Placement Opportunities for Postgraduate and Early Career Social Science Researchers in the current and post Covid-19 reality

Contents

Executive summary

Current placement opportunities for postgraduate social science researchers are limited, despite it being one of the few platforms for social science researchers to connect with businesses. The purpose of this report is to examine how universities can collaborate with businesses to create placement opportunities for postgraduate social science researchers during and post-Covid-19. Through online surveys, interviews and sandpit discussions, the research examined the perspectives of multiple stakeholders such as researchers, employers, universities and representatives of Local Economic Partnerships (LEPs), Chambers of Commerce (CoC) and Institute of Directors (IoD), to understand the current and future landscape of placements for social science postgraduate researchers. Examining the facilitators and barriers faced by researchers and businesses in their engagement with placement opportunities, this study proposed several practical recommendations for enhancing university/business collaboration in the delivery of placements to postgraduate social science researchers.

1.0 Introduction

1.1. Background

The contributions of UK universities to economic growth (Lambert, 2003; Sainsbury, 2007) and innovation (Kitson, Howells, Braham, & Westlake, 2009; Wilson, 2012) have long been highlighted across various studies. Wilson (2012, p. 13) considers UK universities to be key to business success, having the potential to contribute to "economic prosperity" through three key aspects, namely (1) "research capability", (2) "enterprise and entrepreneurial culture" among students, and (3) the knowledge capital of graduates. Across the student population, Wilson's (2012) key assets are most characteristic of postgraduate researchers, many of whom would have developed strong research skills and in-depth knowledge of a subject matter through their training within an academic environment (Metcalfe & Gray, 2005). Connecting postgraduate researchers with businesses can create opportunities for them to position their research work within the broader contexts of industry. In so doing, postgraduate researchers can potentially develop entrepreneurship skills through considering the contributions of their research beyond the academic field, to the practical field of business, innovation and economic development.

Helping researchers to gain industrial experience is challenging for universities to achieve on their own, hence the importance placed on university-business collaborations (Hewitt-Dundas & Gkypali, 2017; Wilson, 2012; Lambert, 2003; Sainsbury, 2007). These reports reviewed the potential for university-business collaborations to leverage on the human capital within universities to drive business innovation and economic development. In particular, Wilson (2012) identified several areas of collaborations with businesses, such as through (1) work experience via placements and internships, (2) company sponsorships of students, (3) co-funding of employee upskilling, (4) business investment in universities for research and development, and (5) researcher-business networking facilitated by universities and Local Economic Partnerships (LEPs). Critical examination of Wilson's (2012) report, however, demonstrates these five strategies to be inadequate in meeting the needs of all postgraduate researchers, with social science researchers falling through two key gaps in the collaborative framework.

Firstly, Wilson's (2012) findings suggest that work experience and company scholarships were targeted at increasing the employability of undergraduate students, implying that opportunities for postgraduate researchers are limited since university resources are focused on equipping

undergraduates with industry experience. The limited number of placement opportunities for postgraduate researchers across UK universities is supported by Mellors-Bourne and Metcalfe's (2015) survey of 8964 research staff across 72 UK institutions, which reported that only 8.6% of respondents had undertaken an internship or placement outside higher education research, with 43.6% expressing interest in undergoing a placement. Mellors-Bourne and Metcalfe's (2015) survey demonstrates a significant demand for placement opportunities among postgraduate researchers, suggesting the low number of placements to be attributable to lack of opportunities rather than interest. Metcalfe and Gray's (2005) report on the employability of doctoral research postgraduates focused on research training provided by universities as a means of enhancing employability, excluding a discussion on the contributions of placement opportunities to researcher employability. Such an omission in Metcalfe and Gray's (2005) study suggests that placements are not considered, nor offered as an essential aspect of postgraduate researcher training in the UK.

Secondly, where collaborations through business investments in R&D and networking opportunities were available to postgraduate researchers, existing reviews (Lambert, 2003; Sainsbury, 2007; Wilson, 2012) suggest that these schemes were largely focused on science and technology research where knowledge was perceived as more readily commercialised. The British Academy (2004) reports scientific disciplines to be more valued by economy and society than the humanities and social sciences, since contributions are more easily quantifiable and predictable, which means that opportunities to connect with businesses tend to be concentrated on scientific researchers. Unlike STEM researchers, social science postgraduate researchers often lack access to R&D and networking infrastructures, implying that access to opportunities for knowledge exchange with industry are rather limited. Since the setting up of R&D infrastructures can be exceedingly costly, it would be challenging for universities to persuade businesses to offer such opportunities to social science postgraduate researchers. Increasing the number of placement opportunities may be a more viable option for increasing researcher/business interactions.

1.2.   This report

The purpose of this report is to examine how universities can collaborate with businesses to create placement opportunities for postgraduate social science researchers. Such a focus is informed by the understanding that despite being one of the few platforms for postgraduate

social science researchers to connect with businesses, current placement opportunities are limited. This situation is likely to be exacerbated by the Covid-19 pandemic and its economic impact on businesses. Existing reviews on the landscape of university-business collaborations have neither evaluated nor provided any recommendations for the delivery of placement opportunities to postgraduate social science researchers. This report seeks to examine the perspectives of multiple stakeholders on the current and future landscape of placements for social science postgraduate researchers, to inform practical recommendations for its delivery in a manner which supports post-Covid recovery for businesses and researchers in the UK.

2.0   Key and sub-questions

The key questions and sub-questions addressed in this report are:

(1) What are the real and perceived facilitators and barriers to engagement in placement schemes?

    a.   What are the perceived benefits of delivering placements to researchers?

    b.   What challenges do employers face in the provision of placement opportunities?

    c.   What motivates researchers to participate in placements?

    d.   What hinders researchers from participating in placements?

(2) What are the impacts of Covid-19 on placements?

    a.   In what ways have Covid-19 economically impacted businesses/for profit organisations?

    b.   What are the impacts of Covid-19 on postgraduate social science researchers?

    c.   How might Covid-19 affect engagement in placements for both businesses and researchers and what forms of support can be provided to maintain engagement?

(3) What are the possibilities for virtual placements during the pandemic?

    a.   How likely are businesses to consider offering virtual placements?

    b.   What is the demand for virtual placements like among researchers?

3.0   Definitions and boundaries of the study

In the more recent decade, placements have become of interest in relation to their purpose, the beneficiaries and the paid nature of the work (Department of Business, Innovation and Skills, 2012). The term is often used interchangeably with internships which are often unpaid and provided as a route into full time employment (Department of Business, Innovation and Skills, 2011). Since full-time positions are not guaranteed upon completion of internships, with labour

sometimes benefiting the operations of businesses more than the career development of interns, some internships schemes may be exploitative of the labour of fresh graduates.

For the purpose of clarity, this report will adopt Vitae's (2015, p. 3) definition of placements as "any temporary position for a researcher in a non-academic environment which puts an emphasis on on-the-job training rather than simply employment". This emphasis on researchers' training is important as it not only addresses the issue of labour exploitation, but also ensures that the opportunity contributes towards researchers' career development and industry exposure beyond academia. Non-academic work environments can include third sector employers, commercial or industrial, but can also include a higher education setting beyond the researchers' fields of specialisation (Vitae, 2015). The duration of the placement can be flexible, ranging from days to months, and may be paid or unpaid (ibid.). Placement positions can include those offered by the universities or privately arranged schemes (ibid.), although this report will focus on placements delivered through university-business collaborations.

Postgraduate researchers shall constitute doctoral (PhD) candidates, postdoctoral researchers and Early Career Researchers (ECR) based in one of the South East Network for Social Sciences (SeNSS) universities in the UK. Researchers will specialise in one of the 13 social science disciplines offered by SeNSS universities, namely (1) business and management, (2) development, (3) economics, (4) education, (5) human geography, (6) linguistics, (7) politics and international relations, (8) psychology, (9) science, technology and sustainability, (10) social anthropology, (11) social work and social policy, (12) socio-legal and (13) sociology.

4.0   Methodology

Two surveys were designed to examine the perspectives of postgraduate social science researchers and employers on the facilitators and barriers of engaging in placement opportunities. The surveys were created using Qualtrics and disseminated via email and social media through gatekeepers. Surveys for postgraduate social science researchers were sent out to academic staff and the doctoral student mailing list through gatekeepers in the SeNSS DTP and University of Surrey. Surveys for employers were disseminated via several channels, through emails via gatekeepers in the Chambers of Commerce (CoC), Institute of Directors (IoD), and Local Economic Partnerships (LEPs), weekly newsletters of IoD, CoC and Surrey

Research Park, and social media posts of representatives in the LEPs, IoD, CoC, and Surrey Research Park. We received 145 responses from postgraduate social science researchers and 13 responses from employers.

Since the survey had open-ended questions, we gathered detailed responses from postgraduate researchers and did not require follow-up interviews to further explore issues. Employers who completed the surveys were invited for follow-up interviews to enable the further exploration of opinions. No positive responses for interviews were received from employers. Due to the low number of survey responses from employers, 6 online interviews lasting between 30-60 minutes were conducted with representatives from LEPs, IoD, and CoC to further examine the employer perspective on placements. Interviews with multiple stakeholders also facilitated our understanding of the roles of government institutions and membership organisations in facilitating university/business partnerships. Interviews were recorded and transcribed. Transcripts were imported to NVivo for thematic analysis. Thematic analysis was also conducted on qualitative data from the surveys. The recommendations for universities, businesses and researchers emerging from the findings were discussed in a sandpit meeting with 9 university staff who have experience of collaborating with businesses to implement placements for students. Outputs from the sandpit informed a revision of the proposed recommendations to consider the practicality of implementation and the diversity of practices across different universities.

5.0   Facilitators and barriers to researcher engagement in placements

This section seeks to examine the perspectives of researchers with regards to the facilitators and barriers to placement engagement. The perspectives of researchers are investigated through findings from the online survey. The employer perspective will be covered in the next section, section 6.0.

5.1   The researcher experience

145 responses were collected from postgraduate social science researchers through an online survey conducted across the period of 6 weeks. After filtering out responses which were incomplete as well as those from participants which did not meet our criteria, we retained 132 responses for analysis. We present our findings from this survey in four parts. In the first, we introduce the demographics of our respondents. In the second, we investigate the experiences

of respondents who indicated they had completed or are completing a placement, questioning the facilitators and barriers to placements. The third section will examine the perspectives of participants who had not done placements, focusing on the reasons why they choose not to do placements and the perceived advantages of participating in placements. In the fourth section, we explore how researchers were impacted by Covid-19 and its impact on their decisions to participate in placements. We also question the possibilities for virtual placements during and post pandemic.

5.2   Demographics of respondents

Respondents represented all 10 universities in the South East Network for Social Sciences Doctoral Training Partnership (SeNSS DTP). Approximately half of the respondents were from three universities: University of Surrey, University of Sussex and University of Essex. Three other universities, namely University of Roehampton, Goldsmiths University and City, University of London had relatively lower rates of participation as compared to the rest. Three respondents were from other universities such as the University of Suffolk, University of Nairobi and Imperial College London, and hence did not meet the criteria of being from the SeNSS DTP network of universities (see Figure 1). We chose to retain their responses as two are PhD candidates and one is an early career researcher in the social science disciplines, hence falling within our subgroup of interest. These three individuals may also add value to our understanding of placement practices and demands beyond the SeNSS universities. In addition, since we disseminated the survey via emails through the SeNSS DTP networks, we considered the possibility that these 3 individuals may be associated with SeNSS universities through fellowship or exchange programmes, as such informing our decision to include them in the study.

WHERE ARE YOU BASED?
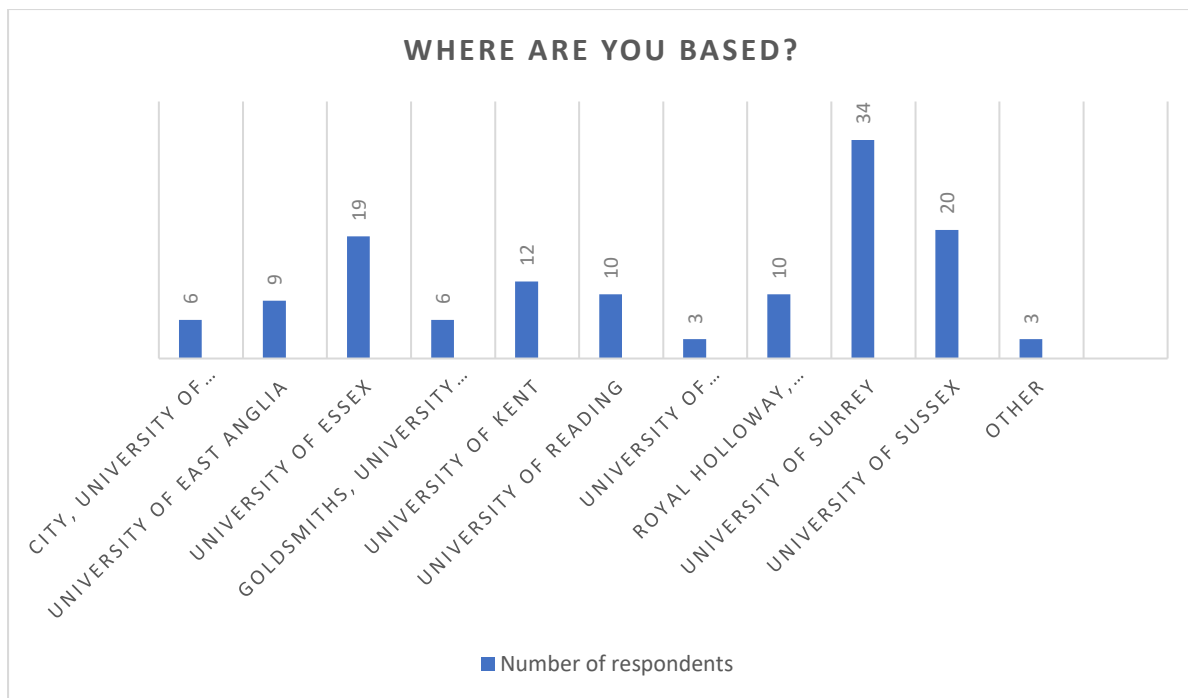
Figure 1: Representation of respondents across universities

Our study focused on postgraduate social science researchers constituting PhD level and Early Career researchers (e.g. post-docs, research fellows). A significant proportion of 83.6% of respondents were full-time PhD researchers, with 11.9% part-time PhD researchers, and a small proportion of 4.5% who were Early Career researchers (see Figure 2). Among the PhD researchers, approximately two-thirds are in their first and second year (full-time equivalent) of the PhD, with the other one-third in their third year and beyond (full-time equivalent) (see Figure 3). Approximately a quarter of the PhD respondents are self-funded, with the others funded largely by the institution and the UK Research Council (see Figure 4). Other reported sources of funding included industry, country sponsorship such as the Turkish Government, SeNSS and NHS. As for Early Career researchers, two-thirds are in the first three years of their research career, with the other one-third reporting more than five years of experience. 50% of the Early Career researchers are on either a fixed-term or casual (hourly-paid) contract, with the other 50% having a more stable, open-ended/permanent position. The imbalanced proportion of participants may in part be reflective of the PhD/ Early Career researcher ratio in academic institutions. Researchers in the earlier stages of their research career may also be more open to career options beyond academia, thereby explaining the greater interest in our study among these subgroups of individuals.

What is your role in the higher education institution?
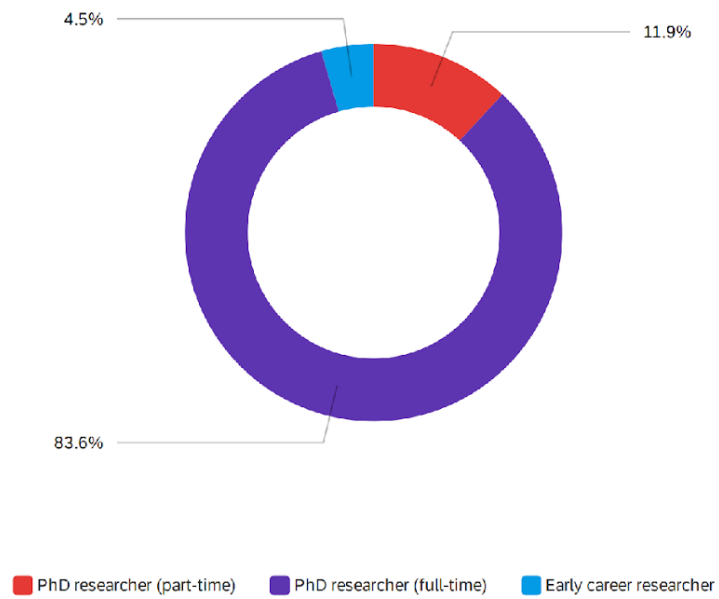
Figure 2: Role in higher education institution

What point are you in your PhD?
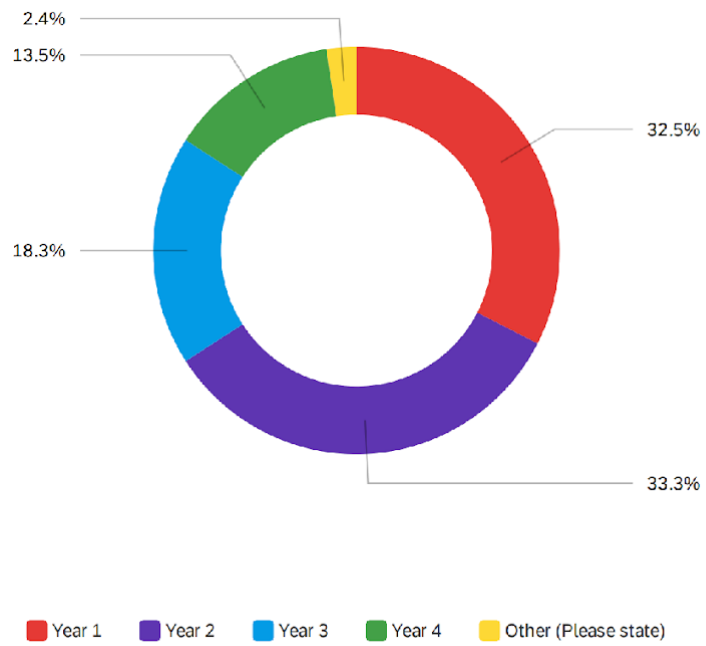
Figure 3: Stage of PhD programme

What is your main source of research funding?
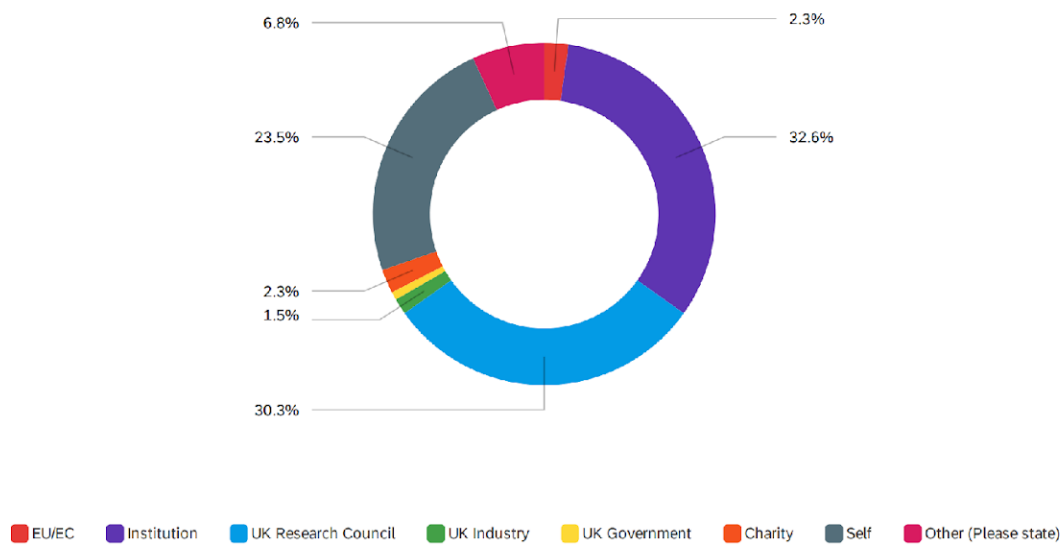
Figure 4: PhD respondents' main source of funding

All 13 social science disciplines offered by the SeNSS DTP universities were represented, with some disciplines such as Psychology, Business and Management, Sociology, Education and Socio-legal more represented than others (see Figure 5). A majority of respondents in the most represented discipline (Psychology) were from the University of Surrey, University of Sussex and Royal Holloway, University of London, all of which have high to moderate response rates. The Business and Management discipline demonstrated the same pattern, with respondents mostly from University of Essex which had one of the top three numbers of responses. Respondents in other disciplines were randomly spread across all universities, with no significant clusters. 12% of respondents indicated other for their subject specialisation and specified Visual Sociology, Law, Marketing, Healthcare, Hospitality, Tourism and Events Management, Entrepreneurship, Environmental Sciences, Financial Technology, Computational Neuroscience, Housing Markets, Real Estate and Planning. Many of the respondents who indicated other had also selected 1 of the 13 disciplines offered by the SeNSS DTP universities, since the question requested for them to select all that applies. Most of the subject specialisations provided by respondents in the other category can be categorised under the 13 social science disciplines offered by the SeNSS DTP, except Housing Markets and Real Estate and Planning which is more challenging to categorise. Since Housing and Real Estate

Planning is one of the key industries in the Southeast of England, both these specialisations are considered relevant to this study.

