getting nervous about publishing, so

they're now concentration on supporting researchers in the workflow." In order to compete

with OA initiatives, Elsevier, or other commercial publishers could build a suite of products that serve the range of functions that a third level institution would require to implement those initiatives.

This adaption of open access tools and ventures by commercial publishers shows that there is a change happening in the field of academic publishing. Open access principles are being implemented in individual institutions, at a national level, and by funding bodies, and in order to keep up with this implementation, commercial publishers are appropriating the trappings of open access while still attempting to earn a profit. Although this assimilation of OA by commercial publishers is antithetical to the values of both open scholarship and the academic library, it acts as a signal that open access is prevalent enough in third level institutions that it is considered a competitor.

4.2.6 The Future

Due to this growth of open access adoption and implementation, many of the research participants spoke of the aims they are striving to achieve in their institutions. The ambition to see their OA programmes grow and reach further success is indicative of their confidence that these programmes will continue for the foreseeable future. Examining these aims and ambitions will provide a clearer picture of what the participants believe the future of open access in their institutions looks like.

Many of the participants' aims for the immediate future are concerned with expanding the impact of their OA programmes. Par1 has been speaking with some of the faculty in Inst1 about publishing monographs, while Par 3 will start uploading research theses to their IR. These aims are efforts to expand on the OA services that can be provided and grow the audience that these services cater to, respectively. This shows that there is a

certainty among the research participants that they will be able to achieve these goals. Par3 has stated however that uploading the research theses to their IR will see a "doubling of our customer base" and they are not sure if their labour resources will be sufficient to handle this new workload. This scenario could be used to justify asking institutional stakeholders for further resources. If the IR as a service can be marketed as beneficial for the students, library staff can argue for that more institutional investment in OA services.

The ambitions of the research participants are similar in their scope, in that the goal of them is to expand on the OA services they currently provide, but the distinction between these ambitions and the aims previously mentioned is there are no concrete plans in place in the institutions included in the study to implement them. One ambition voiced by Par4 is to approach their institution's faculty about publishing OERs, open educational resources. Creating open access textbooks by collaborating with institutional experts and then using those textbooks on the courses that the institution runs, would be a self-sustaining publishing venture that could further increase the value of OA programmes and act as an incentive for funding a library-led monograph press. Par5 also address their ambitions regarding open access and education, as they wish "to bring on hopefully a new generation of library staff who will be very well versed in" open scholarship principles and the OA programmes in place in Irish institutions. By teaching new librarians about how to implement open access as a part of their information and library science education, the ethos of open access could be embedded into them at the beginning of their professional careers as opposed to "they're picking up off the ground," through conference attendance or on-the-job experience.

The future of library-led open access publishing in third level institutions is a future of growth. The research participants are planning for the next steps that their open access ventures will take, OA is understood by commercial publishers to be a competitive force, and open scholarship is being enforced at a national and multi-national funding level by investors and stakeholders. However, this growth is dependent on funding and costs. Many of the research participants expressed their concerns over the funding they will receive going forward, not due to any failure to market their services, but due to external factors that they cannot control, such as the current global pandemic. Par2 mentioned to the researcher that "let's say everything's been up in the air with COVID, so everything's a bit kind of on hold," while Par4 lamented that "nobody foresaw COVID, money is going to be extremely tight. God knows what's going to happen long term, nothing may change because there won't be any money to do so." The impact of a factor such as this on open access library publishing needs to be considered and accommodated if library staff wish to sustain the growth of their programmes.

4.3 Limitations and Strengths of the Research Study

In this section, the researcher has mentioned any possible design flaws or limitations of this study in order to reflect on how, or if, they impact on the results that have been gathered. The strengths of the study have also been highlighted below to recognize that despite any limits that might exist, this research study has been conducted to the best of the researcher's ability.

4.3.1 Limitations

The study has been limited from its inception as the research question automatically reduced the sample size of study participants. As the question was concerned with library staff in Dublin-based institutions that already implemented open access publishing, there was a geographical limit set on the sample size. Only academic libraries based in Dublin were considered for the study. Likewise, only academic libraries that are currently engaged with OA programmes were selected for the research. If any academic libraries were based in Dublin but do not currently run any OA initiatives, they were disqualified from the sample. Similarly, any academic libraries that ran robust OA programmes but were based outside of Dublin were not put into the pool of potential participants.

