## Assessing Current Open Access and Research Data Management Practices and Services in Palestinian HEIs

| Author(s)                      | Iyad AlAgha & Rawia Awadallah  
<table>
<thead>
<tr>
<th></th>
<th>(With Contributions from BU and GLA Teams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOI</td>
<td>10.5281/zenodo.801735</td>
</tr>
<tr>
<td>Document version and date</td>
<td>v.01, 27/03/2017</td>
</tr>
<tr>
<td>Dissemination level</td>
<td>Public</td>
</tr>
</tbody>
</table>
Contents

1. Introduction ..............................................................................................................................3
2. Objectives .................................................................................................................................3
3. Methodology ............................................................................................................................3
4. Analysis and Results .................................................................................................................4
   4.1. Demographic Profiles of Respondents ...............................................................4
   4.2. Estimating the Size and Types of Research Outputs .....................................................8
   4.3. Research Practices ...........................................................................................................11
   4.4. Data Sharing Practices ................................................................................................. 19
   4.5. Institutional Services ..................................................................................................... 25
   4.6. Awareness and Attitudes towards Open Access Publishing and Open Access
        Institutional Repositories (OAIR) ...................................................................................... 28
5. Conclusions ............................................................................................................................ 36

References ..................................................................................................................................... 38
1. Introduction

This report presents the findings of a needs assessment survey that was carried out with researchers and academic staff in four Palestinian Higher Education Institutions (PS HEIs) between December 2016 and February 2017. The four participating institutions include:

- The Islamic University of Gaza (IUG)
- Al-Quds Open University (QOU)
- Birzeit University (BZU)
- Palestine Technical University-Kadoori (KAD)

2. Objectives

The survey aimed to assess research and sharing practices among researchers in PS HEIs, as well as their attitudes towards open access publishing and Institutional Repositories (IRs). The survey data will be used to:

- Review the practices and procedures used by the researchers and members of academic staff at PS HEIs to handle and share their research outputs
- Estimate the size and types of research outputs and digital materials produced by the academic staff
- Determine the current attitudes towards open access publishing and Open Access Institutional Repositories (OAIRs)
- Explore the awareness of and attitudes towards the institutional policies and support for research data management
- Explore the potential motivations/deterrents to contribute to OAIRs

3. Methodology

A questionnaire consisting of 35 questions was prepared based on the information derived from the literature, (Alemayehu, 2010; Bishoff & Smith, 2015; Cox & Pinfield, 2014; Flores, Brodeur, Daniels, Nicholls, & Turnator, 2015; Green, McArdle, Rutherford, & Turner, 2012; Hedstrom & Montgomery, 1998; Ibinaieye, Esew, Atukwase, Carte, & Lamptey, 2015; Manjunatha & Th, 2011; Yang & Li, 2015), and in cooperation with Brighton University (BU) who leads the Needs Assessment workpackage and the university of Glasgow University who, through their role in the Digital Curation Centre, have been involved in collecting similar data in the UK. The questionnaire was divided into six sections:

- Demographic Information (7 questions)
- Estimating the size and types of Research Output (3 questions)
- Research Practices (9 questions)
- Data sharing practices (5 questions)
- Institutional services (4 questions)
Research Output Management through Open Access Institutional Repositories in Palestinian Higher Education Institutions

- Awareness and Attitudes towards Open Access Publishing and Open Access Institutional Repositories (OAIR) (7 questions)

Paper and electronic versions of the questionnaire were prepared in both Arabic and English. The project coordinators at partner PS HEIs were requested to circulate the electronic questionnaire to all researchers and members of academic staff. The study was conducted in the period from Jan. 4th 2017 to Feb. 19th 2017.

4. Analysis and Results

Of the 1,053 academic staff, 217 staff members across all four PS HEIs completed the questionnaire—a response rate of 20.6%. Responses from individual HEIs were collated and have been treated as a single sample representing the population of academic researchers in the four partner PS HEIs. For certain questions, differences between HEIs were highlighted and discussed where appropriate.