What is your subject specialisation?

| 13% Business and management | 7% Education | 21% Psychology | 7% Socio-legal | 11% Sociology | 12% Other (Please state) |

Business and management ■ Development ■ Economics ■ Education ■ Human geography ■ Linguistics ■ Politics and international relations ■ Psychology ■ Science, technology and sustainability ■ Social anthropology

Social work and social policy ■ Socio-legal ■ Sociology ■ Other (Please state)

Figure 5: Distribution of disciplines

5.3 Experiences of researchers who completed placements

5.3.1 Sample of respondents who participated in placements

Across the 132 respondents, only a small number of 15 (11.4%) have completed a placement opportunity (see Figure 6). The majority (N=109) had not completed placements and a few (N=8) responded "don't know". Among the 109 who stated they had not completed placements, 2 were in the process of completing one, bringing the total number of respondents who have experience of placements to 17 (12.9%). Our findings echoed Mellors-Bourne and Metcalfe's (2015) survey of research staff which reported a small percentage of researchers having completed placements.

Have you completed a placement?
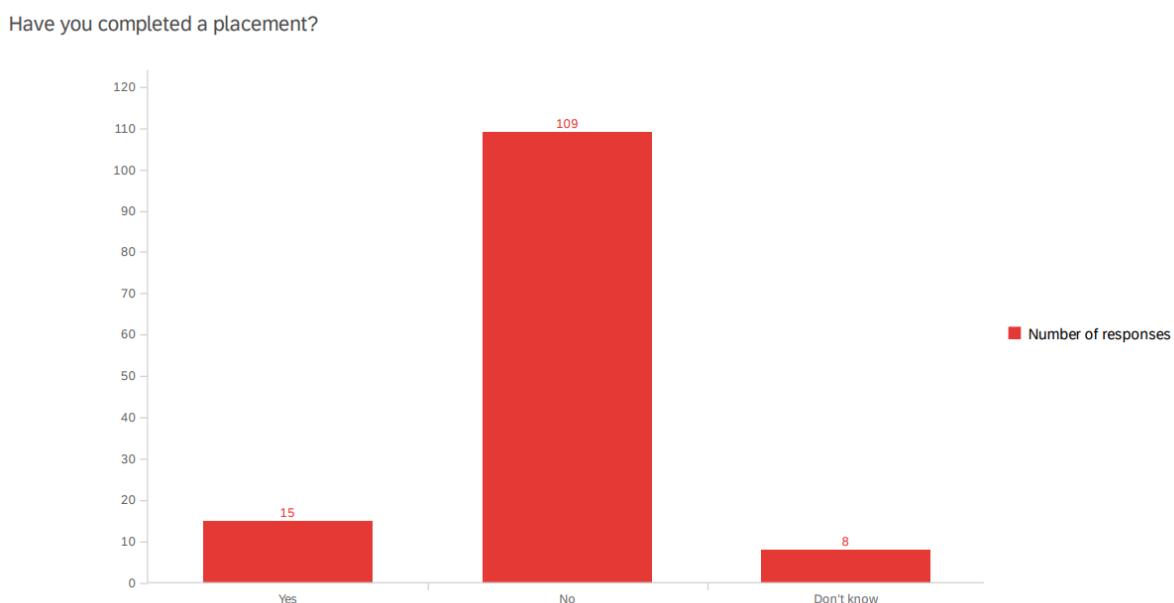
Figure 6: Participants who completed placements

The 17 participants with experience of placements are well distributed across most of the 10 SeNSS DTP universities, with the exception of University of East Anglia which had none of its respondents having completed or completing a placement (see Figure 7). A majority of researchers who had experience of placements were based in the University of Surrey, although the higher representation may also be attributable to the high number of respondents from this university.
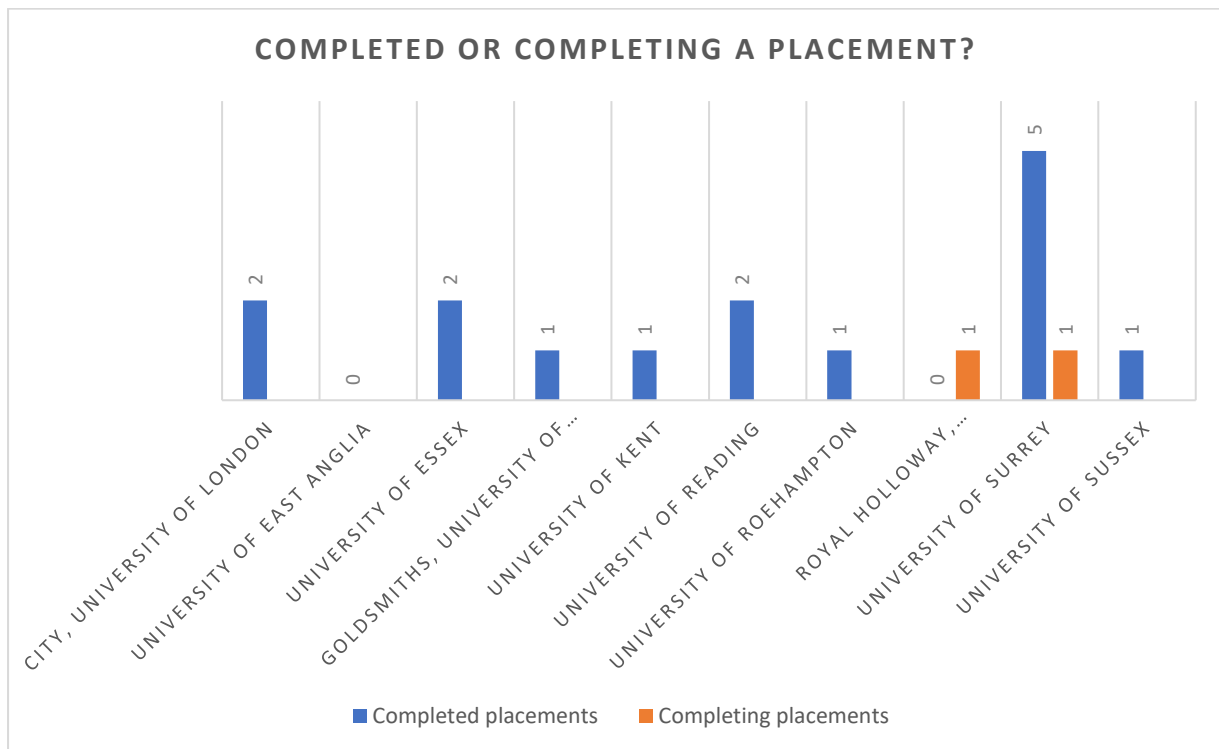
Figure 7: Distribution of placement participants across universities

The 17 respondents who have experience of placements consisted of both PhD and Early Career researchers. 2 part time PhD, 11 full-time PhD and 2 Early Career researchers completed placements, while 1 part-time PhD and 1 full-time PhD researcher are in the process of completing a placement (see Figure 8). Participants who have experience of placements also represented a broad number of the 13 SeNSS DTP disciplines, with several in (1) Business and Management, (2) Psychology and (3) Science, technology and sustainability (see Figure 9). Some disciplines such as Linguistics and Socio-legal were not represented, while the other disciplines had at least one respondent with experience of placements. The concentration of respondents in disciplines such as Psychology is likely due to placements being structured into PhD programmes (further discussed below). For example, two respondents majoring in

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Psychology in the health sector described their placements as a requirement for their PhD programmes as such:

> "I am waiting for an honorary contract with asexual health clinic within the NHS. I also must do a placement for my PhD because it is a requirement for registration with the HCPC (so it is a professional placement)."

(2nd year part-time PhD researcher)

> "Part time researcher role alongside full time PhD - carried out for the duration of my PhD as a placement for my stage 2 training in health psychology."

(3rd year part-time PhD researcher)
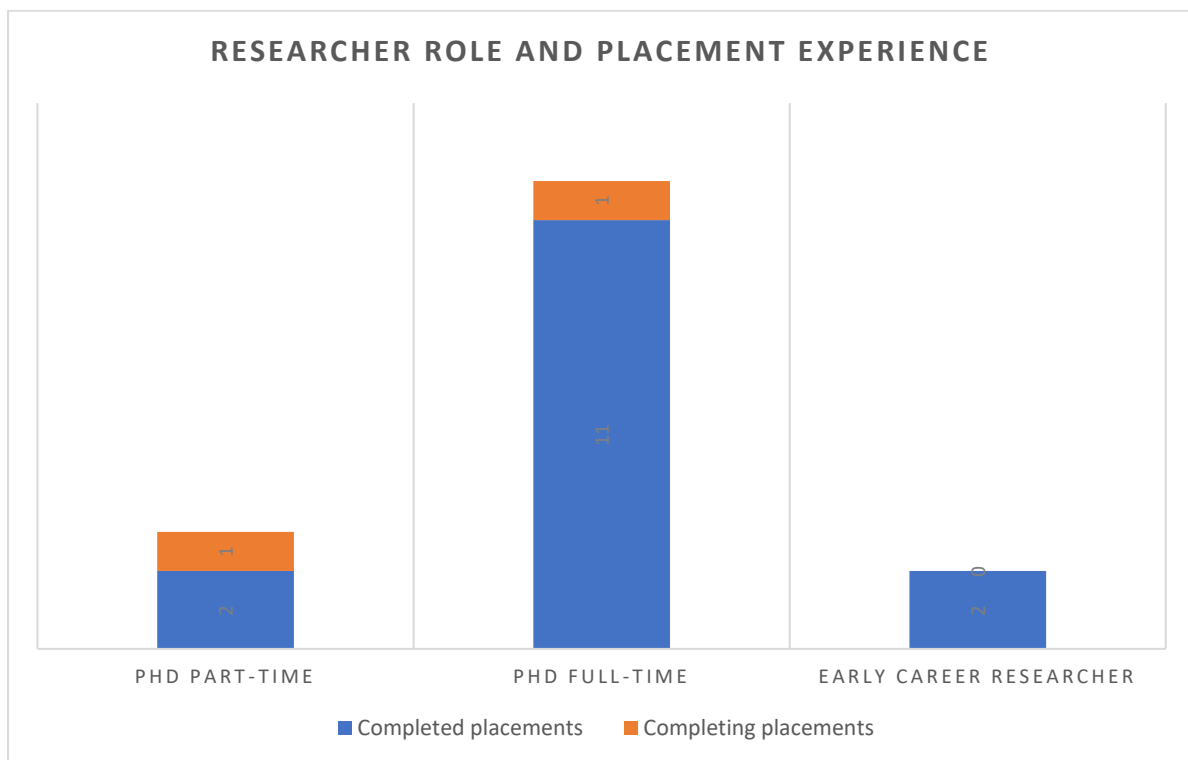
Figure 8: Distribution of placement participants across researcher roles
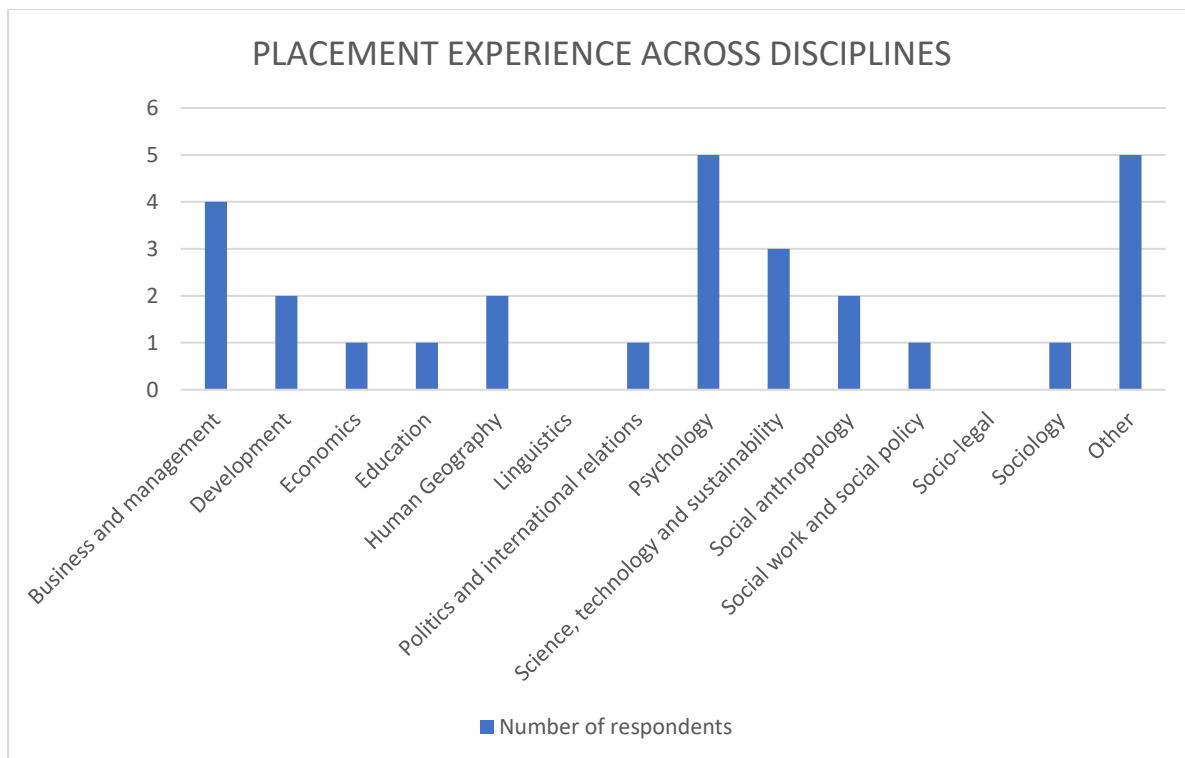
Figure 9: Distribution of placement participants across researcher roles

5.3.2   Characteristics of placement opportunities

Respondents undertook their placements across several sectors such as third sector, private and public sector. A majority of participants completed their placements in the public sector (healthcare, education, social care), and third sector/not for profit organisations (charities, think tanks, social enterprises) (see Figure 10). The private sector (commercial, industrial) was not well represented, with only 1 respondent having done their placement with a private sector organisation, possibly attributable to the smaller number of placement opportunities offered by private sector firms, or the interests and career trajectories of social science researchers (further investigated in section 4.2 on employer perspective). The average length of placements were 191 days (6-7 months), with the shortest placement reported by 1 participant to be 7 days, and the longest placement reported by 4 participants to be 365 days (12 months). Most PhD researchers did their placements in the earlier part of their PhD programmes, with 10 respondents having completed their placements within the first 2 years of their PhD. Both Early Career researchers completed placements in the second year of their research careers, by taking a leave of absence from their academic research positions. None of the PhD researchers took temporary withdrawals to participate in placements.

Which sector did you complete your placement in?
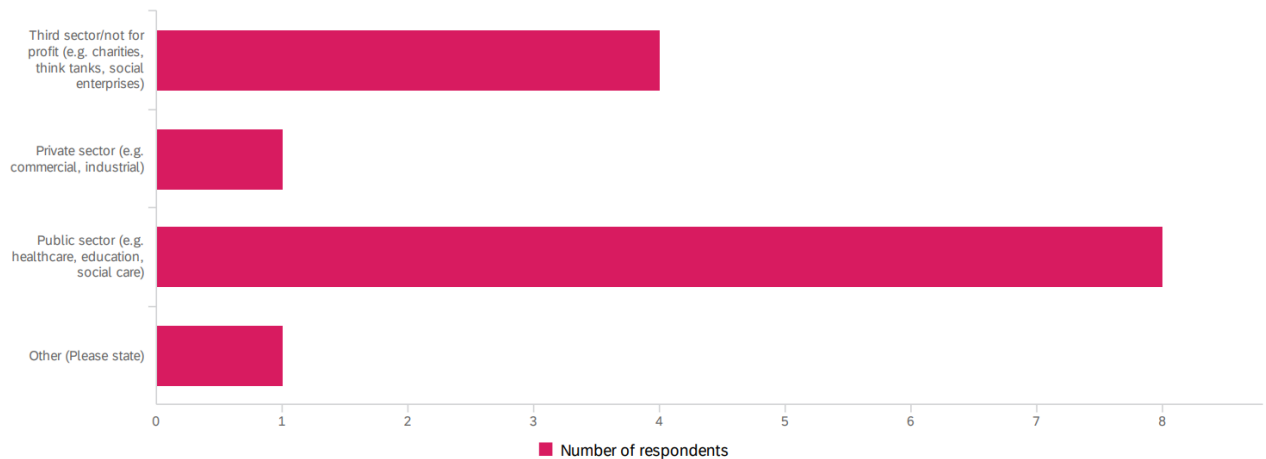
Figure 10: Sectors in which placements were completed

Drawing from participants' description of their placement projects, many placement opportunities engaged researchers for the specialist knowledge in their disciplines. For example, an Early Career researcher in Psychology (health and well-being) participated in a 6-month long placement with "Public Health England (behavioural insights team) - the first 3 months were funded by the UKRI internship scheme, […] extended to 6 months, with PHE funding the second 3 months". Drawing from the organisation the participant was attached to and their discipline, it is clear that the researcher, who took a leave of absence from their academic position, was hired for their specialist research knowledge in the field. Similarly, a 2nd year full-time PhD researcher in Politics and International Relations who completed a three-month placement with the Foreign, Commonwealth and Development Office's (FCDO) policy unit "as a policy planner (running policy planning projects, writing papers and presentations, taking part in team activities, meetings, workshops and launch events)" would also have been offered a placement based on their in-depth knowledge in their subject area and their research skills which are necessary for the aforementioned job scope. The responses of various other participants also demonstrated that their research skills and in-depth subject knowledge were valued by the organisations which offered them placements. Needless to say, professional placements completed by some respondents as part of PhD requirements would also be designed to leverage on the professional knowledge of researchers.

It appears that unlike undergraduate placement schemes, postgraduate researchers are offered placements by organisations which require their professional expertise. Postgraduate

researcher placements are more targeted, with opportunities created for individuals whose skillsets fit with organisational needs. The above would also imply that researchers keen on securing a placement opportunity in a sector relevant to their specialisation would need to position themselves as having specialist skills and knowledge which are relevant to organisations. Researchers will first need to demonstrate how they can contribute to organisational needs in order to convince relevant businesses to offer placements to them.