Other issues with the sample size are concerned with the fact that all research participants were qualified librarians, even though the term 'librarian' and 'library staff' has been used interchangeably in this document. No library assistants or other members of library staff were consulted during this study. This was not intentional on the part of the researcher who chose participants based on their availability and through recommendations from other contacts, but neglecting to include these members of library staff may have

prevented the researcher from gaining a full picture of the attitudes and opinions of staff that work with OA programmes.

Furthermore, the basis of the research question is focused on understanding the opinions, thoughts, and feelings of the research participants. Therefore, all the results, discussions and conclusions based on this data are subject to the bias of the participants. Unless verified by another source, all the data gathered is subjective.

A broader limitation of the study was the effect of COVID-19 on the process of data collection. Due to restrictions based on movement and in the interest of safety, all interviews were conducted through online video calls even though the researcher had initially planned to conduct interviews face-to-face. Technical errors such as screens freezing, or slow internet connections could disrupt the flow of conversation, and the researcher had to be aware of the software that they used in regards to their privacy policies so that they could guarantee anonymity for the research participants.

4.3.2 Strengths

As mentioned when discussing limitations, the data gathered for this research is subjective. However, the researcher believes this can also function as a strength of the study. The value of qualitative data is such that it "studies participants' meanings and the relationships between them," (Saunders, Lewis and Thornhill, 2019, p. 163) and the researcher was able to plumb the depths of how participants personally saw the work that they carried out in their roles. The researcher feels that these subjective thoughts and opinions have worth as by understanding the attitudes that these library publishers have towards their work, the changes, benefits and issues that they are aware of in this field can be recorded and addressed.

During the selection of participants, although there were issues with the sample size, the institutions that were included in the research stemmed from universities to institutes of technology to private colleges, and this allowed for a broad range of attitudes from different types of third level institutions. Following on from participant selection, conducting the research interviews in a semi-structured was also of benefit to the study, as allowing the participants to build off of their answers to the researcher's questions not only provided more in-depth information to analyse, but it also established a rapport between the researcher and the participant which enabled the participant to be active rather than passive in gathering research data.

This study also fills a knowledge gap in the field of open scholarship and the researcher believes that is a significant strength. In their research agenda issued in April of this year, the Library Publishing Coalition called for "an exploration of areas where research is needed to support practice in the field," (LPC, 2020, p.4) including the area of labour. By studying the change in the roles of librarians due to the implementation of OA programmes, this study is examining an aspect of the labour make-up of publishing libraries, including a discussion of the skills needed to carry out this work, and this adds to the collective knowledge of how library publishing within academic libraries in Dublin operates.

4.4 Future Research

As the field of open access is still growing, there is ample opportunity for further research to be conducted based on this study. To begin with, the geographic range of the study could be expanded to the entire country in order to gauge the state of library-led OA publishing nationwide. Examining academic libraries based in Dublin has set an expectation for the opinions and thoughts of publishing librarians but conducting this study in every county would provide a much more complete picture of them, and thus broaden the understanding of how OA programmes are implemented.

Similarly, the sample size could be extended to include library staff that are not qualified librarians, or even go beyond the boundaries of the library to include other institutional faculty and students. Gauging the attitudes of other stakeholders in OA publishing in this way could aid in designing and expanding on these programmes in a way that benefits all those who invest in it.

4.5 Implications and Applications

The implication of this study, at its broadest level, shows how much open access ideas and initiatives are growing. Every institution the researcher studied has an institutional repository to host their research outputs and at least one other OA initiative that they publish through. Open access is becoming integrated into the scholarly research cycle to a degree where commercial publishers are attempting to appropriate it for their own use. It has also clarified that whatever the role of an OA publisher in a third level institution is called, library skills and library expertise are a necessity in order for that role to function. The library cannot be detached from OA initiatives as both the abilities that are

needed to maintain them and the principles that guide them are "a natural fulfillment of librarians' role as information disseminators," (Lippincott, 2017).