Excel sheets containing data and visualisations are available in the ROMOR Zenodo Collection and can be accessed through the following links:

- Questionnaire results per institution: http://doi.org/10.5281/zenodo.801758
- Results visualised as pie charts: http://doi.org/10.5281/zenodo.801768

4.1. Demographic Profiles of Respondents

The distribution of respondents across the four PS partner universities is as follows: 113 from QOU, 59 from the IUG, 21 from BZU, and 24 from KAD (see Figure 1).
Of the 217 respondents, only 30 were females, constituting 14% of all respondents (see Figure 2). This number is distributed as the following: 19 from QOU, 6 from IUG, 3 from BZU, and 2 from KAD. The proportion of female respondents, though may seem low, in fact reflects the percentage of female workforce at each partner institution. Table 1 illustrates the percentage of female staff in the sample and the error rate with respect to the population.

<table>
<thead>
<tr>
<th></th>
<th>Academic Staff</th>
<th>Female Staff (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>1053</td>
<td>147 (13.96%)</td>
</tr>
<tr>
<td>Sample</td>
<td>217</td>
<td>30 (13.82%)</td>
</tr>
<tr>
<td>Error Rate</td>
<td>--</td>
<td>0.14%</td>
</tr>
</tbody>
</table>

Table 1: Female academic staff in the sample and population
64.5% of the respondents are PhD holders with different academic ranks, while 33.6% have Master's degrees. The remaining percentage (1.84%) consisted of teaching assistants. See Figure 3 for full details and distribution of job titles. Table 2 illustrates the error rate for each academic rank with reference to the population.
Project number: 573700-EPP-1-2016-1-PS-EPPKA2-CBHE-JP

Research Output Management through Open Access Institutional Repositories in Palestinian Higher Education Institutions

Figure 3: Job titles of respondents

<table>
<thead>
<tr>
<th></th>
<th>Academic staff</th>
<th>Professor</th>
<th>Associate Professor</th>
<th>Assistant Professor</th>
<th>Lecturer (PhD)</th>
<th>Lecturer (MSc)</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>1053</td>
<td>138</td>
<td>175</td>
<td>348</td>
<td>15</td>
<td>361</td>
<td>17</td>
</tr>
<tr>
<td>Sample</td>
<td>217</td>
<td>27</td>
<td>40</td>
<td>68</td>
<td>5</td>
<td>73</td>
<td>4</td>
</tr>
<tr>
<td>Error Rate</td>
<td>--</td>
<td>0.66%</td>
<td>1.81%</td>
<td>1.67%</td>
<td>0.88%</td>
<td>0.64%</td>
<td>0.23%</td>
</tr>
</tbody>
</table>

Table 2: Academic ranks in the sample and the population

Figure 4 shows the distribution of respondents by age intervals. Respondents were normally distributed in terms of age, with 37% for the age interval 41-50, 26% for the age interval 31-40, and 27% for the age interval 51-60. There were 5% of the received respondents for each interval; under the age of 30 and over the age of 60.

Age interval

Figure 4: Distribution of respondents based on their age interval

In respect of the working period in the institution, all working periods were considerably represented in the sample as indicated in Figure 5,
4.2. Estimating the Size and Types of Research Outputs

Looking at the types and scopes of peer-reviewed publications, we found that the research output of partner PS universities comprises different types of scholarly publications with different scopes, with no preference given to one type or scope over another. For example, the proportions of local, regional and international journal articles were 14%, 10% and 15% respectively (see Figure 6 for details of peer-reviewed publications).

This result indicates that the foreseen OAIRs should be designed to support all categories and scopes of research outputs.
Regarding non-published or non-peer reviewed literature, plenty of works of different types were produced, with no clear preference given to particular types (see Figure 7). A remarkable observation was that the size of non-published and non-peer reviewed literature is remarkably large when compared to peer-reviewed literature (927 peer-reviewed publications vs. 625 publications).

Respondents were also asked about other potential types of non-peer reviewed publications not included among the options in the questionnaire. They mentioned several types such as articles in newspapers, seminar presentations, questionnaires, and designs for engineering projects. Cultural-related outputs, such as Friday sermons and jurisprudential provisions, were also frequently reported.

The substantial volume of non-scholarly literature should be considered when the OAIRs are designed. In addition, special categories for cultural-related research outputs should be also supported.
When asked about the common formats of research outputs (see Figure 8), textual and PDF formats had the greatest proportions (29% and 21% respectively). Other commonly used formats included images (8%), statistical data (7%), Spreadsheets (7%), social media content (7%), video (5%) and data formats (.csv, .dat, .xml) (4%). All other formats are produced but with small amounts.