5.3.3 Motivations for undertaking placements

For researchers, it appears that having a placement that is relevant to their professional expertise was also a key factor influencing the decision to participate. 93% of those who participated in placements agree/somewhat agree to the statement that they decided to participate in the placement opportunity because "The placement role was a good fit for my skill-set" (see Figure 11). Other reasons motivating participation were (1) the desire to gain employability skills (86% agree/somewhat agree), (2) wanting to gain experience outside of academia (64% agree/somewhat agree) and (3) wanting to become more employable in the non-academic job market (79% agree/somewhat agree) (see Figure 11). Employability, both within and without academia, is highly valued by both PhD and Early Career researchers, as most consider it to be one of the key reasons for choosing to take part in placement schemes. Apart from employability, networking opportunities made available through placements is also a major attraction to researchers, with 86% agreeing/somewhat agreeing to the statement that "I was attracted to the networking opportunities made possible by the placement". Approximately half (57%) of respondents suggested that they decided to do placement because they secured some funding for the opportunity. Whilst the availability of funding may encourage participation, the same cannot be said of lack of funding, since the other half of the respondents did placements despite not having secured any funding.

For PhD researchers, having placements as part of the PhD programme also determined participation. PhD programmes with placements as a component would often imply that PhD supervisors are more likely to recommend that their tutees complete placements, making PhD supervisors one of the influencers of PhD researchers' decisions to do placements. One factor not considered by researchers to be a reason for doing placements is taking a break from academia, with 71% disagreeing/somewhat disagreeing with the statement that "I wanted to take a break from academia" (see Figure 11). The above findings suggest that postgraduate

researchers are less likely to choose placements as a means to explore alternative career prospects, rather, their decisions tend to be outcome-driven and focused. Researchers' attitudes towards placements would also imply that businesses need to be specific about what they require researchers for and what they can offer researchers in terms of skill-set development, in order to be attractive as a partner in placement delivery.
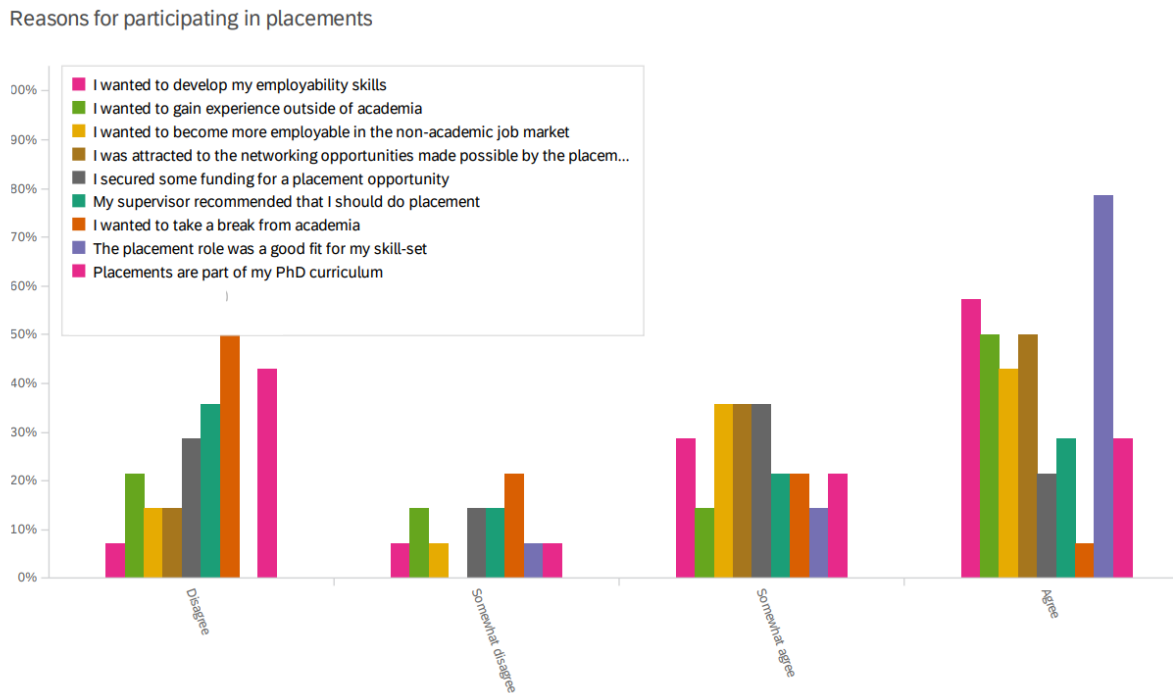
Figure 11: Reasons for participating in placements

5.3.4   Benefits gained from participating in placements

All participants felt they had benefited from placements. When asked to rate the extent they felt they benefited with a score of 0-10 (0 = not benefited at all), all respondents gave a score of 7 and above, with a third of the participants giving a full score of 10 (see Figure 12). More than half of the respondents rated their experience of placement at 9 points and above (out of 10), indicating they felt they benefited greatly from placements. These benefits included the development of a broad subset of skills. A majority of 79% of respondents felt that placements enabled them to develop self-confidence (see Figure 13). Various other skills which more than half of respondents indicated they have developed through placements include (1) interpersonal skills, (2) subject knowledge, (3) self-motivation, (4) professionalism, (5) time management, (6) team working, (7) project planning and delivery, (8) problem-solving, and (9) responsibility (see Figure 13).

To what extent did you feel you benefited from doing placement? (Score 0-10)
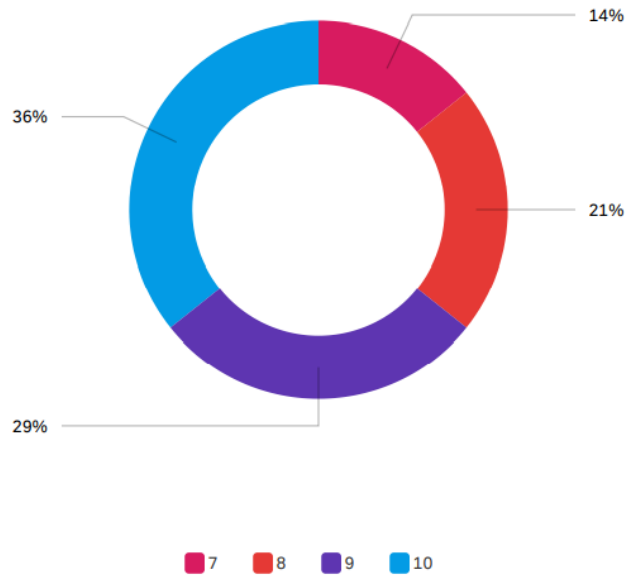
Figure 12: Rating of placement experience

Placements helped me to develop:
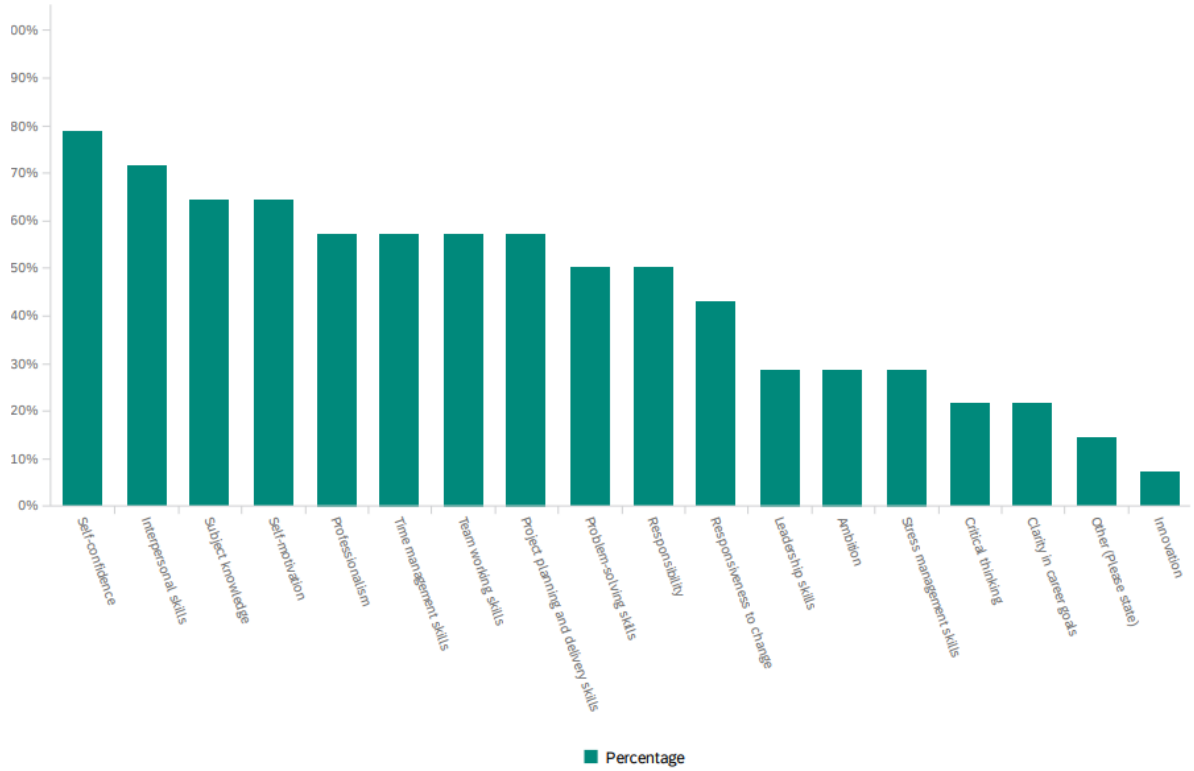
Figure 13: Skills developed through placements

These skillsets which most participants reported to have acquired through placements fell within all four domains of the Vitae Researcher Development Framework (RDF), namely (1) knowledge and intellectual abilities, (2) personal effectiveness, (3) research governance and organisation, and (4) engagement, influence and impact. Since the Vitae RDF functions as a framework to help researchers plan and monitor their professional development, it is clear that placements facilitated the development of desirable employability skills for a research career track. Some of the identified benefits felt by researchers aligned with those in one of few studies on doctoral students' experience of placements. Garza and Jones (2015) reported various positive impacts of placements on researchers' professional development, motivation to complete their PhD, increased maturity and work efficiency, as well as better research capabilities.

Our study demonstrated most researchers to have acquired a broader subset of employability skills than those identified by Garza and Jones (2015). In addition to the aforementioned skills, a third of our participants who did placements also reported having developed other skills such as leadership, ambition and stress management (see Figure 13), all of which are essential to career progression. Critical thinking and clarity in career goals were less emphasised among participants, with only 21% stating that they had developed these skills through placements. An Early Career researcher in the second year of their career stated that one of the skills they acquired was "conducting and applying research in a non-academic setting". A relatively longer placement period of 6 months within a public sector (healthcare), where they were engaged within the capacity of a researcher, facilitated their development of such a skill. The above example demonstrates the importance of creating placement opportunities which are a right fit for researchers, as it would not only facilitate researcher career development, but also contribute to the growth of businesses (further illustrated in section 6.0).

Some researchers in the earlier stages of their PhDs may however be more concerned about finances than career development when deciding to pursue placement opportunities. For example, one of the respondents, a 2nd year full-time PhD candidate, expressed that they took on a one year "temporary position within the eLearning department of my university" because they "needed additional income", and that the placement enabled them to gain "financial security". When creating placements, there is need to consider the financial position of researchers, and to ensure that they are fairly remunerated for the work they perform. Ensuring that researchers are fairly paid in placements would not only increase the attractiveness of

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placement opportunities among researchers, but also ensure equality in access to opportunities. In particular, PhD researchers who are more likely to be relying on stipends or are self-funded may not be excluded from placement opportunities due to financial difficulties, if these opportunities are paid.

5.3.5   Challenges of undertaking placements

Despite the many positive benefits of doing placements, respondents also encountered various challenges while on placements. Several participants discussed time constraints to be a challenge, as they had to juggle between placement work and their own research. For example, a participant expressed that:

> "it was difficult to balance the responsibilities of my placement alongside my research commitments. They had to be managed by careful time management as both are essential for my personal development and financial security".
>
> <div align="right">(2nd year full-time PhD researcher)</div>

Time constraints seemed to be more of a challenge for PhD than Early Career researchers, perhaps due to the structure of PhD programmes which gives researchers a rather short period of time to complete a significant research project. Funded PhD researchers would also need to complete their research within the funding period, or incur financial costs they would need to cover outside of the funding period. As such, while placements provide opportunities for "personal development and financial security", placements can also place additional workloads, responsibilities and hence stress on PhD researchers. The above is further supported by a 3rd year full-time PhD researcher, who completed a short placement of 7 days with a third sector (not for profit), stating that since "I was doing it [placements] in my free time, in my final year of the PhD, I struggled to find time and energy to finish". Perhaps the short placement period may be a result of the participant finding it difficult to juggle their research and placement workloads, especially in the final year of their PhD which can be the most demanding for many. These challenges faced by PhD researchers point to the need for universities to adopt a more flexible PhD programme structure which supports researchers' decisions to participate in placement programmes.

Other respondents discussed logistical challenges in cases where their placement opportunities were located in a different geographical area to where they are based. For example, a full-time PhD researcher from the University of Kent who had to complete their placement in Bristol museum pointed out that their biggest challenge was "moving to a different city, lucky to have a friend's house to stay in". The logistical and financial cost of relocation can be challenging for researchers, especially when the relocation is short and temporal in the case of placements. Researchers who may not have affordable solutions for accommodation may therefore lose their opportunity to participate in placements. It is important that universities consider the logistical challenges experienced by researchers in the delivery of placements, so they can provide support to researchers by working with businesses to design alternative work arrangements or accommodation options. The experience of an Early Career researcher demonstrated how alternative work arrangements can potentially resolve the issue of geographical distance. The participant described that their

> "biggest challenge was the commuting to the placement, as it made for a long day - when the placement was extended I negotiated with my line manager to work from home 2 days a week to reduce the travel burden".

While the researcher was able to resolve the challenge themselves, their experience demonstrated the effectiveness of alternative work arrangements in addressing the logistical difficulties of travel and accommodation. Universities have a role to play in helping researchers to resolve these issues before they arise, which will make placements more attractive to researchers. The involvement of universities can also imply that these issues may be resolved at an earlier stage of the placement, unlike the above case where the issue was only addressed towards the end of the placement, negotiated at the stage of an extension to initial contract.

Other logistical challenges include documentations required for some placements. For example, a PhD researcher with an "honorary contract with asexual health clinic within the NHS" identified one of their key challenges to be that of "completing all the documents [which took] nearly 5 months to have all the document necessary". While they did not clarify what paperwork was needed for them to take on the placement position, they added that "it would be nice to have more support from the University when handling the paperwork, at least knowing who is going to be the person within the University who is going to authorise the placement". It appears that this paperwork is a university requirement, pointing to more scope

for universities to be involved in supporting researchers in acquiring placement opportunities. There might be a need for universities to streamline administrative processes for placements, or appoint mentors or key point-of-contacts to researchers who are required to complete complex administrative documentations.

One last challenge discussed by participants relates to needing to do placements online, which for many was a transition which was made due to the pandemic. One respondent who had started their "applied research [project] to produce an Impulse paper for the EU" before Covid-19 found it challenging to "adapt it to perform all the activities online (meetings with officials from EU, workshops with different stakeholders, etc.)". The sudden transition of planned research activities onto the online platform can prove to be difficult for researchers due to the novelty of doing research on the virtual platform. Others suggested that doing placements online can be a challenge in itself. For example, a 2nd year PhD researcher on a 3 month placement as a policy planner faced many challenges with their placement being "largely held over MS Teams". They felt that communication was very different through MS Teams in terms of knowing when and how long to speak, albeit adding that it was something they got used to over time as they developed their "confidence and persevering through lots of slightly awkward meetings!" (2nd year PhD researcher). Another challenge they faced with online placements was the feelings of inadequacy and needing to demonstrate that they are part of the organisation. They described their constant feelings of uncertainties when working online as:

> "feeling the need to present myself as an insider, whilst being very aware that I was an outsider - I lacked a lot of insider knowledge (even down to acronyms that were used very casually) that made it difficult to fully get to grips with every situation, and made me less confident in proposing solutions ("I must just not realise something really obvious")." (2nd year PhD researcher).

Unlike being in an office context where the researcher would likely be better orientated to the organisation at the start of the placement and be able to approach their direct manager for questions, researchers beginning placements virtually risk losing these opportunities and feeling lost in the process. In this context, universities play a crucial role in ensuring that researchers are well adapted to their organisations, perhaps checking in to make sure that they are being assigned a direct mentor in the organisation or have participated in virtual orientation programmes. In the case of the aforementioned researcher, they pointed out that the presence

of a "manager who encouraged me to ask lots of 'stupid questions' and always go to them if there was something I didn't know or was confused by" greatly facilitated their adaption to the organisation (2nd year PhD researcher).

Apart from difficulties relating to a different working environment, online work arrangements can also be administratively problematic to administer in some organisations. An example is provided by a 4th year PhD researcher who completed an online placement as a financial manager in a non-profit organisation in another country during the second year of their PhD. Whilst they did not relate any difficulties working online with the organisation, they stated that they "faced challenges with the external auditors because I managed the work online". An issue points to the need for universities to ensure that third sector organisations are aware of such potential issues, if virtual placements were to be considered a viable alternative post-pandemic.

5.4   Perspectives of researchers who had not completed placements

This section investigates the perspectives of respondents who have not completed a placement. We seek to examine receptivity towards placements among researchers, motivations for wanting to do placements, and reasons for deciding not to. These findings will enable us to unpick some of the facilitators and barriers to doing placements from the perspectives of researchers.

5.4.1   Receptivity towards placements

Among the 111 responses from participants who had not completed a placement, a significant proportion of 67.6% indicated interest in completing a placement, with 10.8% selecting "don't know" as a response. The remaining 21.6% expressed no interest in doing placements (see Figure 14). Similar to findings by Mellors-Bourne and Metcalfe (2015), there appears to be a demand for placement opportunities among researchers, suggesting that there is scope for universities to facilitate the process.

Are you interested in doing a placement?
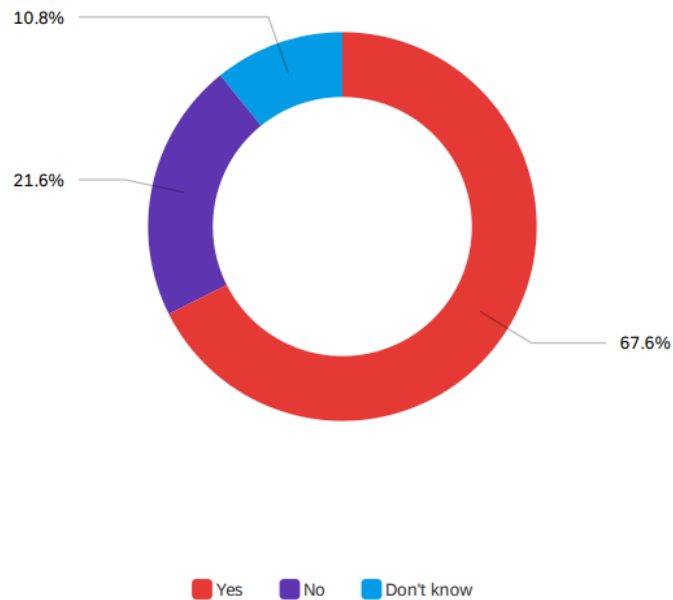
Figure 14: Level of interests in placement opportunities

5.4.2 Motivations for wanting to do placements

Similar to researchers who have completed placements, researchers interested in doing placements identified employability within and outside of academia as a key motivating factor. More than 90% of respondents indicated they may consider doing placements because they wanted to develop their employability skills, with the desire to gain experience outside of academia expressed by more than 80% of respondents (see Figure 15). Approximately 70% of participants agree/somewhat agree with the statement that they considered doing placement to become more employable in the non-academic job market (see Figure 15). Among respondents who selected the "other" category, the stated reasons all related to increasing employability and experience beyond academia, such as:

"A way into a job sector I have not had an opportunity to experience"

(Part-time PhD researcher, Year 3)

"It can help me enhance my professional development."