The application of this study on the other hand can be put towards constructing an understanding of the duties that are involved in implementing OA programmes in academic libraries. Par5 told the researcher in their interview that they would "like to see, um, the scholarly communications librarian or open science librarian" come into existence as a specialized library role, similarly to the existence of subject librarians. This study can provide knowledge of the approximate duties and skills that might be incorporated into such a role. A broader application of this understanding and knowledge would be for publishing librarians to share it. The LAI has already established a special interest group for library publishing but as an accompaniment to this, publishing librarians in Ireland could build a network of collaboration to share their experiences and skills with each other, moving beyond their institutional borders to further the aims and ethos of open access nationally.

4.6 Conclusion of Discussion

The primary question of this research project, have academic library staff in Dublin redefined their role after implementing open access publishing in their libraries, has been answered with a definitive yes. Throughout this study, the researcher has shown that a change has occurred in the role of academic librarians who publish, by documenting the experiences of the librarians who occupy these roles in Dublin.

In doing so, the researcher found several determining factors that facilitated, effected, or were affected by this change. The open access programmes that were implemented in the institutions included in the study operated in different capacities although every institution had an institutional repository and these IRs were often the first OA programme to be implemented in an institution. The roles that research participants held varied in terms of titles and responsibilities, however, they all operated in a hybrid capacity where they brought library skills and ways of thinking into initiatives that were carried out on a wider institutional scale. The resources such as the technology used for hosting OA programmes was integral for their implementation as all these programmes would not be possible without online services and hosting software. The library as an entity within a third level institution has been affected by this change in roles as there is now more visible integration between the library and the wider institution. The OA programmes featured in the study call for more collaboration with other faculty members and this centers the library as a more active partner in scholarly outputs. The influence of these programmes also benefits the institution as they can aid in the dissemination of research. Other external bodies also showed interest in institutional OA programmes, either to support them, such as the issuing of Plan S by the European Commission, or to compete

with them, such as commercial publishers adopting open access practices in order to retain customers.

The future of OA is regarded positively by the research participants and they anticipate that the field will continue to grow. Although the current global circumstances might have an impact on the budgets of academic libraries, the participants are confident that further implementation of open access in third level institutions is the path forward for scholarly communications, and that library staff are uniquely positioned to oversee this implementation due to their range of information management abilities and the alignment of library values and open access principles.

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6. Appendices

Appendix A – Interview Questions

1. Why was the decision to introduce open access publishing in your library made?

2. Can you tell me about your day-to-day tasks before and after OA implementation?

3. What was the library staff's reaction to the implementation?

4. What have been the benefits and what have been the disadvantages to implementing this service into the library?

5. What resources does the library use in the publishing process?

6. Has the way in which the library implements OA practices changed since it was first introduced?

7. What does the future of publishing in the library look like?

Interview participants were informed that these questions were subject to change and addition.

Appendix B – Participant Information Sheet

<u>PROJECT TITLE</u>

Investigating the Effects of the Implementation of Open Access Publishing on the Roles of Academic Librarians

You are being asked to take part in a research study on open access publishing programmes in academic libraries to determine if the implementation of these programmes has influenced the roles and functions of library staff.

The aims of the research study are as follows:

- To determine if the roles of academic library staff have changed with the implementation of open access publishing in their libraries.

- If this change exists, to determine if it is beneficial or detrimental to library staff.

- If this change exists, to determine how it manifests in the daily duties of library staff.

- To understand how the implementation of OA publishing was carried out in an academic library.

- To understand the continuing processes of OA publishing in an academic library.

This research is being conducted by myself, Amy Fitzpatrick, as part of the MSc in Information and Library Management. It is being supervised by Clare Conneally. This research is affiliated with DBS and has been approved by the Research Ethics Committee of DBS.

<u>WHAT WILL HAPPEN</u>

In this study, you will be asked to answer the interview questions given honestly and without restriction. Please feel free to elaborate on your answers as this study is concerned with your perceptions and opinions of your duties and role. The interviews will be recorded via the recording function of the video-call programme that will be used to conduct the interview, and the recordings with be stored on a password-protected drive that only the researcher can access.

<u>TIME COMMITMENT</u>

The interview will typically take no more than an hour of time.