Besides the aforementioned formats, 13 respondents chose the "other" option but not all of them explained this choice. Two respondents, who were apparently mathematicians, mentioned the mathematical equations. Two other respondents referred to Latex format.

This result suggests that PS researchers produce outputs in a variety of formats, and hence the OAIRs to be developed should provide support for a wide range of formats.

Figure 7: Non-scholarly literature produced at partner PS HEIs
Research Output Management through Open Access Institutional Repositories in Palestinian Higher Education Institutions

4.3. Research Practices

When asked about the storage media used by researchers for their outputs, answers varied widely (see Figure 9). In total, 77% of responses referred to the use of personal and local storage media, including 20% for flash drives, 18% for laptop hard drives, 18% for desktop hard drives, 12% for external hard drives and 9% for CD/DVD. Only 13% of respondents indicated the use of cloud-based solutions. Besides the storage media shown in Figure 9, three respondents said that they store data as an attachment to emails, and one respondent uses mobile phones.

In contrast, institutional digital storage facilities, servers and repositories were rarely to never used. This result shows that the majority of research and academic staff still prefer to use personal storage media for their research outputs, despite the existence of institutional repositories in some partner PS universities, such as BZU and QOU, and the provision of institutional storage services. The tendency to store research outputs personally on local devices may be attributed to the lack of trust in, or the lack of awareness of the available institutional services. In addition, it reveals the potential risk emerging in terms of longer-term accessibility to research outputs.
When asked about who is responsible for archiving research outputs, the vast majority (85%) indicated that they, or their research groups, archive their data on their own (see Figure 10). This result indicates either the lack of the institution’s support for data archiving, or the lack of awareness of the available support. Even if there are facilities that are known, researchers may not have confidence in them. It may also indicate that the archiving of staff’s research outputs is not part of the job responsibilities of the institution’s IT staff, librarians or data managers.

Digital archiving at partner PS HEIs is often carried out only for digital materials for which the institution assumes preservation responsibility. The archiving of staff’s research outputs remains the responsibility of the staff members, unless these outputs are deposited into the institutional repositories, storage servers or content management systems.
When asked about whether they have ever encountered research data loss (see Figure 11), 23% of respondents agreed, giving different explanations for that: 23 respondents explained the data loss by reasons related to faulty or lost computers/flash drives. Another common reason was the devices infected by malwares/viruses or that become inaccessible or corrupted (4 responses). Two respondents indicated that they lost data by not being able to access their email accounts. It is worth noticing that most reasons of data loss were related to the use of personal and local storage devices, which are often vulnerable to technical faults and cyber criminals.
Figure 11: Responses to question: "Have you already experienced research data loss?"

Respondents were also asked whether they are used to describe their research data so that others could reuse it (see Figure 12). The motivation behind this question was to investigate the provision of metadata or descriptions that may improve the understandability and potential for reuse of PS research outputs. 34% of respondents said they do not describe their research data. The largest proportion of respondents (40%) declared that they describe their research data but not consistently. Only 16% of respondents do that consistently, and 9% use suitable standards for that.

Looking at the results per institution, we found that this pattern was consistent across institutions (see Figure 13). However, BZU seems to have a good number of researchers using standards. This may be explained by having an institutional repository for faculty publications at BZU. This repository, which is called FADA, uses Dublin Core metadata standard. In contrast, QOU seems to have the highest number of researchers who do not describe their data. This might be due to the large percentage of respondents from QOU who were lecturers with Master degrees (51.3%). Job duties of Master lecturers often include much teaching and less research activities.

While there is evidence of good practice among researchers in describing their data, the majority do not make use of standards to do so. We think that researchers may benefit from training on the use of applicable metadata standards for describing their data.
Figure 12: Responses to the question: "Do you normally describe your research data?"

