## **Data Management Plan**

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| **1.1 Postgraduate Researcher:** Rana Elnakla |
| **1.2 Project title**: Impact of indoor thermal environment, plan layout and biophilia in green and non-green offices on employees’ work performance in Jordan |
| **1.3 Project start and end dates:** 6th March 2017 to 6th March 2021 |
| **1.4 Project context:**  This research aims to investigate the impact of the indoor environment of a certified-green office building on occupants’ performance in Amman, Jordan |

# Defining your data

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| **2.1 Where do your data come from?**  Two types of data were generated in this research:  Subjective data, which was generated by surveying every employee in the offices.  Objective data, which was generated by measuring the indoor environmental parameters of workplaces. |
| **2.2 What formats are your data in?**  The survey was entered manually in Excel spreadsheet.  The outputs of measurements for each office were stored as csv file. |
| **2.3 How often do you get new data?**  All of my data comes from two fieldwork trips. Each trip is five months long.  The fieldwork will consist of two types of measurements using two different sensors. As well as 120 surveys will be conducted in every fieldwork trip. |
| **2.4 How much data do you generate?**  Each Phase of fieldwork produces about 1GB of data, so over the course of my PhD I expect this to increase to about 2GB.  I expect my consent forms and completed questionnaires will fill three filing cabinet drawers. |
| **2.5 Who owns the data you generate?**  According to my studentship agreement, the University owns all data I create, but I regain the copyright on publications based upon my data. |

# Looking after your data

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| **3.1 Where do you store your data?**  My primary copy is on the university’s managed data storage (the X: drive), to which both my supervisor and I have access, and I copy files to my laptop and on encrypted hard drive to work on while I’m away from the office.  My participants’ responses are in a locked drawer within my locked office. |
| **3.2 How are your data backed up?**  Data stored on the university research storage system is backed up by Computing Services. I make sure I copy the latest versions of my working files there each day.  I access my backup weekly to check the files are still useable. |
| **3.3 How do you structure and name your folders and files?**  I use this structure for the objective data: <monitoring><fieldwork phase I><Building code>/<office number><sensor type><sensor number><date of measurement>.  I use this structure for the subjective data: <survey> <fieldwork phase I><Building name> |
| **3.4 How do you manage different versions of your files?**  As I survey new respondents, data are appended to the dataset and saved as a new file. |
| **3.5 What additional information is required to understand the data?**  Abbreviations used for column headings are kept in a separate ‘readme’ text document.  The content of digital photographs is recorded in the file name.  The equipment I use embeds information about the settings in the metadata for the files. |

# Archiving your data

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| **4.1 What data should be kept or destroyed after the end of your project?**  I will keep all of my data, both raw and processed. |
| **4.2 For how long should data be kept after the end of your project?**  I will keep my data for future works after the end of my PhD. |
| **4.3 Where will the data you keep be archived?**  My sponsor university will retain a copy of all of my project data. |
| **4.4 When will data be moved into the archive?**  I will archive the data when I submit my thesis.  I will archive a copy of data supporting my findings when a paper based upon them is accepted for publication. |
| **4.5 Who is responsible for moving data to the archive and maintaining them?**  I am responsible for depositing my data in an archive and the archive service will maintain them. |

# Sharing your data

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| **5.1 Who else has a right to see or use this data during the project?**  Only my supervisor should have access to my data during the project. |
| **5.2 What data should or shouldn’t be shared openly and why?**  All of my data may be shared openly at the end of my project when my research findings are published. |
| **5.3 Who should have access to the final dataset and under what conditions?**  Not applicable |
| **5.4 How will you share your final dataset?**  Users will be able to download my data from the University’s research data archive where they are archived. |

# Implementing your plan

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| **6.1 Who is responsible for making sure this plan is followed?**  I will take responsibility for carrying out the actions required by this plan and report them to my supervisor as appropriate. |
| **6.2 How often will this plan be reviewed and updated?**  My supervisor and I will review this plan every 6 months and will agree updates if necessary. |
| **6.3 What actions have you identified from the rest of this plan?**  Set up a backup system and periodically test that I can restore from my backup. |
| **6.4 What policies are relevant to your project?**  This project is covered by the University of Bath Research Data Policy and the EPSRC Policy Framework on Research Data. |
| **6.5 What further information do you need to carry out these actions?**  I will ask Jordanian green building council for further information about the Jordanian green codes. |