<u>PARTICIPANTS' RIGHTS</u>

You may decide to stop being a part of this research at any time, with no explanation required. You have the right to ask that any data you have supplied be deleted, and any consent given at any point can be withdrawn.

You also have the right to omit or refuse to answer or respond to any question that is asked of you.

You have the right to have your questions about the research answered (unless answering these questions would interfere with the outcome of the research. A full de-briefing can be given after the interview upon request). If you have any questions as a result of reading this information sheet, please feel free to ask the researcher at any point.

CONFIDENTIALITY/ANONYMITY

The collection of data gathering for this study will not contain any personal information about you. Generic names and titles will be used for the purposes of the research and anonymity will be applied to all interviewees and their places of employment as default. Please note that upon completion, this thesis will be available to read through eSource, the institutional repository of DBS. If you wish to waive your anonymity, please be sure to inform the researcher who will be available to discuss including your personal details in the research.

FOR FURTHER INFORMATION

I and / or Clare will be glad to answer your questions about this research at any time. You may contact me at 10522326@mydbs.ie and Clare at clare.conneally@dbs.ie

Appendix C – Participant Consent Form

<u>PROJECT TITLE:</u>

Investigating the Effects of the Implementation of Open Access Publishing on

the Roles of Academic Librarians

<u>PROJECT SUMMARY:</u>

You are being asked to take part in a research study on open access publishing

programmes in academic libraries to determine if the implementation of these programmes

has influenced the roles and functions of library staff.

The aims of the research study are as follows:

- To determine if the roles of academic library staff have changed with the

    implementation of open access publishing in their libraries.

- If this change exists, to determine if it is beneficial or detrimental to library staff.

- If this change exists, to determine how it manifests in the daily duties of library staff.

- To understand how the implementation of OA publishing was carried out in an

    academic library.

- To understand the continuing processes of OA publishing in an academic library.

This research is being conducted by myself, Amy Fitzpatrick, as part of the MSc in

Information and Library Management. It is being supervised by Clare Conneally. This

research is affiliated with DBS and has been approved by the Research Ethics Committee of

DBS.

By signing below, you are agreeing that: (1) you have read and understood the Participant Information Sheet, (2) questions about your participation in this study have been answered satisfactorily, (3) you are aware of the potential risks (if any), and (4) you are taking part in this research study voluntarily.

Participant's signature: _____ Participant's Name (Printed): _____

Student's signature: _____ Student Name (Printed): _____

Date: _____

Appendix D – Sample Email of Initial Contact

Dear Participant,

My name is Amy Fitzpatrick, I am a student of DBS currently working on my Masters thesis.

I am contacting you to gauge your interest in participating in my thesis research. I am investigating the changing roles of staff in libraries engaged in open accessing publishing and I would love to interview someone [Your Institution] about open access publishing programmes that the library engages with, particularly your research repository. If you could provide me with the contact details of the right person to speak to about this, it would be greatly appreciated.

I am aware that this is a difficult time for everyone, but if you have any availability to speak please let me know.

Thank you in advance.