Figure 13: Responses per institution for the question: "Do you normally describe your research data?"
Staff members were also asked about the methods they use to describe their research data. Respondents indicated the use of different methods as depicted in Figure 14. 54% of the respondents use digital files, while 36% use paper-based documentation. When asked about whether the provided description is sufficient for anyone other than the person who generated the data to understand and use it, 56% of respondents felt that their descriptions were adequate while 44% felt that their descriptions would be insufficient for this purpose. This result may indicate that the visibility of PS research outputs on the Web remains low due to the large number of respondents who still rely on paper-based methods for describing data. Comparing to electronic description techniques, paper-based techniques are more error prone, more time consuming, and harder to link to the original data. Therefore, we think it may be necessary to consider changing the practice of PS researchers towards electronic description techniques.

Regardless of the used method, a large proportion of respondents provide description relevant only for personal reuse, and not for anyone else to understand and reuse the data. This point might have constantly reduced the opportunities for reusing data published by the PS research community. Therefore, researchers may benefit from training on the potential value of good data description techniques to improve validation and reproducibility as well as promoting data reuse, both by themselves in the future or by other researchers.

**Figure 14: Methods used for describing research data**

Aiming at exploring how the staff members handle the data management, they were asked about the procedures they follow for managing their data. Results depicted in Figure 15 show that respondents behave differently in this regard: 31% indicated that they follow ad-hoc procedures, while 30% follow formal procedures at a personal level. 21% indicated that they follow no procedure.
When it comes to the institutional level (see Figure 16), the same trend was observed across all institutions: The majority of respondents from each institution use either ad-hoc procedures or formal procedures at the personal level. In addition, a notable number of respondents from each institution indicated that they follow no procedure, especially from KAD.

![Distribution of procedures used for managing data](image)

**Figure 15: Distribution of procedures used for managing data**

**At any point in working with your research data are there procedures that you follow for managing data?**
When asked about the institutional policies for RDM (see Figure 17), 35% of respondents indicated the presence of written RDM institutional policies, while 65% indicated the absence of such policies. When looking at results per institution (see Figure 18), we found that this variation was consistent across all institutions. In fact, some partner PS HEIs, i.e. QOU and BZU, indeed have written RDM procedures for handling digitized material, while others, i.e. IUG and KAD, have no RDM policies. Regardless of whether RDM policies exist or not, this result reflects the extent to which the staff members at partner PS HEIs remain uninformed of the status of institutional policies. Even where RDM policies exist, these policies are apparently not well-implemented to the extent that makes the staff members aware of them. However, this result may be interpreted in another way: Researchers and academic staff are often not concerned with many RDM policies and pertinent operations such as storage, migration and refreshing. This is because the academic staff often handle and manage their research outputs on their own without using institutional support. Except for copyright issues, RDM policies and operations mainly target the managerial staff who work on data management such as librarians, data managers and IT staff. There may be value in working with HEIs to review what policies are in place and how researchers are made aware of these. There may be scope to review existing RDM policies to better reflect the active participation of a range of stakeholders across the entire research lifecycle.

---

**Figure 16: Distribution of procedures used for managing data across institutions**

**Figure 17: Responses to the question: "Does your institution currently have any written policies for managing research data?"**
Research Output Management through Open Access Institutional Repositories in Palestinian Higher Education Institutions

Does your institution currently have any written policies for managing research data?

![Chart showing responses per institution to the question: "Does your institution currently have any written policies for managing research data?"

Figure 18: Responses per institution to the question: "Does your institution currently have any written policies for managing research data?"

4.4. Data Sharing Practices

The next group of questions aimed to explore the sharing practices and preferences of academic and research staff at partner PS HEIs. Participants were first asked about the types of digital materials they used to share with others. Results revealed the willingness to share all sorts of digital materials, with priorities given to published papers, theses and learning material (see Figure 19 for details). Respondents were also asked about additional types not included in the question choices. A few of them mentioned types like working papers prior to publication, and descriptions of chemical compounds.

A remarkable observation from Figure 18 is that the majority of respondents are overwhelmingly in favor of sharing to some degree. Only 3% have said they do not share.
Research Output Management through Open Access Institutional Repositories in Palestinian Higher Education Institutions

Figure 19: Responses to the question: "What types of digital materials do you usually share with others?"

