

# Human Resource Management Students – but no HR Analytics? Modifying the Traditional Masters Dissertation to Accommodate Students Struggling with Data

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## Abstract

This developmental paper outlines how the Human Resource Management (HRM) module team on a master's degree programme at a UK University are attempting to shape the curriculum to encourage HRM students to work with data. This is in direct response to as well as to debates within the employment and wider HRM literature around the growing need for HR practitioners to be effective users of data analytics. Moreover, the changes implemented reflect the rise in the number of international students who struggle to conduct self-directed, empirical research. The paper also discusses plans for how this project will feed into pedagogic research on teaching data to HR students, as well as meeting the wider needs of international postgraduate students.

## Introduction

The extent to which there is a significant demand for data skills in the UK is well-documented in the literature. For the field of Human Resource Management, expertise in data skills has become gradually more important, especially due to the increasing use of big data and the role it plays in decision-making on human capital (Morrisson & Abraham, 2015). However, the skills gap is particularly notable; many Human Resource Management (HRM) graduates enter the profession with a limited understanding and even more limited skills in working with data (Martin-Rios et al., 2017).

A recent Government report placed some of the responsibility for supplying the UK workforce with hard data skills at the door of universities (Gov.UK, 2019); however, this seems like a big burden for universities to bear. Certainly, on the one hand the marketisation of education has contributed to the rise of the student who seeks a degree as currency for entry into a well-paid job. Thus, arguably students should be attracted to programmes with embedded skills that will make them ultimately more employable. Nevertheless, on the other hand, the Coronavirus pandemic has spawned a new generation of students who are difficult to engage. In terms of HRM degrees, where students typically seek to avoid working with numbers and data, it is even more difficult.

One of the spaces within a degree pathway where data skills is particularly taught and tested is the dissertation. Certainly, we would argue that a successful – and useful! - dissertation requires a great deal of input from both staff and students. As well as accompanying robust research methods training, with which students engage, there needs to be a strong supervisor-student relationship. In cases where supervisors might be supervising more than ten dissertations, there is the need for students to be proactive in approaching their supervisor. It is also worth noting here that is a plethora of literature around the extent to which the traditional capstone project is an anachronism,

This paper discusses the example of a master's degree programme at a UK University, where the programme team has tried to shape the curriculum to encourage HRM students to work with data, as well as to reflect the rise in the number of international students who struggle to conduct self-directed, empirical research.

The next two sections provide some context to the issue of data skills and HRM students, as the importance of supporting skills development. Then we will outline the catalyst for change at our institution, which led to significant changes to the capstone project, before a discussion of the proposed research and methodology are outlined, as well as providing some indication of the gaps in the literature that this project will seek to fill.

### The Data Skills Gap and the role of HE

A policy paper commissioned by the Department for Digital, Culture, Media and Sport reported that, in 2019, the UK labour market had 178,000 to 234,000 job vacancies that required data literacy, but employers struggled to fill these roles (Gov.UK, 2019). Aside from a lack of training at organisational level for data skills, the 2019 report laid some of the blame at the feet of UK universities for failing to produce graduates with adequate skillsets in hard data. Furthermore, the Gov.UK (2019) study suggested that UK employers did not have much confidence in the ability of HE institutions to offer executive training in data skills, with only 14% of the firms in their sample, who had taken measures to upskill employees in the use of data, choosing a university as their training provider on data skills.

It has been argued that the responsibility for closing the data literacy gap in HE should be placed on Business Schools. Certainly, some disciplines in Business lend themselves well to modules and assessments designed to support students in exploring and utilising their 'digital native' skillsets; but predominantly – and especially at postgraduate level – students are looking for assessments which are straightforward to pass. It can be argued that the marketisation of education has contributed to the rise of the student who seeks a degree as currency for entry into a well-paid job, and little more. Some students may typically dislike the quantitative aspects of business programmes, if they had poor past experiences of studying maths at school.

Henderson et al. 's (2017) study on students' perceptions of the usefulness of digital technology suggested that students were more interested in the potential of IT for saving them time rather than for enhancing their skills. This makes a lot of sense when we look at postgraduate cohorts. The drive to succeed in a 12-month timeframe is markedly high. For the growing numbers of international students, a successful outcome within one year makes them eligible for the desirable UK post-study visas. An added pressure is that an increasing number of students work full-time alongside their postgraduate study.

Hence, there may be an even greater reluctance to engage with anything that is seen as challenging and complex, such as business analytics being widely embedded in the Business Management curriculum. If we add in the widely documented poor levels of engagement that frequently categorise Masters level students (see, for example, Faroa, 2017; Heussi, 2012), this does not bode well for training within a subject such as data analytics. In terms of dissertations, client-facing projects, where organisations are looking for students to engage with organisational data, our experience shows these projects are often unpopular with students from some Business disciplines, especially Human Resource Management, because of the data analytics.