Kind regards,

Amy Fitzpatrick

Appendix E – Codenames for Interview Participants and their Institutions

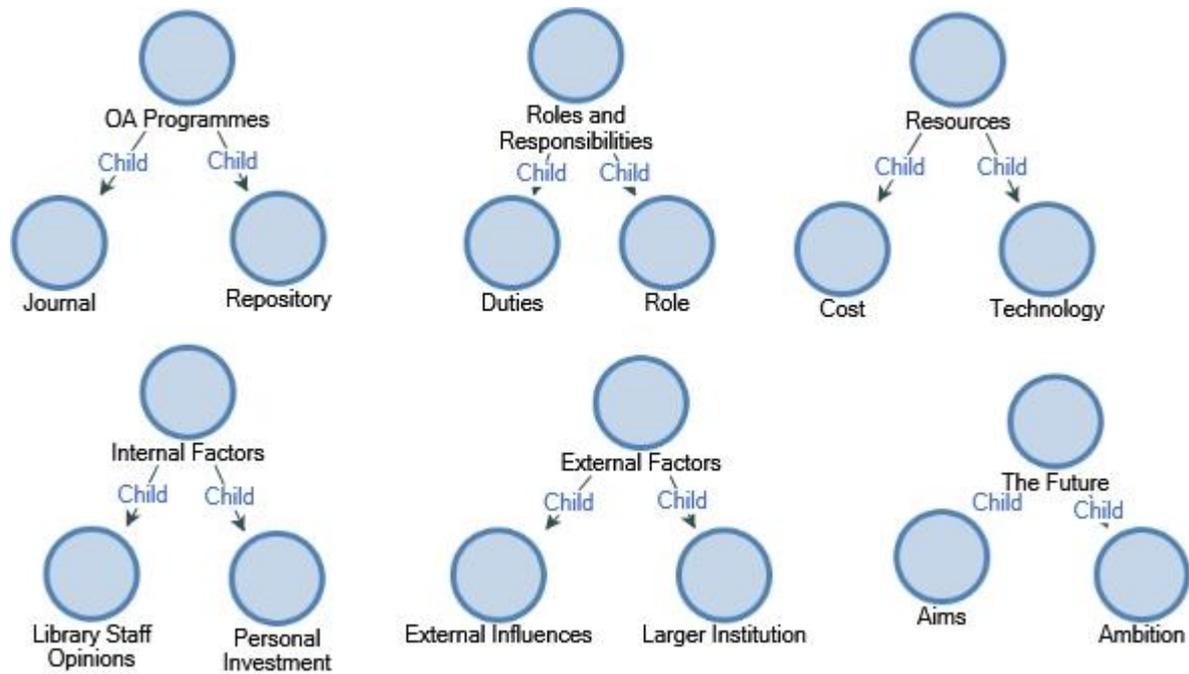| Par1 (Participant 1)	Inst1 (Institute 1)
Par2 (Participant 2)	Inst1 (Institute 1)
Par3 (Participant 3)	Inst2 (Institute 2)
Par4 (Participant 4)	Inst3 (Institute 3)
Par5 (Participant 5)	Inst4 (Institute 4)
Par6 (Participant 6)	Inst5 (Institute 5)
Par7 (Participant 7)	Inst6 (Institute 6)