(Full-time PhD researcher, Year 1)

It is evident from the above responses that placements are valued by respondents for their potential to increase researcher employability both within and outside of academia. Similar to participants who completed placements, increased networking opportunities was considered by more than 90% of respondents as a key motivation for considering placements (see Figure 15).
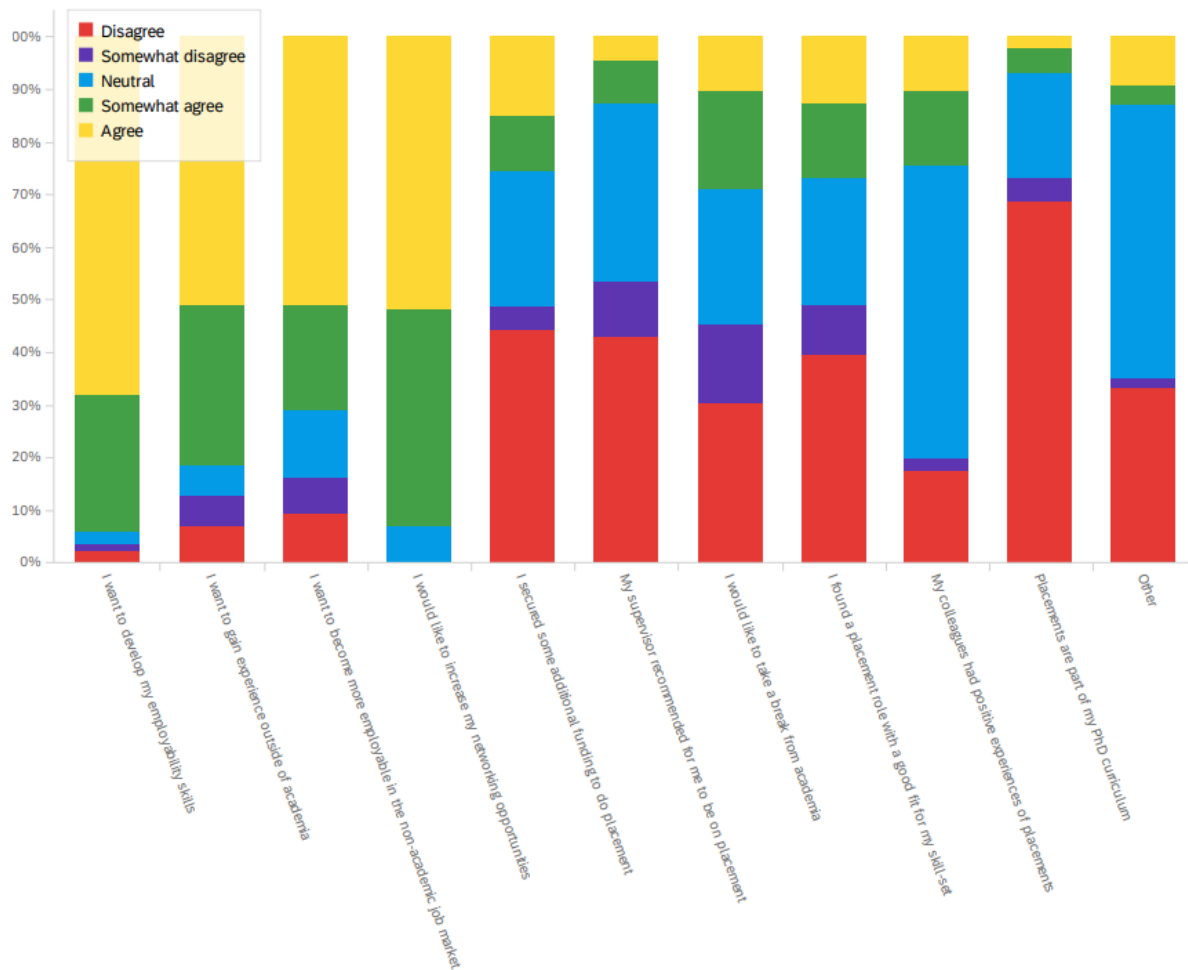
Figure 15: Reasons for wanting to do placements

Although not explicitly raised by respondents, it appears that even though many indicated their interest in doing placements, one of the key reasons they had not yet embarked on one might be that placements is not part of their PhD curriculum. Approximately 70% of respondents disagree/somewhat disagree with the statement that that they may consider placements because it was part of their PhD curriculum (see Figure 15). Other factors which participants considered to have little impact on their decisions to do placements are: (1) supervisor recommendations for them to be on placements, and (2) securing additional funding to do placements. Apart from

supervisors not having much impact on researcher's propensity to do placements, colleagues and their positive experiences of placements also seemed to have little influence over researchers' decisions to do placements. More than half of the respondents expressed neutrality over the statement that they may consider placements if their colleagues had positive experiences of placements (see Figure 15).

Researchers who have not done placements demonstrate financial availability to not be a key motivating factor, suggesting that funding has less of an impact on researchers' decisions to participate. Such may be since placements are valued by researchers as an opportunity for career development, rather than for financial gains. Despite this focus on career development, respondents appeared to place less importance on placement opportunities being a good fit for their skillsets, unlike participants who had completed placements. Only a small proportion of 25% of respondents agree/somewhat agree that they would consider placements if a role with a good fit arises, pointing to the presence of various other more important factors influencing decision (see Figure 15).

5.4.3 Perceived benefits of placements

Respondents who were interested in doing placements and those who indicated "don't know" identified several perceived benefits of placements. However, comparing both subgroups, it appears that more perceived benefits were identified by the subgroup who were more certain about their interest in placements. A larger proportion of respondents in the subgroup who answered "yes" to wanting to do placements considered the experience to be useful in enabling them to develop a range of 17 skills across the four categories in the Vitae RDF, as compared to the subgroup who responded "don't know" to whether they would consider doing placements (see Figure 16). This difference in the perceived benefits of placements is reflected in Garza and Jones's (2015) study of PhD candidates, which reported that positivity towards placements was only expressed by those who were open to the idea of doing placements. Our study confirms that receptivity towards placements among researchers has to some extent influenced the perceived benefits of placements.

The development of skills such as (1) professionalism, (2) team-working, (3) project planning and delivery, (4) leadership, and (5) clarity in career goals were identified by more than 40% of respondents in both groups as some of the perceived benefits of placements (see Figure 16).

Some of these were similar to the actual skill sets acquired by participants who have completed placements (see section 5.3.4), demonstrating some alignment in expectations of what placements can bring. However, leadership skills and clarity in career goals were not reported by many to be skills acquired through placements (see section 5.3.4), flagging up a mismatch in expectations among those who have not done placements. There is need to address this misalignment in expectations before offering placements to researchers, to ensure that outcomes are positive. Universities might perhaps consider helping researchers to understand what leadership encompasses within the industry, demonstrating how leadership extends beyond leading a team or a research project, and illustrating the breadth of work/roles that researchers can undertake to develop and demonstrate leadership skills.
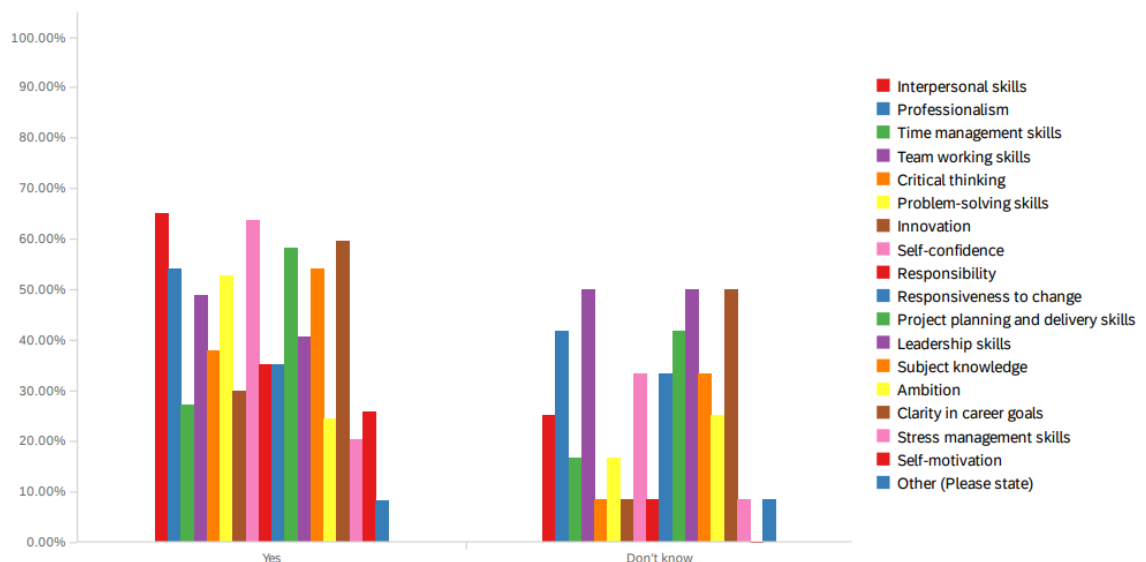
Figure 16: Perceived benefits of doing placements across 2 subgroups of respondents

More than 50% of respondents who were more certain about wanting to do placements also identified interpersonal skills, problem-solving skills, self-confidence and subject knowledge to be key areas that they can develop through placements (see Figure 16), matching the reported skills developed by those who had completed placements. It appears that respondents who were keener about placements had clearer and more realistic expectations of what they can gain through placements than those who were uncertain. There may perhaps be scope for universities to create more awareness of placement programmes among researchers, possibly through the testimonies of those who have completed placements, to demonstrate how they have developed through the experience.

Respondents added that other perceived benefits of placements included, "impact with research" and "understanding of policy". The first relates largely to broadening the dissemination of one's research to a wider audience for greater impact, which is a concern for many researchers. Placements were perceived by some researchers as a route to improving impact assessments, pointing to the potential role of universities and businesses in facilitating such opportunities through placement delivery. For some researchers, placements can also serve the practical purpose of enabling them to experience policies as implemented on the ground, rather than through academic debates. Researchers whose work informs and impacts practice may therefore benefit from a first-hand experience of the industrial environment within which policies and recommended practices are implemented. The potential benefits of placements and the enthusiasm among researchers to do placements draws attention to the need for universities to create more placement opportunities for postgraduate social science researchers.

5.4.4 Reasons behind not wanting to undertake placements

One-fifth of the respondents were less keen about doing placements, stating that they will not consider such an opportunity. Various explanations were given for the decision not to do placements. However, the three most prominent reasons were: (1) I already have experience of working within the private/public/not for profit sector prior to working in an academic setting, (2) I am under time-constraints to complete my PhD, and (3) I am unable to fit placements into my work commitments (see Figure 17).

I have no plans to do a placement because:
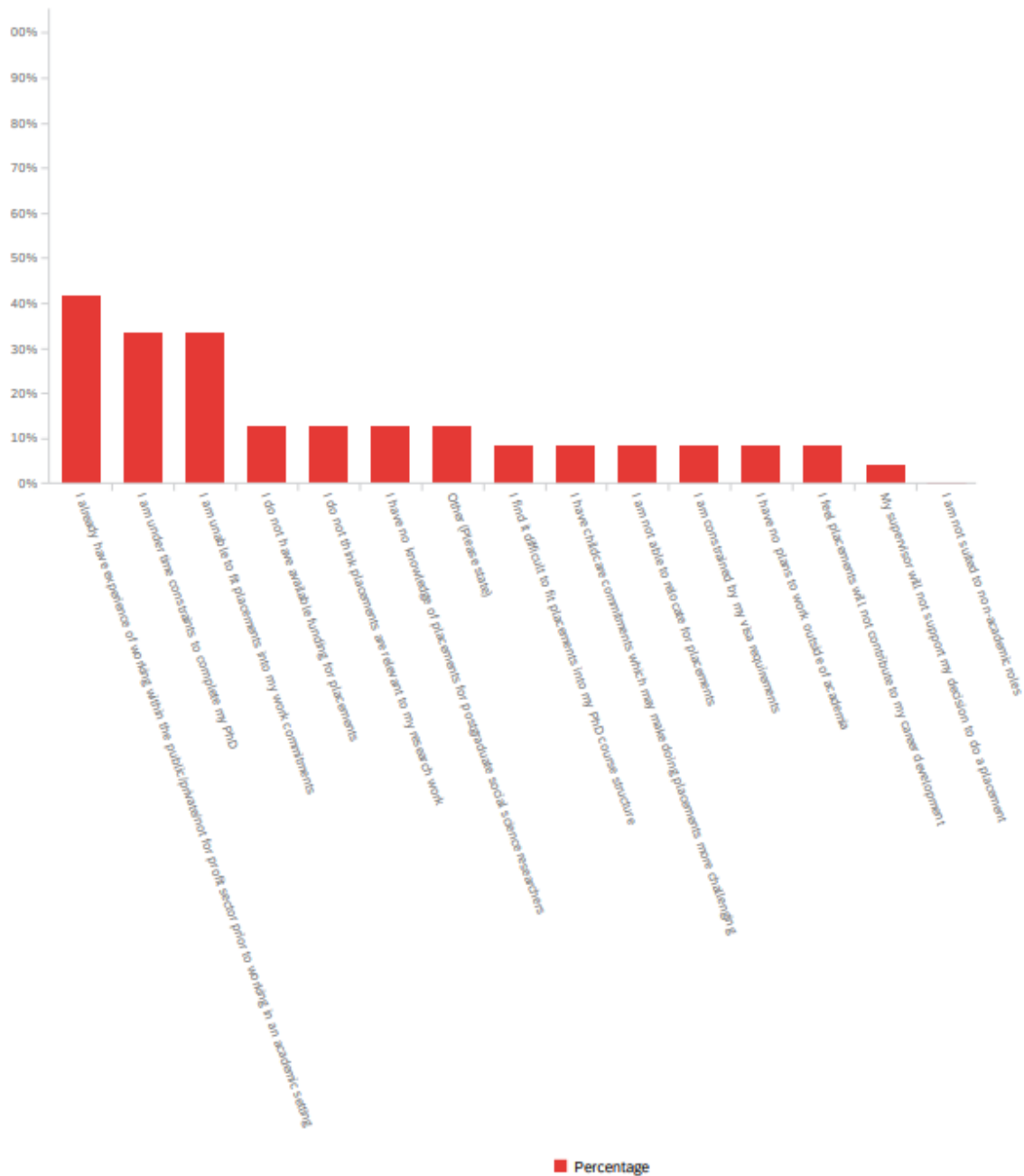
Figure 17: Reasons for not wanting to do placements

Individuals who entered academia with prior experience outside of academia comprised mostly Early Career and part-time PhD researchers. Having transitioned into academia from the industry would likely imply that this subgroup is more certain about their plans to remain in academia, and are less likely to be attracted to placements as a means of gaining industrial experience and increasing employability. Those who acquired a job after their PhD were also less likely to consider placements as an option, demonstrating that placements seem to be

perceived as a short-term transitionary route into longer term, more stable employment opportunities. For example, a participant described the role of placements in their career path as such:

> "I would like to gain experience in an area that might lead to a good job rather than precarious short-term contracts which are particularly a problem for older women where academia is not their first career. I can no longer afford to work on precarious contracts. A placement may well really help with this."
>
> (Part-time PhD researcher, Year 3)

Having a fixed career path also presented some barriers to placement participation. Those who were more certain about pursuing academia appeared to consider placements as a detraction from their career path.

> "I don't think placement suits my current career progression within academia"
>
> (Full-time PhD researcher, awaiting viva)

> "3-4 years is already a long time before I can start a post-doc and then eventually a permanent position, and I'm hesitant to further delay that"
>
> (Full-time PhD researcher, Year 1)

Researchers who had more fixed career plans after their PhD were also less likely to consider placements. A PhD researcher in their final year expressed that they

> "have an obligation because of my scholarship and after graduation, I need to start working as soon as possible".
>
> (Full-time PhD researcher, Year 4)

Similarly, another PhD researcher funded by an industry partner explained their lack of interest in doing a placement as such:

> "I have a permanent role with the industry partner sponsoring my PhD so I will be able to continue to work in industry rather than doing a placement."
>
> (Full-time PhD researcher, Year 1)

Some researchers are also completing their research hand in hand with acquiring industrial experience, as such their perceived lack of need to pursue placements. For example, two respondents described their PhD research/programme as such:

"I currently work in healthcare alongside my research."

(Part-time PhD researcher, Year 1)

"I am doing the Practitioner Doctorate in Sustainability run by CES and so I work full time in industry while researching my PhD. […] It is also an excellent example of industry collaboration with academia. I would recommend this innovative approach to anyone and would love to talk about it if you are interested to know more."

(Full-time PhD researcher, Year 2)

PhD researchers who have industry experience integrated into their PhD programmes expressed satisfaction with the programme structure, which perhaps explained why they felt they did not need placement opportunities. Our findings suggest that researchers who expressed no interest in placements because they have/had access to working opportunities outside of academia are least likely to benefit from placements in terms of employability and career progression, suggesting that universities can focus their resources on targeting those who express more interest in placements.

However, considerations need to be taken to ensure that individuals with time constraints are not left out of placement opportunities. Respondents indicating a lack of interest in placements due to a lack of time to complete their PhDs are largely full-time PhD researchers. The issue of time-constraint faced by full-time PhD researchers is also raised by respondents who had experience of doing placements (see section 5.3.5), which points to a need for universities to address the issue to facilitate more participation among PhD researchers. Drawing from the above experiences of researchers on PhD programmes with integrated work experience, there may perhaps be a need for universities to revisit their PhD programmes, perhaps adopting a more flexible programme which can enable researchers to pursue placements if they express an interest to do so. The inability to fit placements into work commitments was a reason provided by all Early Career and some PhD researchers. In order for university-led placement schemes to be more successful, universities may need to consider re-structuring work contracts

and PhD programmes to support and facilitate the participation of researchers in placement opportunities.

Another barrier to doing placements is researchers' lack of funding to meet financial commitments during the placement period. Such is perhaps due to researchers' perspective of placements as unpaid or lowly paid work opportunities. For example, some researchers expressed that:

"I do not have sufficient fund available to go for placement and support family"

(Full-time PhD researcher, awaiting viva)

"I would not do an unpaid placement and could only accept 37k per year as a minimum salary as I have a mortgage to pay".

(Early career researcher, 3 years' experience)

One last explanation for the low interest in taking on placements is the lack of knowledge that such opportunities existed. Participants indicated that:

"I would not know where to start to research opportunities to determine my interest in the first place."

(Full-time PhD researcher, Year 2)

6.0   Facilitators and barriers to placement delivery

6.1   Employers' perspective on placements

This section presents the employer perspective of placement delivery by drawing on findings from (1) interviews with organisations working closely with businesses such as CoC, IoD and LEPs, (2) a small number of 13 survey responses from employers in mid to large scale companies of 50 or more employees, and (3) sandpit discussions with university staff who have experience of collaborating with businesses for placements. Through the inputs of multiple stakeholders, we were better able to understand the facilitators and challenges faced by different types and scales of businesses in the delivery of placements. For example, an interviewee representing Surrey CoC described the organisation to "represent them [businesses] because we are constantly talking to businesses and then we can feed that back through the British Chambers of Commerce right the way back through to the government".

The above response demonstrates that organisations such as CoC, IoDs and LEPs stand in the gap between businesses and governments, and are well-positioned to represent the perspective of employers and present a broad overview of the facilitators and challenges faced by businesses in their engagement in placement delivery. Our engagement of multiple stakeholders also enabled us to address the lack of employer participation in this study.