When asked about the methods of sharing research outputs, respondents gave different answers (see Figure 20): 26% of respondents are willing to share data based on personal requests only. Social networking sites, such as ResearchGate, are commonly used for data sharing by 18% of respondents. Institutional repositories, however, are not commonly used for data sharing, with only 10% of respondents indicating that they deposit their research outputs into institutional repositories. Only 5% mentioned that they do not share their research outputs. This trend was also consistent across individual institutions.

With the variety of sharing methods used by PS staff members, it is necessary to convince the staff of the unique possibilities offered by OAIRs, and the advantages they present over other classical sharing methods. This is important to get them deposit content into OAIRs.
Respondents were also asked about the restrictions or embargoes that may limit their ability to share data with others. The motivation behind this question was to identify potential restrictions that may prevent staff at PS universities from sharing their data through OAIRs. Results are depicted in Figure 21: 26% of respondents mentioned that there are no restrictions or embargoes. 24% of respondents indicated that they need to have their work published before sharing it. 10% of respondents think that sharing their data may jeopardize intellectual property rights.

When it comes to IRs, these restrictions should be carefully considered in order not to impair the staff’s contribution to the content of OAIRs. When the promotion and advocacy plan is prepared: the staff’s concerns regarding these restrictions and embargoes should be carefully addressed and resolved. OAIRs may also enable depositors to apply embargos for materials and to restrict access where necessary.
Research Output Management through Open Access Institutional Repositories in Palestinian Higher Education Institutions

Figure 21: Restriction or embargoes that may limit the ability to data sharing

Staff members were also asked with whom they are willing to share their research data. This question aims to explore a common idea of the scope of data sharing, and to what extent this scope fits with the notion of open access and OAIRs. As shown in the results in Figure 22, the PS staff members tend to share research outputs with the wider communities: 24% of respondents are willing to share with all researchers working in the field, while 15% agreed to share with the general public. 24% are willing to share with immediate collaborators, and 14% will share data with researchers at the same institution. It is necessary to notice that this question allows multiple answers, and respondents often selected multiple responses regarding the scope of data sharing. For example, most respondents who would share with collaborators and researchers at the same institution also indicated their willingness to share with all researchers in the same field. Looking at results per institution, we found that this pattern is consistent as shown in Figure 23.

We think that different notions of the scope of sharing should be considered when designing the OAIR at PS HEIs. Staff members may be given the ability to specify who can access/share their deposited content.
If your research output/data were not affected by such restrictions or embargoes, with whom would you be willing to share them?

Figure 22: Responses to the question: "With whom would you be willing to share research outputs/data"
Aiming at exploring the staff’s awareness of research data repositories, staff members were asked about any discipline-specific research data repositories of which they were aware. Only 28% of the respondents replied with 'Yes', while the rest replied with 'No' (see Figure 24). This result reveals that the use of discipline-specific repositories is still not a common practice among PS researchers.

As a part of this question, respondents were also asked to list examples of repositories of which they were aware. Among the common answers were: "Research Journals", "Google Scholar", "LinkedIn", "ResearchGate", "IEEE", and "ACM Digital Library". Such examples showed that many of the staff members do not realize the difference between research repositories, which aim to make the intellectual output of the institution openly available, and digital libraries, which are gateways to electronic resources. We think that any future awareness-raising and training activities planned in the project should emphasize the differences between IRs and other electronic resources and libraries. Until IRs become available, there may be a need to train researchers on searching for data repositories by using registries of research data repositories, such as re3data³, or by using free services such as Zenodo⁴.

Are you aware of any discipline-specific research data repositories related to your field?

---

³ Registry of Research Data Repositories, [http://www.re3data.org](http://www.re3data.org)
Looking at the institutional level (see Figure 25), the same pattern was observable: the majority in each institution was not aware of discipline-specific repositories, except in BZU, which showed a slight majority that showed awareness of such repositories. In fact, BZU is the leading among the four partner PS HEIs in terms of the research impact and quality\(^5\), and hence their research staff is likely to be more familiar with research data repositories.