Appendix F – Data Hierarchy Models

Fig. 2: Hierarchy Model showing Parent Themes and Child Codes Taken from the Data Provided by Par2.
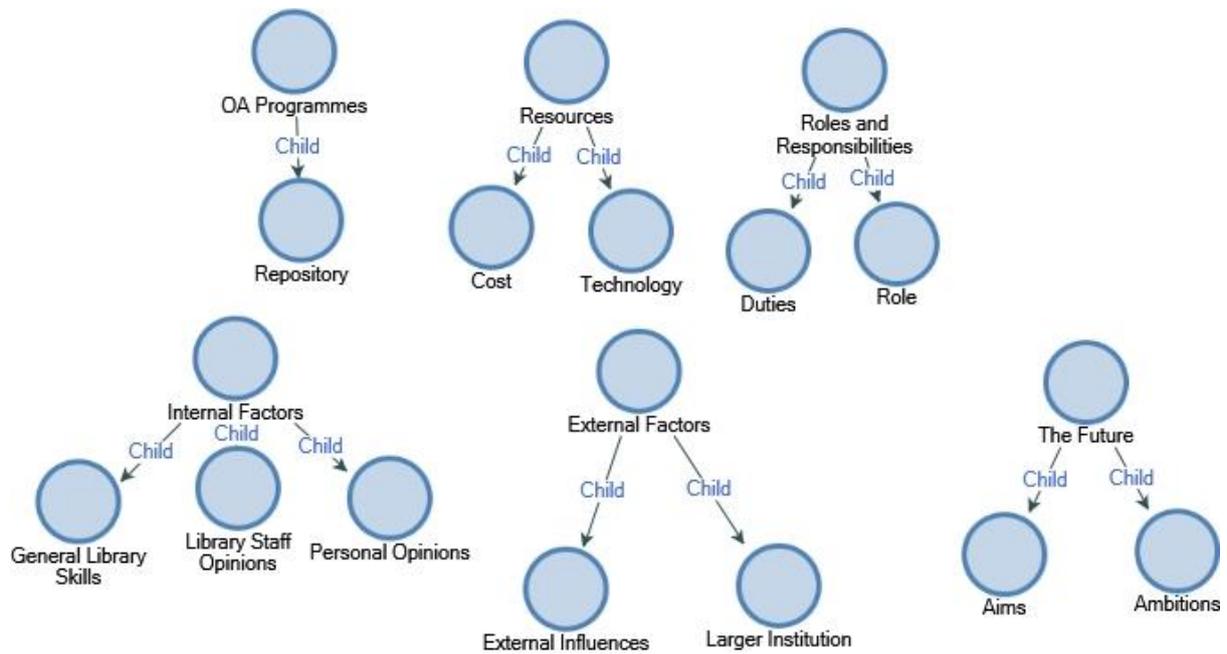
Fig. 3: Hierarchy Model showing Parent Themes and Child Codes Taken from the Data Provided by Par3.