6.2 Facilitators to placement delivery

The size of businesses is one factor influencing participation in placement delivery. Several interviewees suggest that larger businesses are more likely to have considered placements as an option, adding that small companies will find it quite challenging to offer placements, despite being the ones which could benefit more from placements than large companies. Interviewees reasoned that smaller companies have less available human resources to manage placements, with those managing the business often juggling several responsibilities and having less time to dedicate to the longer-term development plans of the business. An interviewee from the South East LEP explains that even though placements with researchers may be a "real asset" to small-medium enterprises (SMEs):

> "sometimes they are so small that they are understandably kind of set on the day to day running of things, there is not that kind of future forecasting piece that would be valuable, and I definitely think there is a role for us to play in that. […] And sometimes the ease with which some of the really big players that we work with do work with universities, and just do get it, can reinforce the barriers that SMEs face, because sometimes there is the thing about 'oh this is just for the big corporates, you know, you are just working for the big players, it is not for us, we are not meaningful in this equation".

It appears that SMEs may exclude themselves from placement opportunities as they perceive collaborative work with universities to be the playground for big players, and that there is no space for them to be involved. The interviewee from South East LEP (SELEP) highlighted that LEPs play an important role in facilitating SMEs' participation in placement delivery, stating that they had been "putting forward things that the universities have got as options". It is important for universities to be aware that they may unconsciously be excluding SMEs from placement opportunities, and more needs to be done in targeting initiatives at SMEs, pitching

the opportunity to SMEs in a manner which is accessible to them and their business circumstances. The significance of collaborative efforts between universities, government and membership organisations such as LEPs, IoD and CoC- in widening employers' awareness of opportunities to work with postgraduate researchers through placements, has been highlighted by other interviewees.

The perception among employers that bigger companies have increased access to placement opportunities is reinforced by another interviewee from SELEP, with an example of their collaborative project with a huge business organisation as such:

> "I had dealings with [Company X] […] we are talking there about a £ [X] million bid […] that include medicine manufacturing, simulation suites, and the universities are connected. […] That is just the whole, you know, level beyond the SMEs' understanding, and their brains might burst if they are getting involved in something like that […] you almost feel like that is where universities work, and as they come down, it gets a bit more difficult, because they have got to cut through these other things that these businesses have to deal with day to day. So almost, that is the safe space, that kind of big scale, big money, big volume, big excitement, whereas that gap is the lower level".

The above discussion reinforces the importance of targeting placement schemes at SMEs, in particular focusing on the smaller scale problems that SMEs face in their everyday functioning, and questioning what researchers can contribute towards solving these issues for businesses. Universities might perhaps need to acknowledge that bigger businesses are more likely to have the capacity to initiate collaboration with universities, and that more effort should be targeted at helping smaller businesses to succeed.

In order to facilitate engagement in placement delivery especially from smaller companies with less resources, interviewees add that the perceived benefits and practicality of the scheme needs to be clear and immediately evident to businesses. In the words of an interviewee from Surrey CoC:

> "The placement has to have a really clear output. So it has to be based on a very specific need of the business, so for it to be really successful and required, it needs to be

something that will definitely improve the businesses' fortunes if you like. You know it has to be something practical. Now it can be research obviously, but it needs to be research that is very much what the businesses wants rather than necessarily what the placement postgraduate would be needing."

The above response demonstrates the importance of designing placements in a manner which not only meets the specific needs of businesses, but also communicating the anticipated outputs in a concrete and practical manner understandable by employers. This clarity and practicality in presenting a case to businesses for why they would need placement researchers facilitates engagement, especially among smaller businesses with limited resources to dedicate to new ventures. Rather than focusing on their research specialisation, researchers need to consider how their knowledge can benefit businesses and help employers to visualise the benefits of working with researchers.

Universities can also achieve clarity in communication with businesses through engaging the growth hubs in LEPs which have a business support function, since these hubs function as "gatekeepers in terms of the complexity not just in skills world, but beyond that, everything from trading standards to business grants." (Interviewee from SELEP). The interviewee added that growth hubs and skills advisory panel within LEPs can play a vital function in helping universities to communicate placement opportunities to businesses, especially SMEs, in an accessible manner, since they possess good knowledge about "'what plays well to businesses', 'what else does this fit around?', 'what else is going on in the local landscape that we can hang this on to?'". Collaborative efforts with government and membership organisations when reaching out to businesses is important in ensuring the success of universities.

Transparency in outcomes and outputs is key to encouraging businesses to engage in placement delivery, evidenced by the case example of university/business partnership described by SELEP. The interviewee illustrated the case of University X's[1] postgraduate scheme focused on data analytics, where they felt that

"there will be huge appetite if employers understand the way that it is funded, the fact that it is at no cost to them, what that means in terms of the support they can get on their

---

[1] University Name anonymised by researcher for confidentiality

project or a particular area of work they need to do more or improve upon. […] If University [X] were a bit more sleek, a bit more bright and breezy with the way they describe these kinds of offers, it might have more play with a wider group of employers".

The interviewee stated that the benefits of the scheme did not "quite translate" because "a university has a way of articulating that I guess isn't necessarily in line with you know, like recruitment speak". This example points to the need for higher education institutions to achieve clarity and transparency through aligning with the language of businesses, in particular emphasising the measurable benefits of offering placements, costs to businesses and levels of commitment required of businesses, in order to raise interest and awareness in placement opportunities among employers.

Another facilitator of placements identified by Solent LEP is the potential for placements to "offer a bridge" between graduates and employers, to retain talent and enable employers to adopt a "try it before you buy it approach", and "call on specific opportunities for project work for short periods of time, to bring in that additional academic thinking and academic rigour into the project". According to the interviewee in Solent LEP, there is some need among businesses for "project-based work" where businesses "don't need a permanent member of staff" and would rather have the opportunity to be "able to draw on expertise for specific issues and problems". Employers also reinforced the above point, with all respondents in the survey suggesting that they perceive researchers to contribute to improvements in the skills, knowledge or experience of existing employees (Figure 18). More than half of the respondents add that other perceived benefits of collaborating with researchers include contributions of expert knowledge and successful completion of specific projects (Figure 18). It is clear that businesses look towards universities as a resource for academic thinking and expert knowledge. There is scope for universities to leverage on employers' need for academic expertise to promote placements, helping employers connect with appropriate postgraduate social science researchers to address business needs through placement work.

In what ways do you think your business might benefit from delivering placements to postgraduate social science researchers?
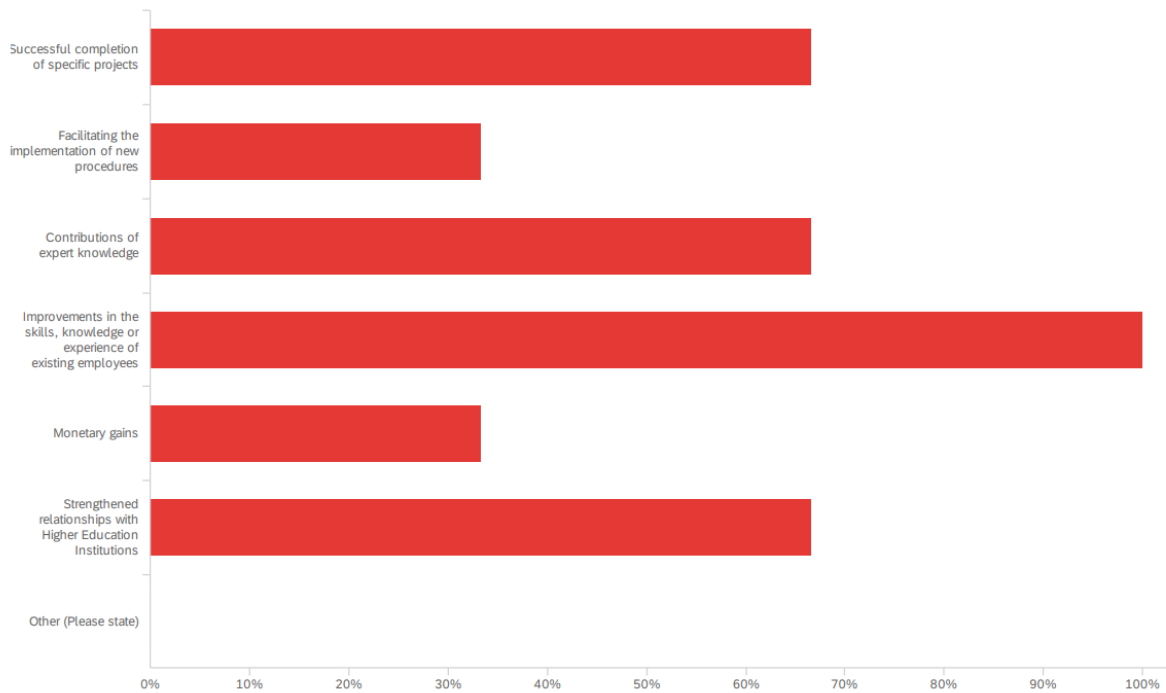
Figure 18: Perceived benefits of delivery placements to postgraduate social science researchers

6.3   Challenges to delivering placements

Interviewees suggest that one of the challenges of getting businesses to engage in placements is that employers may not fully understand what their business needs, and hence are unlikely to perceive a need for the specialist knowledge of researchers. In the employer survey, all respondents stated that one of the main hindrances to delivering placements is the uncertainty over how to fit postgraduate researchers into the business operations (see Figure 19).

What hinders your business from delivering placements to postgraduate social science researchers?
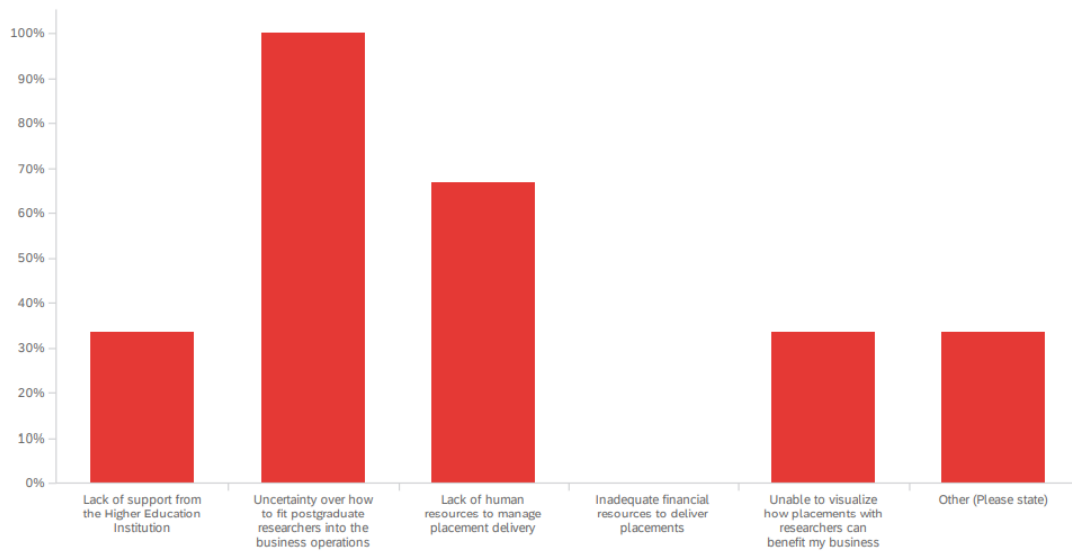
Figure 19: Challenges of delivering placements

Other key hindrances identified by more than half of the employers surveyed include the lack of human resources to manage placement delivery, demonstrating this to be an issue that is also faced by mid and larger scale companies, not just smaller companies as discussed earlier. An interviewee representing Solent LEP added that more human resources would be required to support individuals on placement because:

"you got a placement person, it may be that mentoring aspects, that members of staff would find it difficult to support, that the employer might need to put [...] that support in place in order to break down that barrier".

The introduction of a new member to the team on a short-term basis may disrupt team dynamics, with the extra support required by the placement staff to adapt to the workplace suggesting that businesses may need to invest in additional infrastructure to support the delivery of placements. The added time and financial investments required to participate in placement delivery may pose a hindrance to employers, especially SMEs where resources may be more limited.

Lack of support from Higher Education (HE) institutions was identified by 30% of respondents as a hindrance to participation. A survey respondent elaborated on the forms of support they require from HE institutions as such:

"I think a webinar / online meeting with an open invitation to Surrey IoD members, covering the following: How to partner with UoS, what your business can get, what the students or undergrads can achieve from it. All attendees complete a simple questionnaire – what's the business, what skills they are looking for right now, can this be assisted by the institution? The institution could create a virtual job board for grads, undergrads / placements - they can then apply direct to the employer."

In the response above, the expectation among employers is for universities to play a major role in connecting them with researchers through organising events, with organisations such as IoD playing intermediary roles in the process. An interviewee from Surrey CoC supports the above recommendation, adding that universities could have:

"a little exchange maybe on a little portal website, where you have businesses posting and saying 'I have got this issue', and the placement saying 'I want to do something around this type of barrier. And then you know, sometimes they will go 'Bang!', and maybe sometimes you may have people working with the placement people, looks at it and says, 'do you know what, you could adapt your research and that might actually fit with that business'".

In order for successful matches between businesses and researchers, universities need to provide the platform and inspire engagement among researchers and employers. Only when universities facilitate the interactions and the spark between employers and researchers can more concrete researcher/business partnerships through placements be initiated.

The important role that universities play in publicising the opportunities available for employers to work with researchers is evident in the discussion of an interviewee representing Solent LEP, stating that there:

"must be some job posting board. I would have thought all universities have some sort of local placement opportunities, and I think it is about working in the local authorities in your growth hub to highlight opportunities, to get out to the employer base, […] working with Chambers of Commerce […]".

Higher Education institutions have a role to play in creating platforms and events to connect businesses with employers, with government and membership organisations such as CoC, LEPs, County Councils and IoD playing a supporting role in reaching out to employers and promoting these new opportunities to them. Such a platform can effectively spark new ideas, conversations, relationships and broader networking across researchers and employers. It is clear that Higher Education institutions need to start playing a more pro-active role in the provision of online and offline platforms for relationship development between employers and researchers, with government and membership organisations contributing to outreach through their strong networks and working relations with businesses.

Employers also expect HE institutions to provide information about the process of engaging with researchers through placements and the benefits of doing so. In the words of an employer about why they have not offered placements to researchers, they stated that: "I don't know where to start. Who do I contact at the institution?". Whilst employers may show interest in offering placements to researchers, the lack of information on how to begin can become a major hindrance to the process. An interviewee from IoD adds that some of their

> "members are very active in bringing on undergraduates and even graduates, helping them with their next step […] giving them […] a defined period where they can develop some skills in the area they have been studying and build a portfolio and then get a bigger job, [but yet] none of them actually had a special approach or a special sort of route to engage with PhDs".

There are businesses keen to contribute to the development of individuals in HE institutions through creating short term placement opportunities. However, the lack of information and knowledge on how businesses can include postgraduate researchers into placement opportunities can contribute to the exclusion of this subgroup from consideration. An interviewee from Solent LEP reinforced the above point, stating that:

> "How many employers know that they can have a work placement with a postgraduate researcher? And I think actually there are some companies that do it well, but I think a lot of employers would not be aware that that is something open to them".

Perhaps this lack of awareness of opportunities to work with postgraduate social science researchers needs to first be addressed, before examining what the facilitators and hindrances of engagement are. This lack of knowledge of postgraduate social science researchers and what they can offer may perhaps explain why several interviewees state that businesses often do not make a distinction between individuals with PhDs and those without when creating placement opportunities. Interviewees suggest that it is essential for PhD and early career researchers to set themselves apart from undergraduates and Masters' level postgraduates within the industry. For example, an interviewee from IoD states that:

> "the first challenge is building that distinctiveness because intellectually you know, I can see that somebody who is an early stage researcher would have probably more to offer than somebody who is just graduated with a degree in history or economics."

An interviewee from the South East LEP adds that "part of it is just knowing and being aware of what somebody can bring to a role, and I think most employers are really receptive when they know what is possible". The above suggests that universities, LEPs, IoD and CoC have an important role to play in promoting the specialist knowledge of PhD and early career social science researchers, making employers aware of the distinctiveness of postgraduate researchers to "encourage the breaking away of what [businesses] think [they] may need to what the postgraduate might actually have".

Interestingly, financial resources did not seem to present a challenge to employers in terms of delivering placements, with none of the survey respondents indicating finances to be a hindrance (see Figure 19). This availability of finances to participate in placement delivery appears to be echoed by most interviewees. This is not to suggest that businesses do not consider finances in their decision making on whether to deliver placements. Rather, businesses still rely on cost-benefit evaluation to inform decision making. For example, an interviewee from Surrey CoC stated that:

> "cost would be one of the factors because, it is not really a cost, it is an investment, but a business will see it as a cost. So I think the first thing you have got to do is generate the interest. But the business will say 'yeah, what will this cost'. Because there are so many initiatives out there where people are offered for no cost, or you know, it is really

hard to sort of think about which is the one that is most likely to bring some kind of return if you like".

Placements for postgraduate social science researchers are situated within many other placement schemes such as Knowledge Transfer Partnerships, undergraduate placements, apprenticeships, many of which provide businesses with access to skilled labour at no cost. As such, even though businesses may afford to pay postgraduate social science researchers for placements, they will need to be convinced of the rationality of their decisions through measurable outputs, especially within the context of multiple competing, more established schemes. South East LEP echoed the above comment, emphasising that

> "there is going to be more competition in the market for people looking for placements for their students, and a lot of energy and weight will be thrown into T levels because you know, it is a government flagship programme. And universities, unless they switch up or do whatever they need to do, they might find themselves competing in a market that is difficult after Covid."

It appears that the issue is not about whether businesses can afford to pay postgraduate social science researchers in placement positions, but whether the outputs justify the costs. Postgraduate researchers and universities will need to market their unique skillsets and expert knowledge to businesses, to help businesses understand the value of having researchers in their business. There are, however, instances where finances may present a hindrance to engagement in placement delivery. An interviewee from EM3 LEP described instances where "finances were a bit of a barrier, so there were some charities for example, voluntary organisations where you know, you are not in a position to be able to sort of pay". Universities need to be aware that charities and voluntary organisations may require more assistance to get researchers on board, providing financial assistance when necessary so as not to exclude these organisations from participation.

7.0   Impact of Covid-19 on placements

This section will examine the impacts of Covid-19 on both businesses and researchers, with a focus on how the pandemic has influenced participation in placements. This section will be

presented in two sections, the first examining impact on researchers, and the second on businesses.

7.1 Impact on researchers

Postgraduate social science researchers experienced various challenges due to the pandemic. This section will elaborate on two key areas of impact, namely research career and interest in placement opportunities.