**Are you aware of any discipline-specific research data repositories related to your field?**

![Figure 25: Responses per institution to the question: "Are you aware of any discipline-specific research data repositories related to your field"](image)

4.5. Institutional Services

The following questions aimed to explore the institutional services offered to staff members for handling research data, and the staff’s attitudes towards these services. In the first question of this section, staff members were asked about the provision of an electronic service to search in the institution’s digital research outputs. Staff were also asked about their level of satisfaction with the provided search service. As shown in Figure 26, the majority (64%) answered with ‘Yes’, of which 51% indicated that they were satisfied with the search service (see Figure 27 for respondents' ratings). This pattern was also consistent across institutions.

Respondents gave different explanations on their ratings: four respondents who were not fully satisfied explained that by not being able to search for all types of research outputs, and being restricted to theses and dissertations only. Two respondents indicated that the research outputs are not updated regularly. This result indicates the importance of supporting the prospective

---

\(^5\) Based on Scopus statistics of faculty publications, BZU has 891 publications, while IUG has 665 publications. KAD has 92 publications on Scopus. No Scopus statistics could be found for QOU.
OAIRepositories with comprehensive and user-friendly search service that supports access to all types of research outputs.

**Does your institution provide an electronic service to search in its digital research outputs?**

![Pie chart showing responses](chart1.png)

Figure 26: Responses to the question: "Does your institution provide an electronic service to search in its digital research outputs?"

**If the answer to the previous question is Yes, how do you rate your satisfaction of the provided search service?**

![Pie chart showing ratings](chart2.png)
When asked about the institutional support for handling research data (see Figure 28), about 50% of respondents indicated that they benefited from help-desk support and the technical infrastructure. A considerable proportion of respondents also benefited from training courses (15%) and storage spaces (11%). In contrast, a small number of respondents (13% in total) benefited from the support for data management and archiving, a result that was also consistent at the institutional level.

The above result may indicate the lack of the institutional support for research data management and archiving, a point that should be overcome when shifting towards OA IRs. Enhancing the institutional services in this regard can also increase the staff’s motivation to deposit into the IRs. But in general, the result is a good indication for PS institutions interest in supporting research output management, the thing that would guarantee the sustainability of any initiative to improve these efforts.

**What support for handling research data do you use at your institution?**

![Pie chart showing support for handling research data](image)

Staff members were also asked about potential support they would like to get from the institution regarding research data management. As illustrated in Figure 29, respondents selected all sorts of services, and suggested many others not included in the question choices. 19% of respondents suggested the need to improve the infrastructure by using advanced archiving techniques and tools. Providing policies and digital repositories for research data were among the demanded actions (18% for each service). Apart from the given choices, many respondents (12) put forward the demand that the institution provide subscriptions to electronic research libraries.
4.6. Awareness and Attitudes towards Open Access Publishing and Open Access Institutional Repositories (OAIR)

Questions in this section aimed to explore the staff's attitudes towards open access and institutional repositories in general. Determining these attitudes will largely indicate the staff's acceptance of and enthusiasm for the prospective OAIRs.

The first question investigated the staff's experience with open access publishing. Results, as illustrated in Figure 30, show that the majority of respondents (61%) had experience with open access publishing. Looking at the institutional level, we also found that this trend is prevailing (see Figure 31), except for the QOU in which the small majority indicated that they had not published in open access. This attitude towards open access publishing is largely consistent with the nature and demands of OAIRs.
When asked about the availability of institutional repositories at their institutions to archive research outputs, respondents were almost evenly divided. As depicted in Figure 32, 55% of respondents answered with ‘Yes,’ and 45% answered with ‘No’.

To further explain this result, we analyzed the distribution of responses over the institutions, which is depicted in Figure 33. In the IUG case, the majority (38 out of 58) said that there is a repository at the institute level. Surprisingly, IUG has no formal institutional repository that
adheres to the principles of open access, preservation, archiving and metadata standards. Alternatively, it only provides an online access to parts of its digital materials such as the Master's theses through the library's webpage. This result indicates that many of the IUG staff members do not realize the distinction between institutional repositories and online access to digital materials. On the contrary, QOU has an institutional repository that was officially released in 2014. However, the majority of the staff at QOU (72 out of 113) pointed out that they had no institutional repository, indicating the lack of awareness and advocacy among the QOU staff. BZU also has an institutional repository that was established and released recently in 2016. Their staff members seem better aware of this repository, with 16 out of 21 (76%) answering with 'Yes' to this question.