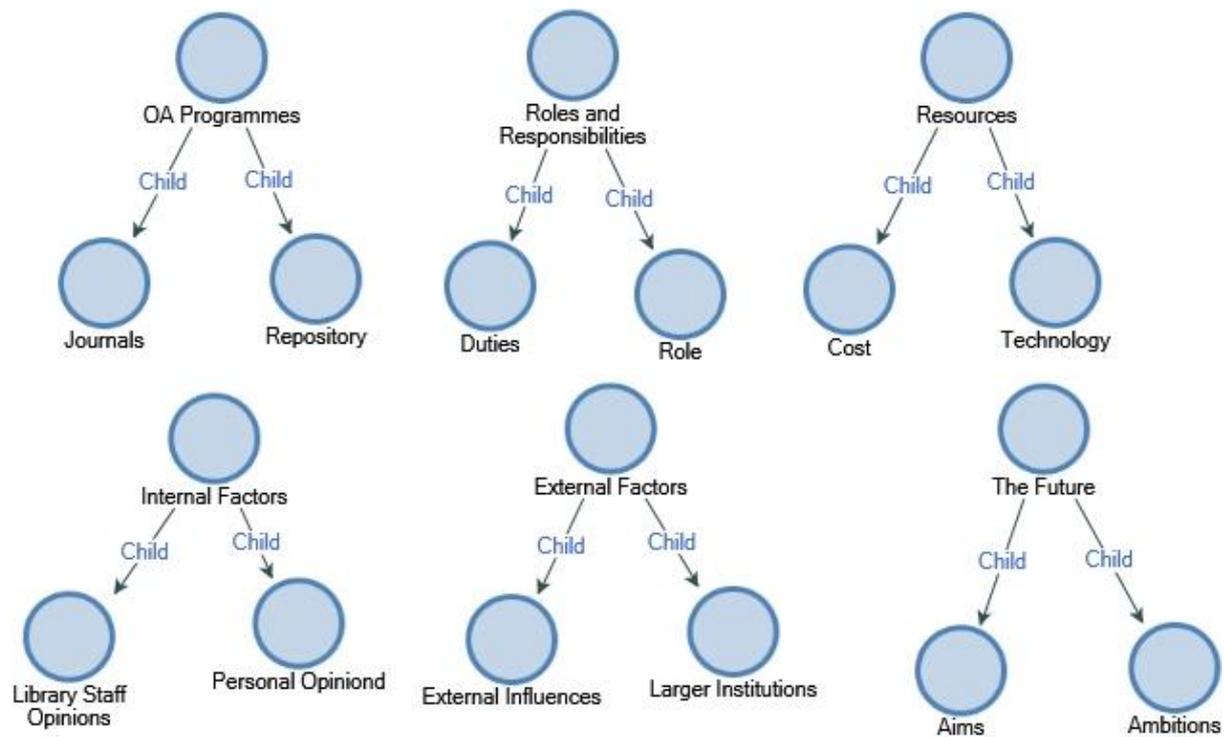
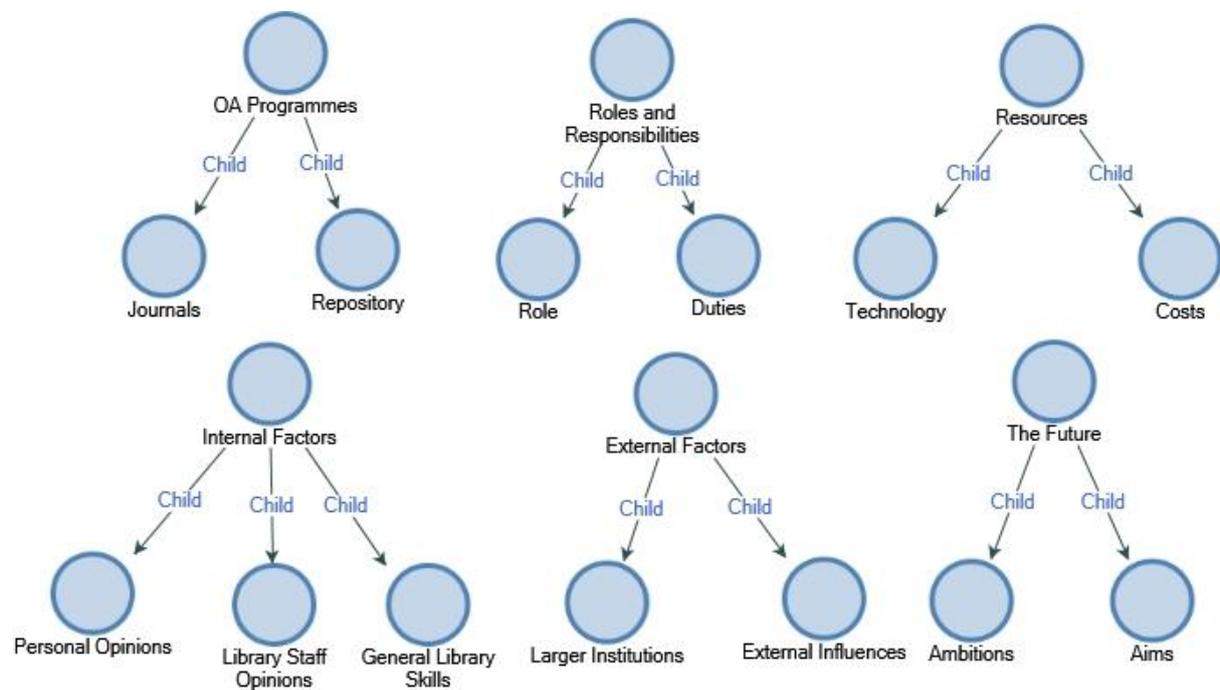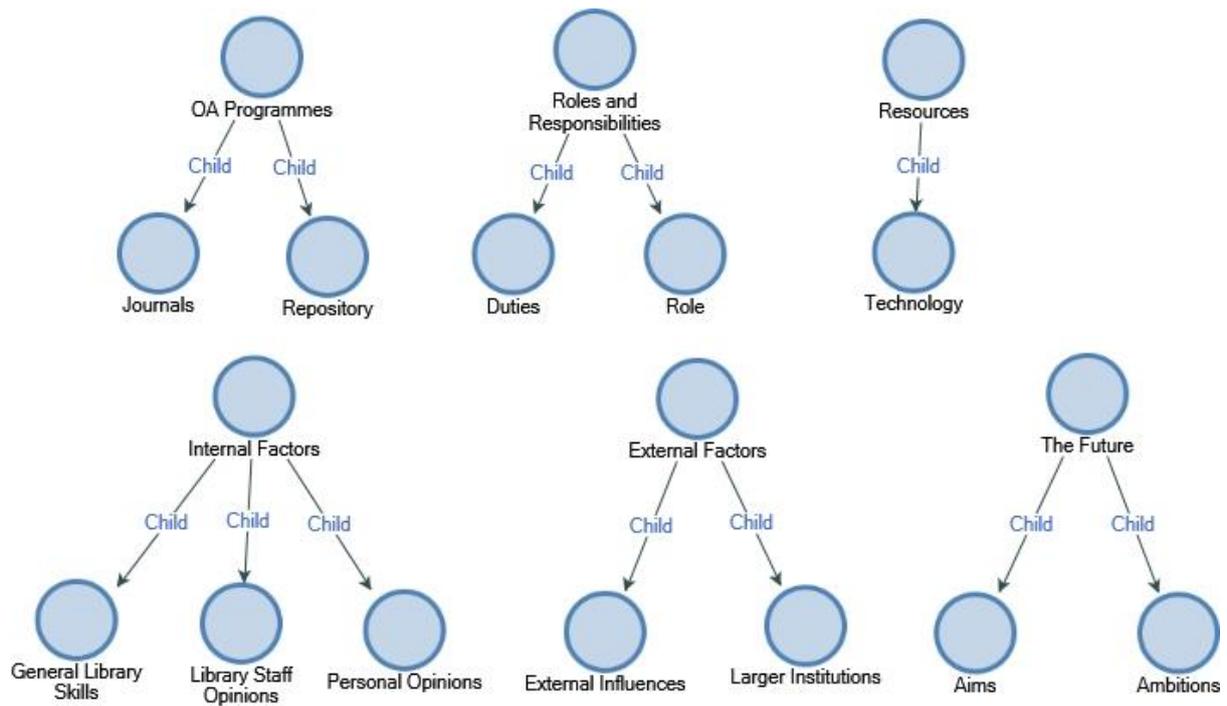Fig. 4: Hierarchy Model showing Parent Themes and Child Codes Taken from the Data Provided by Par4.