## Data and HR

In line with a growth in the literature on the importance of data analytics in HR, there is an ongoing discussion around the extent to which the HR function may typically struggle with the expertise required (see, for example, Davenport, Harris and Shapiro, 2010; King, 2016; Martin-Rios, Pougnet and Nogareda, 2017; McCartney, Keegan and Fu, 2022). The lack of familiarity with data by HR professionals has also been widely discussed in the public domain; an interesting example being an article by Ruettiman (2015), where the (HR professional) author's confession that she is inept at dealing anything number-related in met with a range of comments confirming that this is a common problem for HR.

Thus, we can make a Link with wider HRM and employability literature (see, for example, Chowdhury and Miah, 2016; Parks-Leduc et al, 2018) around the extent to which there is a need for graduates of HRM degree programmes to be better supported to develop these skills.

## Our programme, our module – implementing change

The post-study work visa has had an impact on applications to study in the UK since its reintroduction in 2020. For our MSc International Human Resource Management programme, numbers have almost quadrupled and, in line with the literature, anecdotal evidence has explained that the rise in the number of international students on our programme is partly related to the fact that Human Resource Management (HRM) is perceived as being a subject that requires low levels of numeracy. Unfortunately, these low expectations around the need to engage with data on our programme led to high numbers of students on MSc IHRM who struggled with the dissertation module and its requirements for quantitative and mixed methods research.

Our programme is particularly attractive to international students, interested in Human Resources (HR), because it is accompanied by a 10-week industrial placement. This means that international students, alongside their Chartered Institute of Personnel and Development (CIPD accredited degree, would be able to gain real-world experience of a UK company. With the reinstatement of the post-study work visa, this practical experience is of further interest to international students who may have limited working experience and, possibly, neither experience of working in the UK, nor of the HR field.

On our programme, the dissertation remained a capstone module, where students worked with a client company on a real HR problem. Increasingly, however, again in line with the literature, students failed to select any projects that required them to work specifically with datasets. This began to be an issue, as more and more of the organisations offering projects were asking for students to work on issues such as managing demographic rate, examining turnover or analysing exit data. Our client companies tend to be small to medium firms (SMEs), therefore, these projects represent fantastic opportunities for students to gain expertise in areas of HR where big data is used in larger organisations. Moreover, our students provide useful and free HR support, which, for small companies, presents high value.

We needed to strike a balance between supporting students to develop better data skills and providing an opportunity to apply these, with meeting the needs of our client companies and offering a capstone project that knitted together all the learning on the programme. This meant that we needed to redesign the current offer and have significantly modified the final project element of our HRM programme by introducing a group-based client project, facilitated by a

coaching-style supervision module, assessed by both individual and group tasks. Furthermore, we have ringfenced student projects to ensure that they will not be expected to engage with high levels of data.

The new assessment provides strong peer-led support to scaffold learning and to encourage students to engage with empirical research and data analytics as a group. Additionally, the refreshed module will give cohorts a greater level of confidence to work on client-facing projects that have real-world value.

### Proposed research

We propose to take the learning from this module change to feed into mixed methods, pedagogic research, as the first cohort of Masters students to undertake the new group dissertation will run in 2023/24.

We plan to track the cohorts, designing a longitudinal research project, examining students' aspirations and experience of prior learning, alongside an analysis of student performance outcomes and destination data, in order to understand the extent to which the new capstone project meets the objectives of better supporting students to analyse data and to better prepare them as HR professionals. The university routinely collects the data outlined and, as part of the programme team, we have access to this.

For the qualitative research, we will interview a number of stakeholders, in order to gain a rich picture of the programme, its success and challenges. Firstly, we will utilise student focus groups with each programme cohort at the beginning, middle and end of the programme. This should be between 15 and 30 students, depending on cohort sizes. We will utilise the programme LinkedIn page to keep in contact with programme alumni and to arrange follow-up semi-structured interviews after graduation.

In addition, we will draw, in the first instance, on our own professional and HRM alumni networks to conduct some semi-structured interviews with HR professionals, in order to understand more about the gaps in knowledge around data and HR analytics within the HR profession and how our Masters programme can continue to better support the next generation of HR managers. We plan to interview around 25 respondents.

### Contribution to knowledge

One of the overarching aims of the final project module on our programme is to draw together the various threads of the programme, in order to enable to students to apply their theoretical knowledge of people management to a real-life case. Therefore, the study will add to a gap in the literature around HRM as a degree subject.

We will also contribute to the body of work on HR and data analytics and, more generally, this work will add to the growing body of literature on learning and teaching on how to better support students and enhance employability skills.

### Conclusion

This paper has drawn on the academic literature to set the context for the need for HR graduates to have strong data analytical skills and outline our response at module level on our International MSc programme. We aim to design a research project to better understand the

success of the dissertation module, as well as to add to gaps in the literature around HRM study and how well it prepares students to enter the HR profession.

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