**Figure 32: Responses to the question: "Does your institution operate an Institutional Repository (IR) to archive digitized materials?"**

![Pie chart showing responses to the question](image)

**Figure 32: Responses to the question: "Does your institution operate an Institutional Repository (IR) to archive digitized materials?"**
Research Output Management through Open Access Institutional Repositories in Palestinian Higher Education Institutions

Does your institution operate an Institutional Repository (IR) to archive digitized materials?

![Bar chart showing responses per institution to the question: "Does your institution operate an Institutional Repository (IR) to archive digitized materials?"

Figure 33: Responses per institution to the question: "Does your institution operate an Institutional Repository (IR) to archive digitized materials?"

Those who answered 'Yes' to the previous question were asked whether they have deposited their work into the institutional repository. Figure 34 shows the results of this question: It was obvious that the majority have never deposited into the IRs.

Looking at the institutional level (see Figure 35), the results were consistent with the results of the previous question: Some respondents indicated that they contributed despite not having IRs in their institutions. The result from BZU was the most remarkable, since the vast majority (14 out of 15) indicated that they contributed to the content of the IR.

In our opinion, the above results highlight a two-fold problem that have impeded the development and evolution of IRs in partner PS universities: it is the lack of awareness about the established IRs, as well as the lack of policies, incentives, and motivations that can drive the staff to contribute to the content of IRs. It is essential for ROMOR project to seek effective and sustainable solutions to this problem.
If the answer to the previous question is Yes, have you deposited any of your works into the IR?

No: 59 (53%)
Yes: 52 (47%)

Figure 34: Responses to the question: "Have you deposited any of your works into the IRs?"

If the answer to the previous question is Yes, have you deposited any of your works into the IR?

![Graph showing responses per institution]

Figure 35: Responses per institution to the question: "Have you deposited any of your works into the IRs?"
Staff members were also asked about their perception of making the scholarly outputs of their institution freely accessible through an institutional repository. The vast majority (86%) either agreed or strongly agreed (see Figure 36) that research outputs should be freely accessible through an institutional repository. This result shows that the staff members indeed realize the potential benefits of opening access to the scholarly outputs of their institutions.

**What do you personally think of the following statement?**

“Scholarly research results of my university should be freely accessible through an Institutional Repository”

![Figure 36: Responses regarding making the scholarly research results of the institution freely accessible through IRs](image)

To identify the risks that may undermine the contribution of staff to the foreseen repositories, staff members were asked about potential reasons for not contributing to the IRs. Staff's responses varied largely, as depicted in Figure 37. Common answers included the fear for misuse (15%), additional time and effort required (14%), the lack of rewards (13%), and the redundancy with other modes of disseminating information (13%). These figures should be carefully considered when developing the awareness and advocacy plans in order to overcome or mitigate these risks.

When the results in this section are compared with the results discussed earlier in Section 4.4 and shown in Figure 20, one can notice the following:

1) 26% of respondents as discussed in Section 4.4 said that they share their research work. On the other hand in this section 86% of respondents agree on making the scholarly outputs of their institution freely accessible through an institutional repository.

2) 24% of respondents as discussed in Section 4.4 mentioned that they share only their published works, and 10% of respondents mentioned that the intellectual property rights may be violated.
In this section 15% of respondents indicated that they have concerns relating to misuse of their outputs.

Although the results compared in point 1 may at first look inconsistent, the results compared in point 2 in fact come to confirm that the researchers have in general no problem with sharing their data and making it freely accessible through their IRs, if guarantees are given to protect their intellectual property rights, and to prevent the misuse of their data.

If your institution has, or plans to establish, an open access institutional repository (OAIR), what are potential reasons for not contributing, i.e. not depositing your material, to OAIR?

Figure 37: Responses regarding potential reasons for not contributing to the IRs

Staff members were also asked about things that would motivate them to contribute to OAIRs. Highly rated motivations included: opportunities for re-use, increasing accessibility to and visibility of research results, and fostering cooperation with researchers (see Figure 38). It is obvious that these motivations are consistent with the ultimate objectives of the IRs.
Finally, staff members were asked about the types of materials they are willing to contribute when the IRs are established. In general, results proved the staff's willingness to share all sorts of materials, especially published papers (27%), doctoral and master's theses (16%) and learning materials (12%) (see Figure 39). Materials that received a low vote, such as audio, video and processed data, are in fact not widely used among staff members as shown in Figure 8.
5. Conclusions

The main conclusions from the results of this survey are structured and summarized as the following:

**The size and types of research outputs:**

1. Partner PS universities produce scholarly publications of different types and at different scopes: international, regional and local scopes. There is no significant preference to one scope over other scopes.