7.1.1 Impact on research career

Covid-19 disrupted the research and career development of postgraduate social science researchers in multiple ways. A majority of participants (87%) reported that as a result of the pandemic, they had reduced opportunities for in-person networking, with more than half (59%) adding that their work productivity was reduced (see Figure 20).
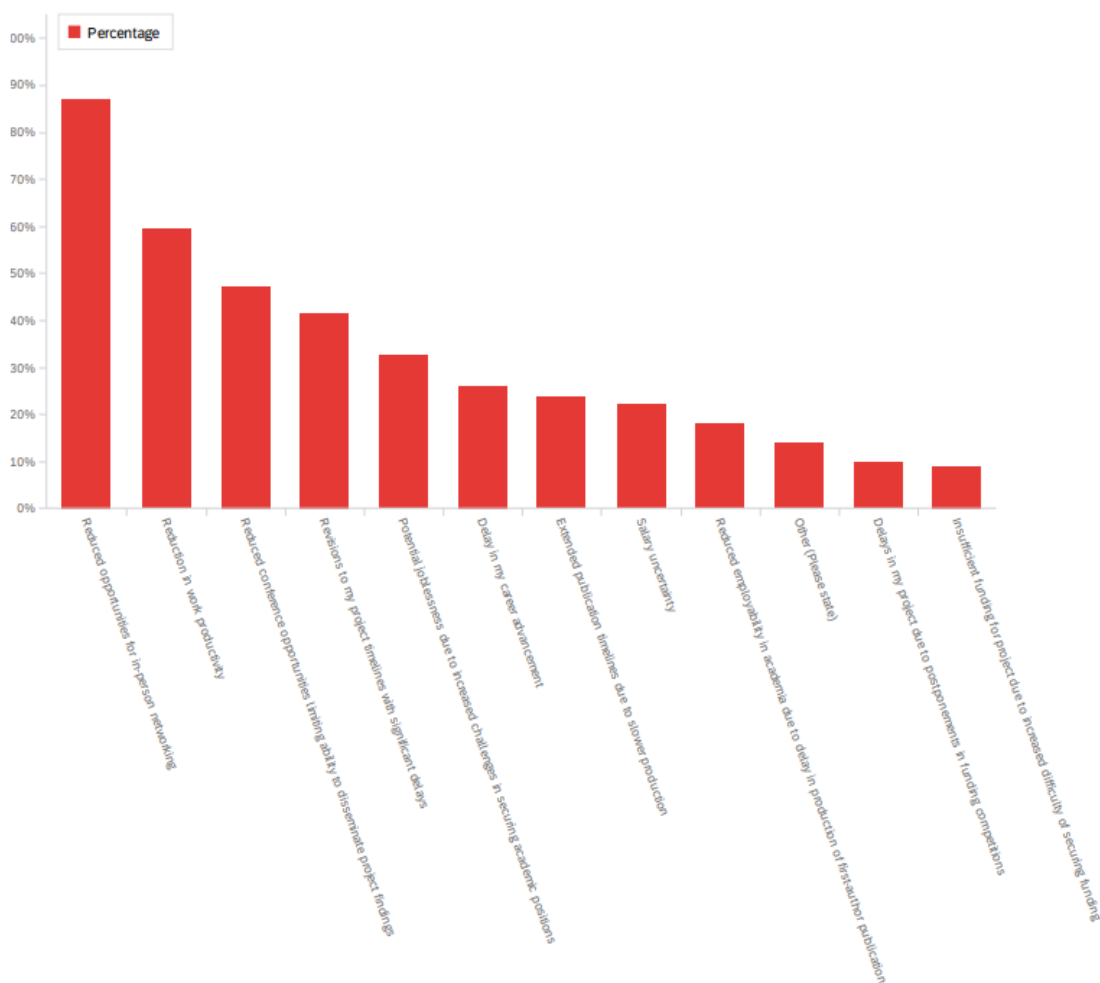

Figure 20: Impact of Covid-19 on researcher development

Various other challenges experienced by approximately half the participants include limitations in disseminating project findings due to the reduction in conference opportunities, significant delays to project timelines and potential joblessness due to increased challenges in securing academic positions (see Figure 20). Some of the challenges had differential impacts on PhD as opposed to Early Career researchers. For example, potential joblessness relating to increased difficulty in securing academic jobs was felt more strongly by Early Career and full-time PhD researchers, and delay in career advancement, salary uncertainty and insufficient project funding due to increased difficulty in securing funds reportedly posed more of a challenge to Early Career researchers. It appears that researchers are more concerned about the impact of Covid on their immediate, as opposed to long-term career plans. Several participants who expressed other concerns suggested that "delays in fieldwork", possibly due to "uncertainty about the ability to work with the public" was a key issue.

Other barriers to career development posed by the pandemic include mental health issues due to "increased isolation" and hence having to "deal with anxiety and loneliness on my own", as well as increased caring responsibilities in terms of childcare and providing "more support to my parents". It appears that feelings of isolation, mental health problems, lack of work-life balance and lack of adequate working environment were some of the issues experienced by most participants during the pandemic (see Figure 21). These difficulties relate largely to a home-based working arrangement. Approximately half of participants agree/somewhat agree that they have experienced financial insecurity, increased job precariousness and increased workload due to the pandemic (see Figure 21).
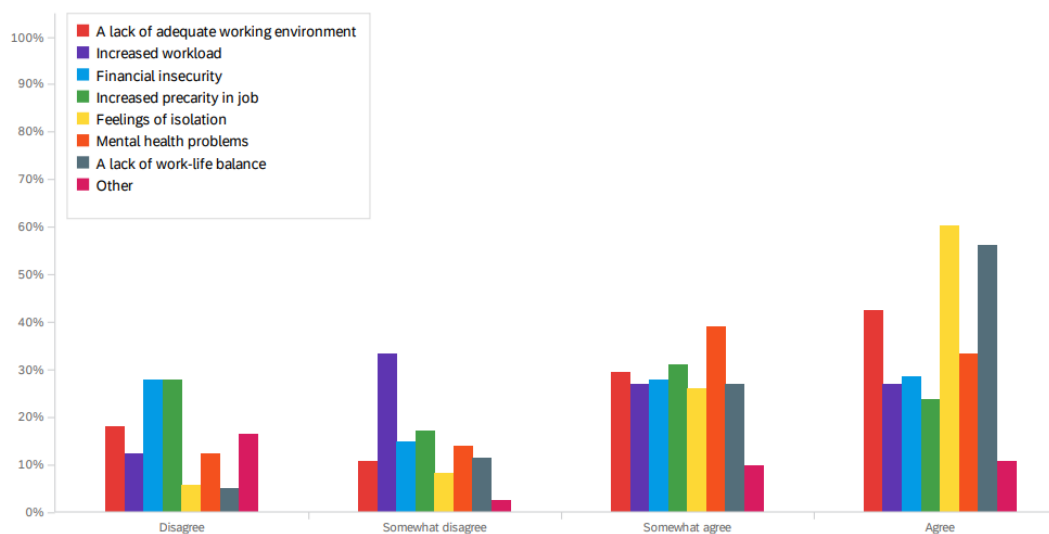

Figure 21: Difficulties experienced during Covid-19

Most researchers reported they had adapted their working patterns and career plans to cope with the aforementioned challenges. Most researchers (88%) transitioned to home-based working, with many (51%) presenting their research through virtual conferences (see Figure 22). Researchers with teaching responsibilities also expressed that they had transitioned to online/hybrid teaching format (see Figure 22). Some researchers indicated other changes to research plans such as "chang[ing] research topic to correspond to currently available material" and the online format of data collection, "defer[ing] the commence[ment] of my PhD for a semester" and intermittent withdrawal.

As a result of Covid-19, I had to:
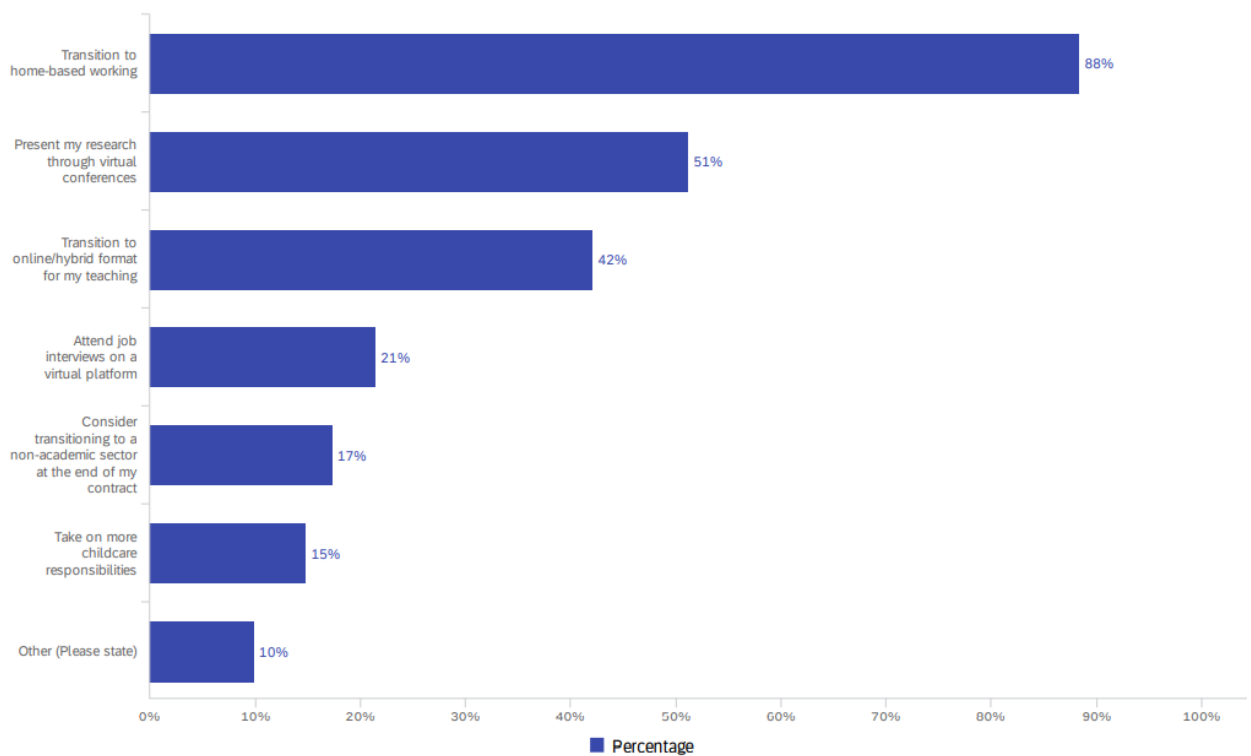
Figure 22: Transitions due to Covid-19 challenges

As for career plans, 21% of participants added that they had to attend job interviews on a virtual platform, while 17% had considered transitioning to a non-academic sector at the end of their contracts (see Figure 22). Researchers who indicated they considered transitioning to a non-academic career were largely full-time PhD researchers, pointing to the potential for placements to facilitate this process. For these researchers, placements can provide them with the opportunity to gain experience and establish networks in the field. Acquiring experience in

the industry would also help researchers to develop more certainty in their decisions to transition, with new networks paving further opportunities into the industry.

Yet for a few others, Covid-19 created various new opportunities. Some researchers (N=13) reported that Covid-19 increased their publication opportunities, while a few (N=4) others stated that they had more opportunities to bid for funding on Covid-19 projects (see Figure 23). Various other opportunities raised by researchers include increased opportunities "to participate in a number of virtual workshops and connect to people" and deliver papers in "conferences, seminars and talks" which are internationally organised and challenging to attend had these events not been virtual. Reduced time spent on travelling to work resulting in fewer distractions and hence increased productivity was also discussed by some researchers as an advantage of homeworking. For one researcher, the virtual platform contributed to more efficient data collection as they were able to "start data collection earlier […] and interview more people from across the world in a shorter time frame than if they had been done in person". From the differential responses to home-working among researchers, it appears that a virtual work arrangement is not suitable for all, as some consider it to be isolating and less productive due to increased caring responsibilities, while others consider home-working to contribute towards higher productivity. These differences point to a need for placements to be customised to the individual needs of researchers.
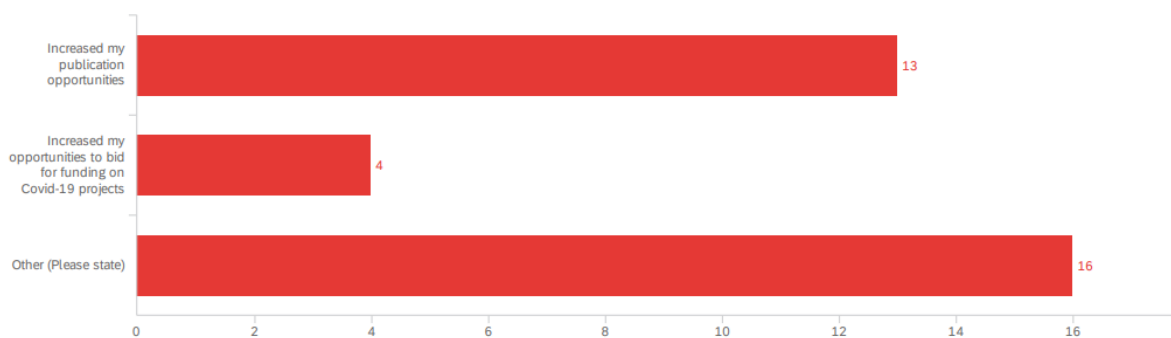

Figure 23: Opportunities availed by Covid-19

7.1.2   Impact on decisions to do placements

Despite the various work challenges researchers faced during the pandemic, most continue to express enthusiasm for placements. When participants were asked to rate from 0-10 their interest in placements during and post-Covid, approximately two-thirds of participants gave a

score of 7 and above, demonstrating high levels of interest in placement opportunities (see Figure 24).

Interest in doing placement during and after Covid-19 (rate from 0-10):
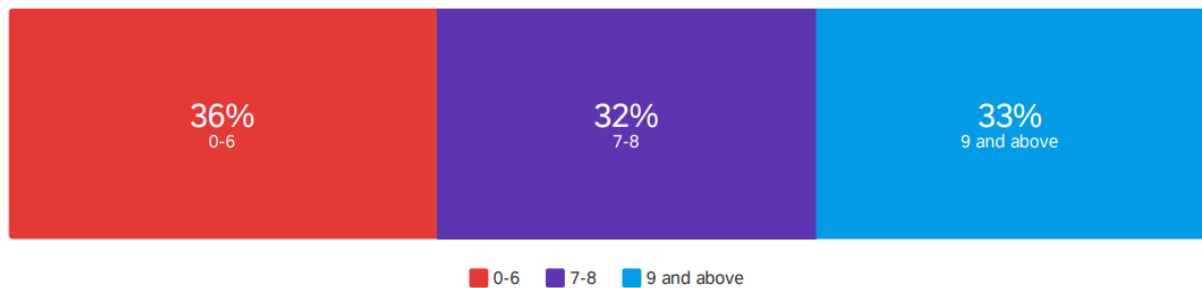

Figure 24: Interest in placements during and post-Covid-19

The pandemic did not seem to influence researchers' interest in placements, as many stated that their decisions about whether to take on placements were guided by "similar reasons to pre-Covid". Researchers who were positive about placements having the potential to (1) "increase career opportunities after finishing my PhD", (2) "expand skills and experience" and (3) "expand my network in the UK" continued to be keen on placements. Others also considered placements to be an opportunity to "work and experience non-academic life" and "get exposure to new things [since] the environment in my department is very unpleasant and it would be good to meet other people". In the words of a 2nd year full-time PhD researcher:

> "I think the placement is such an important and vital part of my PhD experience that I am willing to do it in any condition, either online if things do not change with Covid, or after things ease up following my fieldwork."
>
> (Full-time PhD researcher, Year 2)

In spite of additional pressures faced during Covid-19, several participants with no work experience outside of academia considered placements to be a good opportunity for exposure and potential identification of a career path. For example, a participant described their motivation for doing placements as such:

> "I would really like to know what my options are for a non-academic career after completing my PhD. I would like to see whether I would even like being in a non-academic job as all I have ever really known is academia (been at uni since I was 18

and have only worked in hospitality alongside this) so I might not even like branching out!"

<div align="right">(Full-time PhD researcher, Year 2)</div>

Some others were however hesitant to begin placements during Covid-19, expressing that:

"I would prefer to complete a placement when I can go into a workplace rather than completing a placement virtually. I am extremely keen to pursue a non-academic career and so want to ensure my employability is high when finishing my PhD."

<div align="right">(Full-time PhD researcher, Year 1)</div>

"Need placement to continue my training after PhD but hard to do this during the pandemic. Keen after."

<div align="right">(Full-time PhD researcher, Year 2)</div>

"I don't think that the pandemic has changed my desire to do placements, I would prefer to do a placement after the pandemic rather than during, given the challenges of conducting a virtual placement, but would still rather do a placement during the pandemic than not do one at all."

<div align="right">(Full-time PhD researcher, Year 2)</div>

Researchers whose research subjects are industrially relevant however considered placements during the pandemic to be beneficial towards progressing their research. For example, a researcher described their perceived benefits of placements during the pandemic as such:

"Covid-19 has changed the nature of my research, and through a work placement I could more quickly learn how this has happened."

<div align="right">(Full-time PhD researcher, Year 1)</div>

Researchers who were under time constraints and already had industrial experience continued to be less keen about placements during and post-Covid. While most participants maintained their interest in placements despite the pandemic, some indicated that the pandemic had a negative impact on their willingness to pursue placements. For PhD researchers, the pandemic intensified many of the challenges associated with doing a PhD. Researchers expressed that

they experienced various stressors relating to juggling multiple commitments and delays to their projects as such:

> "Time constraints. No time thanks to the pandemic making a PhD even more stressful"
>
> (Full-time PhD researcher, Year 2)

> "Between me being behind on writing up anyway (in write up year), taking on extra small grants etc. and extra care responsibilities/lack of working space at home, I would not have the time or resources to secure a placement (esp. non-academic) during the pandemic.
>
> (Full-time PhD researcher, Year 4)

> "Because of the delay due to Covid, my priority will be to get back on track with my studies, not looking for placements."
>
> (Full-time PhD researcher, Year 1)

It appears that the work progress of PhD researchers at all stages were affected by the pandemic, pointing to the need for a more flexible PhD structure which enables researchers to take temporary withdrawals to embark on placements during the period when progression is impeded by the pandemic. Such an approach may reduce the stress faced by PhD researchers due to the delays, at the same time enriching the PhD experience through enabling the acquisition of experience and employability skills as part of the curriculum. A participant described the usefulness of placements towards managing pandemic-related delays in PhD progression as such:

> "Taking a placement is really important for me during these difficult times or post Covid-19 as I am facing delays in my research. This can help me face financial hardship, sustain my research enthusiasm and help me proceed toward my future goal."
>
> (Full-time PhD researcher, Year 3)

For some, a lack of progression in the PhD due to Covid-19 restrictions can hinder the pursuit of placement opportunities due to lack of support from supervisors. One researcher elaborated on their attempts to take on placements during the pandemic as such:

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"Found a specific placement opportunity to complete after Covid restrictions have gone but supervisor is not supportive of any "extra-curricular" work due to how delayed my PhD work is. I understand that, but I think it makes sense to do a (paid) placement not only for the experience but also to push back the PhD timeline so that I might still be able to complete some fieldwork. At the moment fieldwork is impossible so I have had to change my project extensively."

(Full-time PhD researcher, Year 2)

Like several other PhD researchers, the above participant considered placements to be useful towards buying additional time for their PhD project, thereby enabling them to get back on track with their research. However, PhD supervisors may consider placements to be an additional distraction from the research, an optional activity that is irrelevant to the PhD. As such, PhD researchers who have experienced project delays due to Covid-19 may be further discouraged by their supervisors from doing placements.

7.2 Impact on businesses

This section will discuss the economic impacts of Covid-19 on businesses, and the extent to which the pandemic influenced willingness to participate in placement delivery.

7.2.1   Differential economic impacts on businesses in the UK

Businesses have been hard hit by the Covid-19 pandemic, with Ball (2020a) forecasting complete economic recovery to be in 2022 or 2023. The slow recovery of businesses from the pandemic is evident in the Office for National Statistics (2020) report which recorded an overall decline in turnover experienced by 45% of businesses trading between 16 to 29 November. The above statistic suggests that almost half of the 8,580 UK businesses which responded to the survey continue to experience negative impacts on their profits a year on from when the pandemic first began, with the outlook remaining gleam with further episodes of lockdowns possible in view of the consistently high infection rates across the country. It appears that not only is the speed of recovery slow, but recovery is rather distant, implying businesses would need to continue drawing on their cash reserves to survive the pandemic.

Under such bleak economic circumstances, it is not surprising that the rates of UK employment have declined significantly, with businesses reporting 15.5% of their workforce still on

furlough between 16-29 November, although the percentage has decreased significantly compared to 29.5% between 1-14 June during the lockdown period (Office for National Statistics, 2020). In LinkedIn's (2020) Workforce Report which derived insights from its 29 million members, a 10.2% decrease in hiring in the UK across all industries was documented in November 2020, compared to the previous year before the pandemic. Unsurprisingly, businesses with the most decline in employment were in the consumer goods, entertainment, recreation and travel, retail and energy and mining industries (LinkedIn, 2020). These industries are most affected by the Covid-19 pandemic which resulted in the imposition of travel restrictions and closure of entertainment, retail and recreation facilities on a global scale. On the contrary, the healthcare and transportation and logistics sectors experienced an increase in hiring since these services were much needed to cope with the pandemic (LinkedIn, 2020). It is evident the pandemic has created new needs which transformed the availability of jobs across different sectors.