Fig. 5: Hierarchy Model showing Parent Themes and Child Codes Taken from the Data Provided by Par5.

Fig. 6: Hierarchy Model showing Parent Themes and Child Codes Taken from the Data Provided by Par6.
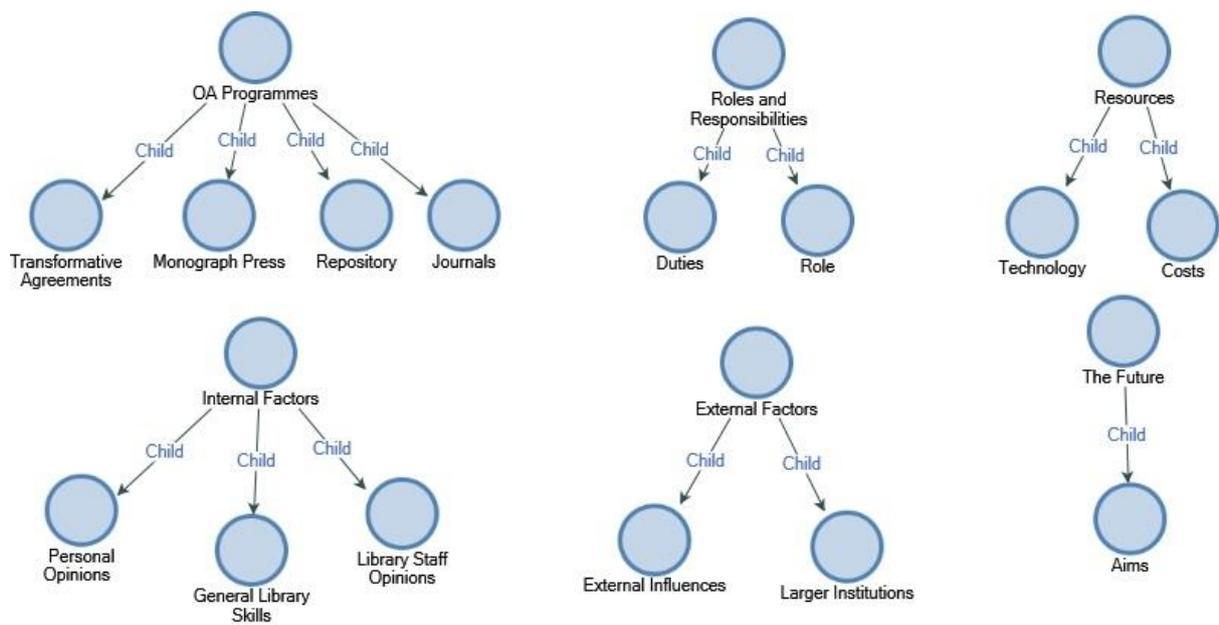

Fig. 7: Hierarchy Model showing Parent Themes and Child Codes Taken from the Data Provided by Par7.