2. Cultural-related materials such as sermons and jurisprudential provisions are of the commonly reported outputs of PS researchers.

3. The size of non-scholarly literature, such as reports and learning material, was remarkably significant and is comparable to the size of published literature. Thus, non-scholarly should not be excluded from the content of the foreseen OAIRs.

4. PDF and Text formats are the most commonly used formats for research outputs. Other formats, such as scripts and statistical files, are also produced but with less quantities.
Research practices:

1. Members of staff at PS universities often archive digital materials on their own. They are used to store data on personal devices and storage media rather than on institutional servers or repositories.
2. The use of personal devices for data storage explains the frequent data loss incidents, and reveals the potential risk emerging in terms of longer-term accessibility to research outputs.
3. Digital archiving at the institution’s level is carried out for only digital materials for which the institution assumes preservation responsibility. The archiving of staff's research outputs remains the responsibility of the researcher or the research group, unless these outputs are deposited into the institutional repositories, storage servers or content management systems.
4. Data archiving is often not included as part of the job responsibilities of the institution's IT staff, librarians or data managers.
5. Describing research data is not a common practice among PS researchers, and data descriptions are mostly added in an ad-hoc manner without adhering to standards. In addition, provided descriptions are often not sufficient for anyone to understand and reuse the data.
6. A considerable number of respondents use paper-based techniques for describing data. Comparing to electronic description techniques, paper-based techniques are more error prone, more time consuming, and harder to link to the original data. Therefore, we think it may be necessary to consider changing the practice of PS researchers towards electronic description.
7. A large proportion of staff members are unaware of the status and content of institutional policies. Even where RDM policies exist, these policies are often not implemented to the extent that makes the staff members familiar with.

Data sharing practices:

1. The majority of respondents are in favor of sharing all sorts of digital materials, with priorities given to published papers, theses and learning materials. Only 3% have said they do not share.
2. Research staff use different methods for sharing research outputs. However, institutional repositories are not commonly used for data sharing, with only 10% of respondents indicating that they deposit works into institutional repositories.
3. The need to publish work and the fear for jeopardizing intellectual properties are the most common restrictions that can limit the staff’s ability to share data with others.
4. The use of discipline-specific research repositories is still not a common practice among PS researchers, and researchers still cannot distinguish between research repositories and digital libraries.
Institutional services related to RDM:

1. Each partner PS University provide some sort of electronic services to search in its digital holdings. However, the provided services are often limited to specific types of materials such as theses and dissertations. A majority of respondents indicated that they were satisfied with the provided search services.

2. A majority of research staff indicated that they benefited from many institutional services including help-desk support and the technical infrastructure. However, the institution's support for research data management and data archiving seems limited or not well exploited by the staff members.

The awareness and attitudes towards open access publishing and OAIRs:

1. A majority of research staff have experience with open access publishing as they used to publish work in open access journals. In addition, most members of staff realize the potential benefits of opening access to the scholarly outputs of their institutions.

2. A considerable number of respondents gave false answer to the question of whether or not OAIRs exist at their institutions. This may be explained by the lack of awareness of OAIRs, or by the inability to discriminate between formal IRs and the institutional file servers.

3. Research staff identified many risks that may undermine their contribution to IRs. The main identified risks include: the fear for misuse, the required time and effort, the lack of rewards, and the redundancy with other modes of disseminating information.

4. Research staff identified the main factors that would motivate them to contribute to OAIRs. The main motivating factors include: opportunities for re-use, increasing accessibility to and visibility of research results, and fostering cooperation with researchers.

5. Research staff are willing to contribute to IRs with all sorts of materials, especially published papers, theses and learning materials.

References


Green, J., McArdle, I., Rutherford, S., & Turner, T. (2012). Developing tools to inform the management of research and translating existing good practice.