The economic impact of Covid-19 on businesses is also influenced by geographical locations. Ball (2020) finds that across the UK, London seems to have taken a more significant hit with decline in footfall. Despite being a strong economy to begin with, Ball (2020) reports recovery in London to be the weakest across the UK, with North West England showing the most positive recovery measured by the number of new job adverts. London's employment market in October 2020 was characterised by job losses of an estimated 200,000, with 170% higher numbers claiming unemployment-related benefits and decreased demands for office spaces in central London compared to the previous year (Ball, 2020). In the South East where postgraduate social science researchers of SeNSS universities are based, even though unemployment (3.9%) and economic inactivity (18.0%) was the lowest in the UK, the rates of increase in the quarter Aug to October 2020 (compared to the previous quarter) was more significant than in the East, South West, Yorkshire and Northern Ireland (Office for National Statistics, 2020). In addition, the South East experienced the third most decrease in the number of filled jobs as compared to other parts of England in the period Sept 2019-Sept 2020 (ibid.). It is evident that the stronger economic position of the South East facilitated a maintenance of its existing workforce, although the number of new job opportunities have declined more significantly compared to other parts of the UK. Covid-19 appears to have shifted the geographical distribution of employment opportunities away from London and the South East, to the North East, East, Yorkshire, East Midlands, and the South West.

The financial impact of the pandemic on businesses in the South East is further evidenced by interviewees, with several adding that even though the South East may be perceived of as being in a better economic position than many other parts of the UK, there are pockets of poverty within the South East that are harder hit by the pandemic. A representative from the South East LEP who conducted extensive research on the impact of Covid-19 on businesses in the South East across the different peak periods reported:

> "up to 1/4 of workforce furloughed at one time, but that really spiked for different sectors, so hospitality and visitor had as many as 70%, and the creative sector […] that was reflected in […] pretty sobering queries coming through where businesses were struggling to survive and looking for what finances were available to them, and there were quite a lot of business grant programmes rolled out through the local authorities. […] Sectors like construction were showing themselves to be quite resilient. […] And digital and IT of course, seeing actually an increased demand, we saw vacancies in that sector being fairly resilient, whereas in others, where we look at vacancies, there were huge drop-offs, our benefits have gone from something like 33 266 people claiming benefits, so it is just really like, something we have not seen before".

The negative impact of the pandemic on the availability of employment opportunities across different sectors in the South East is clear from the above discussion. A representation from Solent LEP described similar impacts on businesses in the Solent area:

> "with significant amounts of people on furlough still, significant amounts of self-employed people who are also getting government support, in Solent economy we talk about marine and maritime, we also have visitor economy and hospitality, and significant portions of our community is very highly vulnerable. So in the initial lockdown, the closing down of the port which is a massive economic wealth creator, and so that sort of slowing down of shipments from across the world. […] the knock-on effect is I think business confidence."

The unevenness of Covid-19's impact across different sectors is further evidenced by our survey of mid to large scale businesses, with a small proportion of respondents reporting (1) reduction in the hours of employees, (2) reducing wages (3) laying off, and (4) furloughing of employees as labour adjustments in response to Covid-19 (see Figure 25). A large proportion

of respondents selected "other" as a response (see Figure 25), adding that they had increased recruitment, not carried out any labour adjustments, and pursued growth in employment despite the pandemic. The differential impacts of the pandemic across different business types is clear.
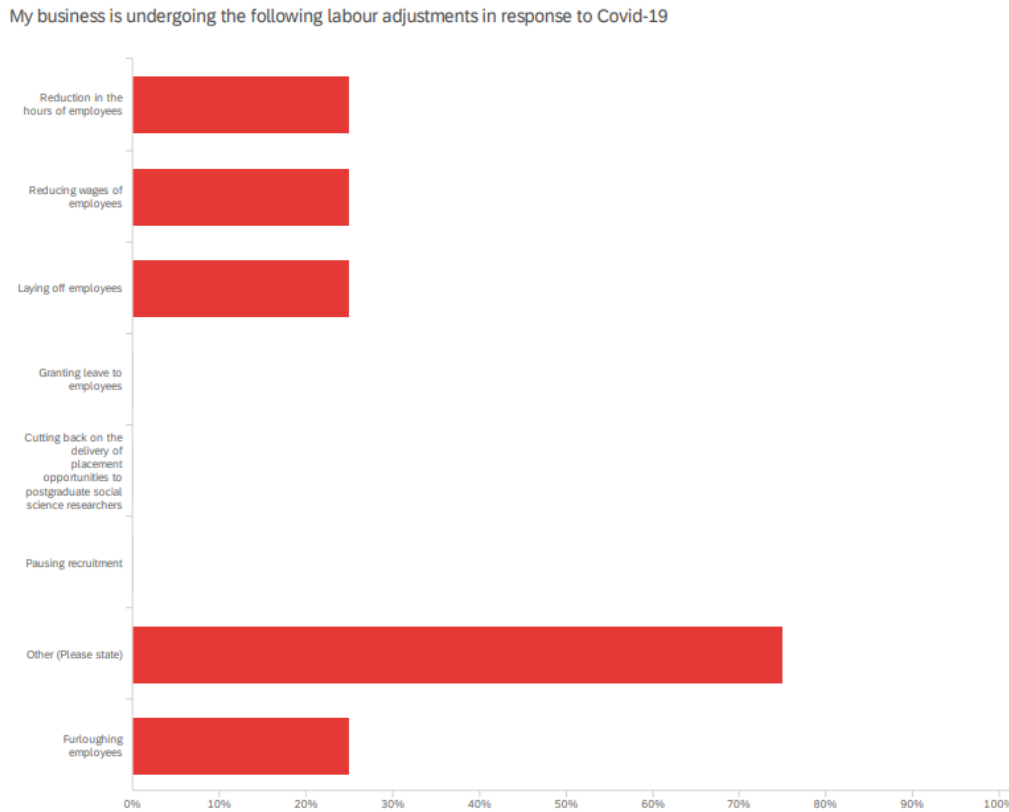
My business is undergoing the following labour adjustments in response to Covid-19

Figure 25: Labour adjustments in response to Covid-19

7.2.2   Impact on placement delivery in South East of UK

Since none of the survey respondents had experience of providing placements to postgraduate social science researchers, the cutting back on placement opportunities was not selected as an option for labour adjustment (see Figure 25). All respondents however did indicate that they are unlikely to include postgraduate social science researchers into their post-Covid-19 recovery plans, indicating that the pandemic had not influenced decisions to deliver placements. Interviewees were uncertain about the impact of the pandemic on placement opportunities for postgraduate social science researchers. A review of the literature revealed that significant declines in graduate recruitment is observed, with other job schemes such as graduate training programmes, internships, placements and apprenticeships also affected, especially in some sectors like the creative arts, retail and services (Ball, 2020a). The above demonstrates that when analysing the landscape of placement opportunities during and post-

Covid-19, it is important to consider shifts in industry needs as a result of Covid-19, with some sectors such as healthcare, transportation or IT having the potential to offer more placement opportunities to postgraduate social science researchers than others. In particular, a representative from SELEP specialising in the digital skills dimension described rapid growth in the digital sector, witnessing "five years of adoption in the space of one", and that digital jobs "sustained themselves very well because we can all do it from home, so I don't think there has been an adverse impact by Covid".

Further studies can examine whether and how

(1) sectors in need of more manpower can leverage on the capacities of postgraduate researchers through placements,

(2) postgraduate researchers can be encouraged to contribute their skills towards post-Covid recovery through placements, and

(3) sectors most negatively impacted by the pandemic can enhance recovery through working with researchers via placements.

Existing literature demonstrates that apart from industry differences, the size of businesses also influences Covid-19's impact on work opportunities, with small-medium enterprises (SMEs) recovering slower than larger businesses (Ball, 2020a). In view of the aforementioned finding that SMEs have lesser resources to identify new opportunities, one needs to recognise that SMEs impacted by Covid-19 may have even less resources to capitalise on the expert knowledge of postgraduate researchers to facilitate recovery through placements. Universities need to be aware of the different needs of SMEs, and invest more efforts into encouraging SMEs to involve postgraduate social science researchers into their post Covid-19 recovery plans through placements. More studies are needed to question the contributions of postgraduate researchers to Covid-19 recovery, and the different resources businesses may require in order to engage researchers more effectively. There is also a need to understand the role of universities in facilitating equal access to the specialist knowledge of postgraduate researchers such that more affected businesses are not further disadvantaged by the lack of resources. More targeted understanding of how businesses in the South East have been affected, and what universities, government and membership organisations can do to encourage sustained participation in placement delivery, would be useful in ensuring inclusive access to opportunities for all businesses.

8.0   Possibilities for virtual placements

This section examines the possibilities for placements to be conducted virtually during and after the Covid-19 pandemic. The ability to go virtual can have benefits for both researchers and businesses, potentially: (1) reducing the disruptions of Covid-19 to researcher development, and (2) enabling businesses to remain competitive through benefiting from the knowledge capital of researchers.

The novelty of virtual placements, however, implies that little is known about the practicalities of such an offering, or whether there may be demand for such opportunities among postgraduate researchers. This study draws on primary findings collected from surveys and interviews, supplemented by secondary findings from the limited literature, to address the above questions. This section will be presented in two parts, the first examining the practicalities of, and demand for, virtual placements among researchers, the second analysing the likelihood of businesses to offer virtual placements.

8.1   Demand for virtual placements among researchers

Virtual placements are yet to be offered extensively to postgraduate researchers. One of the few universities exploring the virtual platform for the delivery of placements is the University of Nottingham, offering either part-time projects of up to 200 hours across a 3-to-6-month period, or 3 month full-time internships. This section will therefore bring new insights to the potential for virtual placements among postgraduate social science researchers, and the most suitable format for such an arrangement.

Despite the enthusiasm for placements, virtual placements were not as well-received among researchers. More than half of the participants indicated they are less likely to consider virtual placements, with only a quarter of the participants being open to doing placement virtually (see Figure 26). Many who reported less likelihood of doing virtual placements considered shorter term opportunities of 2 months or less to be their most ideal (see Figure 27). Most participants however considered medium length virtual placements of either 3 months or 6 months to be most ideal, with participants who are more open to virtual placements being in favour of longer term opportunities lasting 12 months (see Figure 27).

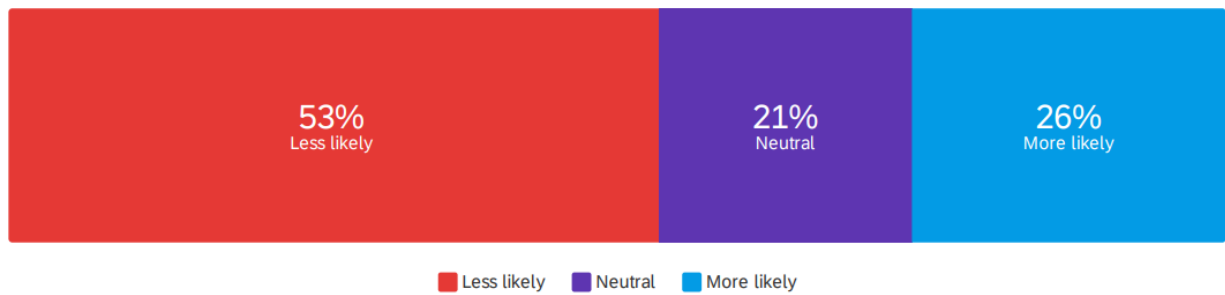How likely are you to consider virtual placements during and post-Covid-19?

Figure 26: Likelihood of considering virtual placements
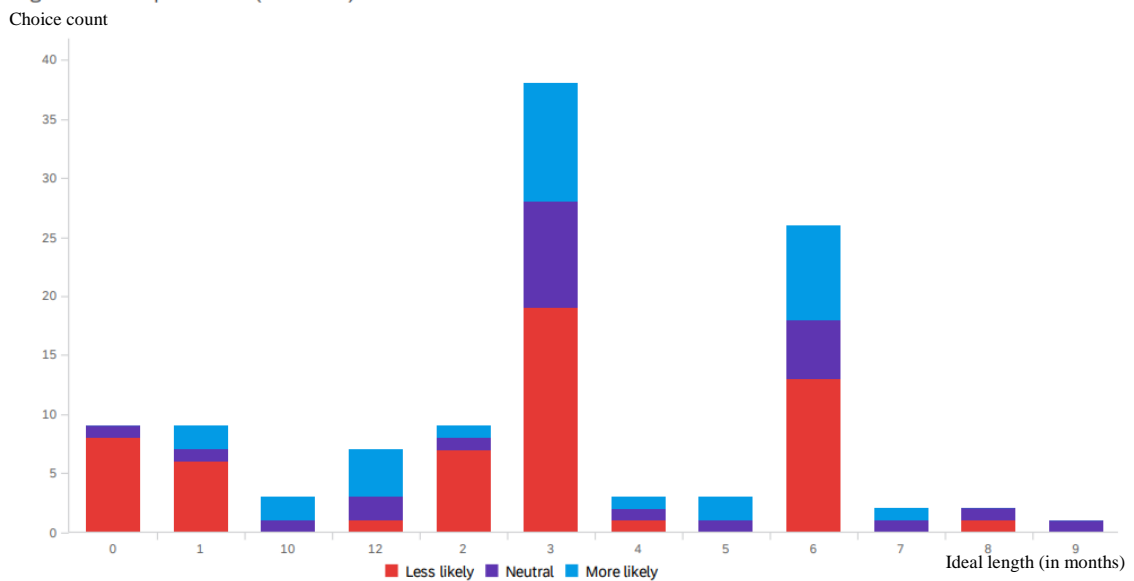

Figure 27: Desired length of virtual placements across likelihood of completing one

Participants were also more open to some aspects of virtual placements than others, with a few stating that they would consider going virtual "if guaranteed something in-person or some form of interaction". Aspects which most participants were comfortable with going virtual included (1) searching for placement opportunities, (2) interviews with potential employers, and (3) weekly meetings with workplace supervisors (see Figure 28). Approximately half of the participants however, value day-to-day presence in the office, as opposed to virtual working (see Figure 28). It appears that researchers consider daily interactions in the workplace to be an important aspect of placements, and the above is not surprising since placements were attractive to researchers as a means of increasing networking opportunities.

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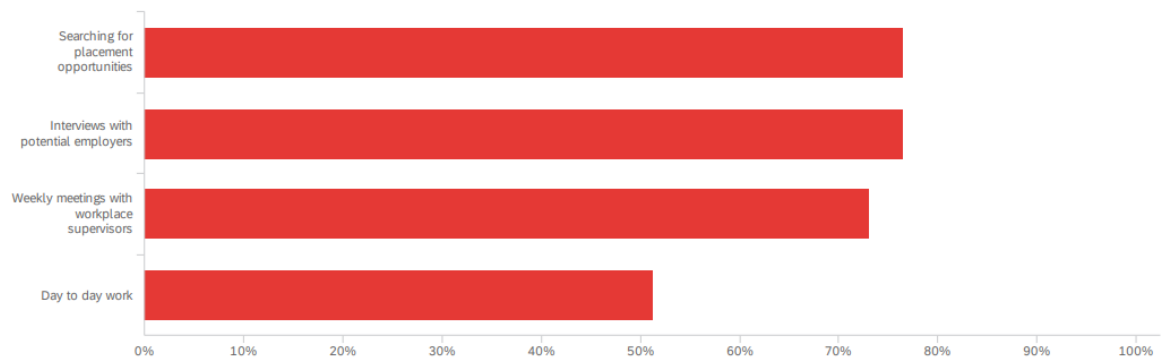I will consider going virtual for the following aspects of placements:

Figure 28: Aspects researchers consider going virtual

Researchers valued some perceived benefits of virtual placements more than others. In particular, broader choice of placement opportunities and more flexibility in work arrangements were two of the perceived benefits most valued by researchers (see Figure 29). Other aspects such as the opportunity to improve technological skills through working from home and the possibility of being able to do placements from one's home country and resolve visa issues were considered to be less important (see Figure 29). Since most researchers are specific about the job scopes of placement opportunities and valued placements as a platform for increasing employability (see sections 5.3 & 5.4), it is unsurprising that a broadening of placement choices through the virtual platform would be most highly valued. There is scope for addressing researchers' lower enthusiasm for virtual placements, through designing placement opportunities to target the specific interests and needs of researchers.

Please rank the following benefits of virtual placements in terms of its importance to you (1 = most important)
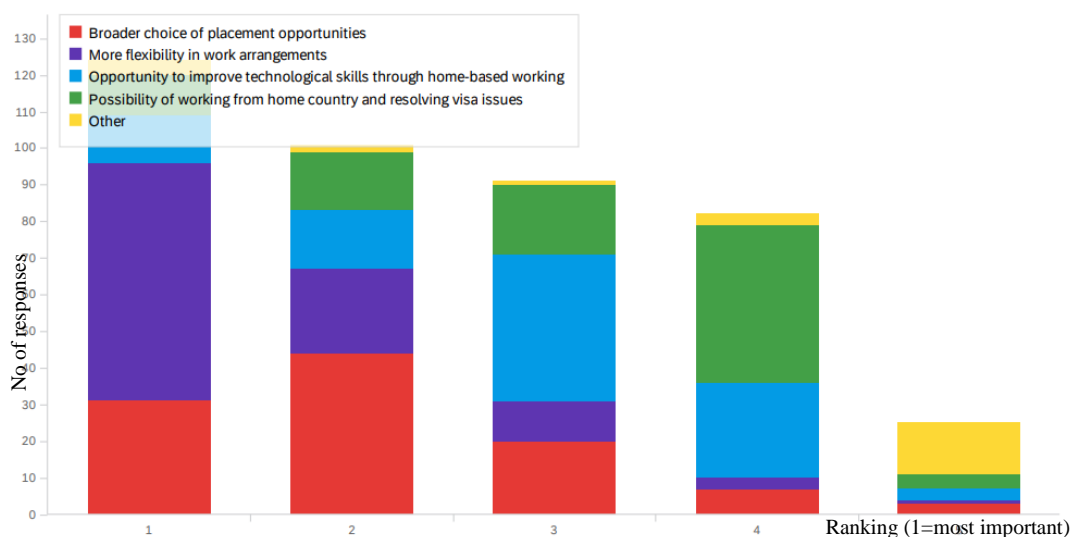

Figure 29: Ranking of perceived benefits of virtual placements

8.2 Virtual working and employer perspective of virtual placements

With the extended impacts of the Covid-19 pandemic on workplace practices, businesses are increasingly finding new ways to maintain their operations, largely by going virtual. Existing reports outlined two key areas in which virtual engagement of employees have been adopted in workplaces, namely e-recruitment and homeworking. This study extends existing findings by questioning the practicalities of using the virtual platform to deliver placements.

Across the recent decade, more and more aspects of graduate recruitment have gone online, evident through the more active use of video-interviewing and virtual reality assessments. Covid-19 stimulated more rapid adoption of the online platform for recruitment, as face-to-face activities such as student engagement through universities, career fairs, talks, workshops and open days were disrupted and terminated, leading businesses to rely on online channels such as company websites, social media marketing and external job boards (Hooley, 2020). Ball (2020a) suggests that online strategies are likely to become more permanent recruitment tools post-pandemic, as businesses increasingly experiment with new ways of using the online platform to attract new talents. Hooley (2020) reported that while businesses were more open to using the virtual space for marketing and initial recruitment, they continued to express reluctance over employing new graduates without face-to-face interactions in the final selection stage. Homeworking on the other hand, was more widely adopted by businesses as an effective

alternative for professional and IT jobs (Ball, 2020a). Ball (2020a) anticipates shifts towards the adoption of homeworking for graduates. This trend towards working from home is also documented by the Office for National Statistics (2020), reporting that in the week ending 6 December, 31% of adults worked from home and 54% combined homeworking with travelling to work. These statistics remained unchanged from the previous week (Office for National Statistics, 2020), suggesting that homeworking has become the new accepted norm.

Employers in our survey expressed similar resistances to conducting placements virtually, with 75% of respondents indicating that they are unlikely to deliver virtual placements and 25% with a neutral response (see Figure 30). Aligning with existing literature, a third of respondents identified online recruitment of appropriate candidates without face to face interviews to be one of the challenges of delivering virtual placements (see Figure 31). Other significant challenges identified by respondents include the initial costs of homeworking such as the provision of training and equipment to placement researchers and information security risks (see Figure 31).

How likely are you to consider delivering virtual placement during and post Covid-19?
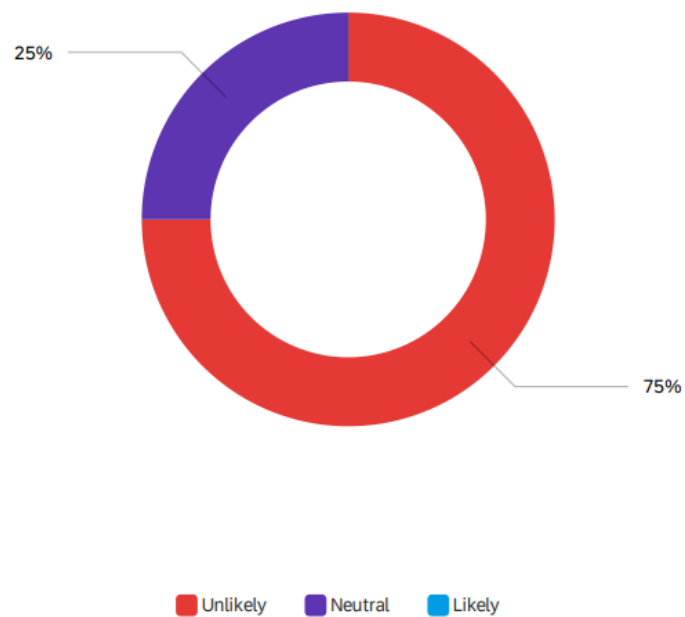

Figure 30: Likelihood of delivering virtual placements

My business is likely to face these challenges when delivering placements virtually:
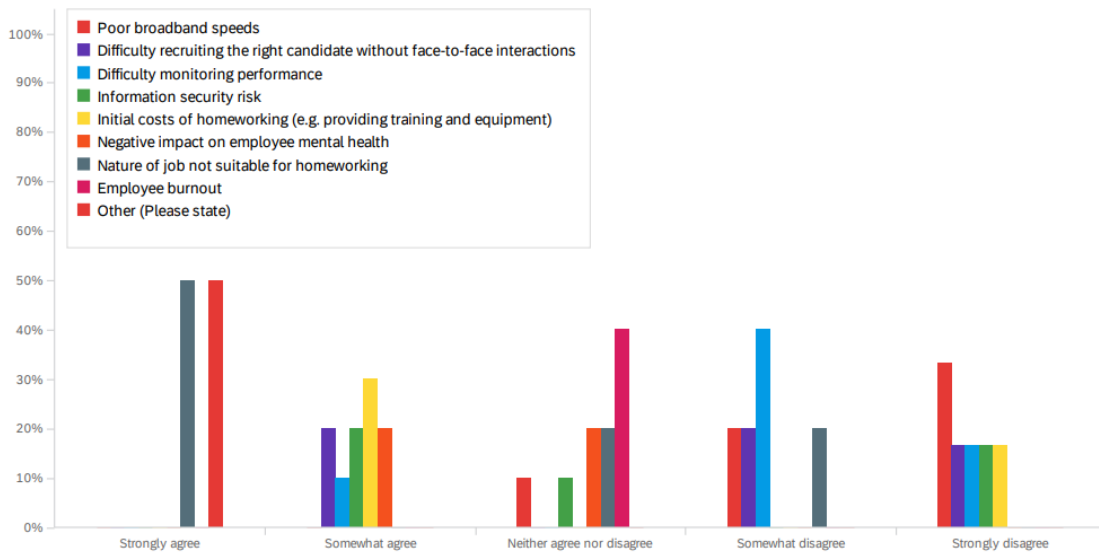
Figure 31: Challenges of delivering placements virtually

Respondents were also more open to delivering some aspects virtually than others, with all respondents indicating that they are willing to consider going virtual for interviews with potential candidates and day to day work (see Figure 32). Drawing from the existing literature, since postgraduate researchers are likely to be in professional services when on placements, it is perhaps not surprising that employers are more open to researchers conducting day to day work from home. Aspects such as the advertising of job roles and weekly meetings with researchers had less uptake for virtual delivery (see Figure 32), suggesting that employers would be more open to a hybrid system of delivering placements.

Which aspects of the placement will you consider delivering virtually?

Figure 32: Aspects of placements to consider delivering virtually

Interviewees were more positive about businesses' receptivity towards virtual placements, albeit suggesting that a hybrid system may be more beneficial both to businesses and researchers. For example, a representative of EM3 LEP added 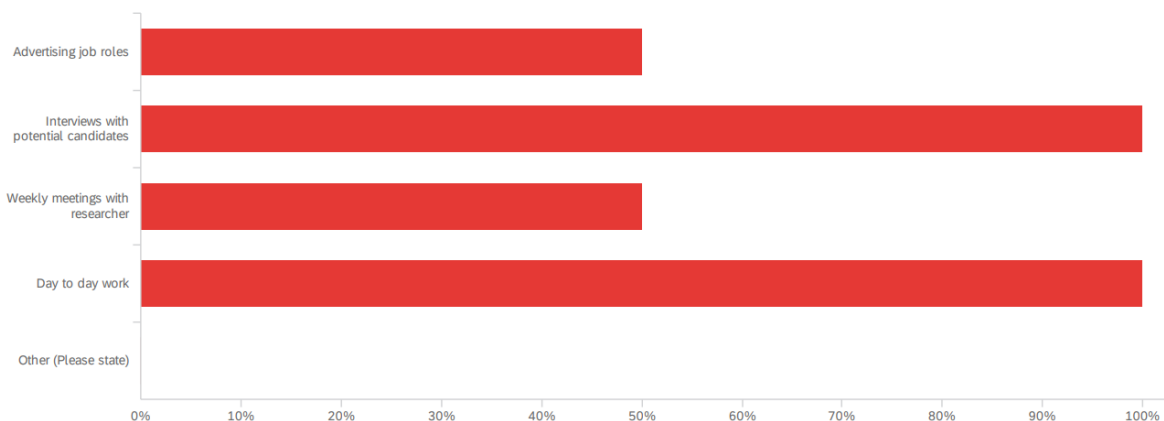that as businesses move towards offering virtual placements and see the benefits of such arrangements, "there is the danger that they will just sort of continue to offer them". The EM3 LEP representative added that even though researchers are "highly qualified individuals" capable of working independently from home, hybrid placements where individuals are

> "welcomed into the office environment" can give "that sense of belonging, even if it is a short placement. […] having that physical connection is really sort of important as well. […] things like office etiquette and you know, just little non-verbal cues and ways of doing things, you don't get that by sitting in your bedroom and working on your computer".

The interviewee forecasts that businesses will eventually shift towards virtual working, and that more placement opportunities will be delivered virtually, highlighting the importance of maintaining some form of physical interaction through a hybrid model. The above sentiment is supported by an interviewee from IoD, giving examples of adjustments in work patterns made by IoD members during the pandemic to justify the benefits of delivering virtual placements as such:

> "Most of our members will be adopting a hybridised employment pattern […] as a permanent feature of British commercial life. […] in terms of on boarding that postgrad PhD, I think that the ability to be able to have that person operating remotely virtually would be seen as a real benefit, as opposed to trying to squeeze them into an office environment where maybe most of the staff aren't in there anyway".

The interviewee from IoD suggests that virtual placements should be perceived as a solution rather than a problem. With many IoD members repurposing and closing down offices when leases expire, the interviewee from IoD added that virtual placements would address the issue of workspace limitations, especially in current times where, "work will not be defined as where you sit, work will be defined as what outputs you deliver". It is evident from the responses of interviewees that a hybrid work model is anticipated and desirable for placement opportunities with postgraduate social science researchers. While survey respondents expressed more

resistance against virtual placements, most identified two key benefits of virtual placements to be (1) providing a broader choice of placement candidates, and (2) increasing flexibility and agility with employees' working arrangements (see Figure 33), both of which are benefits to businesses and researchers. Unlike interviewees, survey respondents did not consider virtual placements to be financially beneficial, perhaps since they had not implemented any workplace adjustments in response to the pandemic, and being bigger businesses, have the capacity to accommodate more staff within the offices.
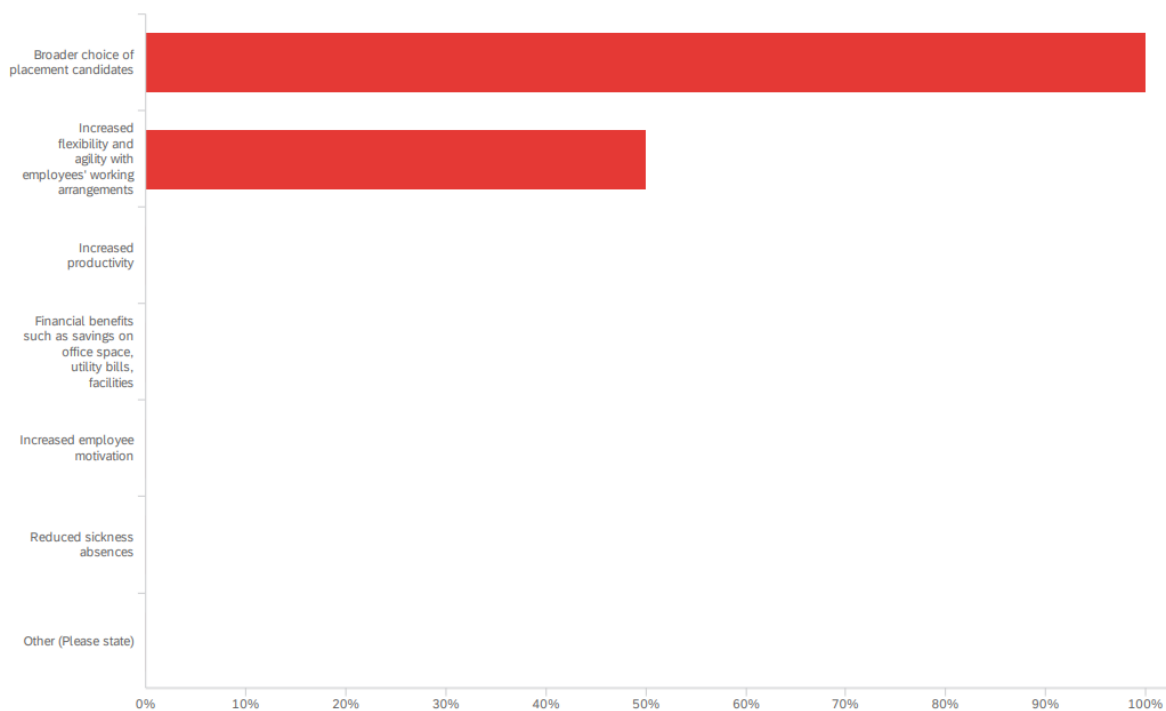

Figure 33: Benefits of virtual placements

9.0   Recommendations

In this section, we present several recommendations to universities, businesses and researchers for the facilitation of placement delivery through university/business collaborations during and post-Covid 19.

9.1 Suggestions for universities

9.1.1 Reposition placements as short consultancy opportunities

The term placements is often associated with work placement programmes undertaken by undergraduates in their PTY year. Unlike undergraduate placements taken on by less experienced students, postgraduate social science researchers looking to do placements have more specialist knowledge and skillsets as well as clearer career goals. Repositioning placements as consultancy can set these opportunities apart from PTY placements, highlighting to researchers the potential for career development through short-term consultancy work. The demand for training to develop consultancy skills is significant among postgraduate social science researchers. A reframing of placements to consultancy can address this demand by creating further opportunities for researchers to practice the skills they have acquired through training. Repositioning placements as consultancy can potentially make the scheme more attractive to businesses. Unlike PTY placements which are 1 year long, postgraduate social science researchers are limited in how much time they can take off from their research to commit to placements, with the shorter commitments making them less attractive to businesses due to the initial costs of on-boarding a placement candidate. A consultancy approach emphasises the targeted, project-based nature of the scheme, enabling businesses to envision how they might benefit from the unique expertise of researchers through short-term, problem-based projects. In adopting a consultancy framework however, care should also be taken to set this apart from staff consultancy, perhaps by modelling consultancy around postgraduate social science researchers and ensuring clarity and outreach of the programme.

9.1.2 Develop a scalable model for postgraduate consultancy programmes

Clarity and outreach may be achieved through the development of a scalable model for postgraduate consultancy programmes. Unlike PTY placements with an established model and structure, existing postgraduate social science placement programmes are much smaller in scale, with no model guiding implementation. This lack of a framework contributed to the vague and often impromptu nature of opportunities which hinders participation among both researchers and businesses. In order to increase outreach, it is necessary for universities to develop a clear and scalable model for implementing consultancy opportunities. This model can potentially adopt a pathways approach, catering to the different needs of researchers depending on their past experience in the industry and their goals for participating in consultancy programmes. The model would also need to highlight the structure of the

consultancy, such as length, professional skills and knowledge that researchers can contribute to businesses and the nature of the project, in order to help businesses understand what they can gain from on-boarding a social science researcher.

9.1.3 Customise consultancy as a stepped approach to model development

The development of a scalable model for consultancy programmes is a longer-term goal that universities may consider working towards. In the shorter term, universities may need to play the middleperson role between researchers and businesses, sourcing for businesses which require the skillsets of postgraduate social science researchers and designing consultancy opportunities which are attractive to researchers and businesses alike. When designing consultancy opportunities, universities need to work with (1) researchers to identify their areas of expertise and career development needs, and (2) businesses to identify business needs and goals. Customising consultancy opportunities to ensure they are the right fit for researchers can benefit businesses in terms of researcher output, and researchers through capacity and career development. Universities can also benefit from the customisation of consultancy opportunities as higher rates of successful delivery can encourage increased participation among researchers and businesses. With increased traction in consultancy schemes, universities can then consider developing a scalable model for more effective delivery of a broader number of opportunities. While customisation of consultancy opportunities can be incredibly time-consuming for universities and require significant human resource, this might be an important step towards awareness raising of consultancy schemes among businesses and researchers, as successful cases can be used to further promote the scheme.

9.1.4 Clearly communicate to researchers and businesses the benefits of placements

Unlike undergraduates, postgraduate social science researchers participate in placements with clear goals to develop their careers. Placements are better received by researchers when they can clearly envision how the scheme will benefit their research and employability. Using the testimonials of researchers who have completed placements, universities can demonstrate how placements contributed to the impact factor and stakeholder engagement of researchers' work. Positioning in terms of impact is not only attractive to researchers, but also to supervisors who are more likely to support the researchers' decision to do placements. While it is important to market placement schemes to researchers, it is important that universities exert care in not inflating the benefits, in order to set the appropriate expectations for employers and enable

them to make well-informed decisions regarding participation. Making clear to researchers what the scheme can offer can potentially increase participation levels since those who perceive more benefits from placements are more likely to complete one.

Apart from researchers, there is also a need for universities to identify and clearly communicate the benefits of delivering placements to businesses. Businesses are often unaware of the difference between PTY and postgraduate researcher placements. Universities need to set out the unique technical and general skills (e.g. research training, data analysis, computational science, writing, etc.) of social science researchers, and help businesses to understand the professional expertise that researchers can contribute to businesses which are beyond the means of undergraduates. Universities also need to map out what the social science field encompasses and how this is applicable to businesses, in order for businesses to gain some clarity over the often misunderstood field due to its breadth and generalisability. Clear communication of anticipated outcomes in a measurable, practical manner can facilitate the decision-making of employers to work with postgraduate social science researchers. Universities need to emphasise the unique selling point of delivering placements to postgraduate social science researchers, as opposed to undergraduates and Masters' level students, to help businesses justify the amount of time and money they might potentially invest into such opportunities. One method of communication may be for universities to document and create case study reports of successfully completed placements with postgraduate social science researchers, to portray to businesses the potential benefits of engagement with researchers. Case study reports can also help other researchers to visualise how they can translate their research into practical terms, to better communicate to businesses the utility of their research and secure a potential placement opportunity.

9.1.5 Provide training workshops and facilitative support to researchers

Unlike PTY placements where universities actively provide undergraduates with facilitative support and development opportunities, postgraduate social science researchers do not receive similar levels of support. There is need for universities to consider catering more support for postgraduate social science researchers to facilitate their participation in placement/consultancy opportunities. Universities can consider providing training workshops to help researchers increase their visibility and outreach to businesses. To establish a researcher/business connection, researchers need to be attractive to businesses. For example,

universities can train researchers on how they can customise their online profiles to reach out to businesses, since this would be rather different from an academic profile. Workshops can also be catered to train researchers on how they can connect with businesses during networking events. Making these training workshops part of the process of securing placements would enable researchers to increase their employability beyond academia, boosting researchers' ability to secure jobs in non-academic environments should they decide such a career path to be suitable after completing placements.

Apart from training workshops, universities can also facilitate the process of securing placements, such as actively scoping out opportunities for researchers rather than relying on researchers to approach them with a proposed placement. Where researchers approached universities to support their proposed placements, it is important that universities streamline administrative processes to make placements more accessible to researchers. Universities can also consider appointing mentors or key point-of-contacts to researchers to assist with putting in place the necessary documentations. To further facilitate researcher/business relationship development, universities also need to consider extending administrative help to orientate businesses on how they can begin to engage with researchers for placements, such as how to connect with researchers who have appropriate skillsets and how to participate in placement schemes.

9.1.6 Develop online and offline platforms to connect researchers with businesses

Universities have a key role to play in creating online platforms and organising offline events to facilitate the networking between employers and researchers. In order to increase the willingness of employers to on-board researchers for consultancy opportunities, employers first need to be connected with researchers, with conversations between both parties enabling businesses to gain greater clarity on how and what researchers can contribute to their businesses. Interactions between businesses and researchers can also promote understanding of the social science field, as businesses have opportunities to connect with researchers from a broad range of disciplines who can demonstrate to them how their research is relevant to the businesses. Online and offline networking platforms also provide an ad-hoc type participation where businesses can explore what researchers can offer without committing to a placement offer. Universities need to work in collaboration with government and membership organisations such as LEPs, CoC, IoD, County Councils, with these organisations playing a supporting role in publicising the online and offline networking platforms to their wide network

of employer base. When designing online platforms, care also needs to be taken to ensure they are user-friendly, fun and interactive, as boring and unstimulating platforms would be unlikely to gain any traction from both researchers and businesses.

9.1.7 Explore adopting more flexibility in PhD programmes

The structure of PhD programmes is one of the determinants of whether researchers participate in placements/consultancy. Whilst not suggesting that placements/consultancy should be made an essential component of PhD programmes, there is room to explore greater flexibility in the structures and timescales of these programmes, to encourage researchers to explore placements/consultancy as part of PhD training. Rather than having fixed timescales and strict progress evaluation procedures, universities may consider creating more space for researchers to engage in placements/consultancy during the course of their PhD. PhD programmes can also be structured to be more responsive to unexpected circumstances such as the pandemic, enabling researchers encountering unforeseen delays or hindrances to their projects more flexibility to take time-off to complete placements/consultancy. Such flexibility would not only reduce the stress placed on researchers to complete their PhD on time, but also transform supervisors' perspectives of placements. Without strict timelines to adhere to, PhD supervisors will be more likely to encourage researchers to participate in placements/consultancy, rather than consider it to be a distraction from the timely completion of the PhD. More flexibility in terms of enabling PhD researchers to take temporary withdrawals to complete placements/consultancy can also relieve the stress of having to juggle placements/consultancy and research in order to complete within the funding period.

9.1.8 Ensure researchers are fairly remunerated for the work they perform

Researchers are at a life stage where they have various financial commitments such as mortgages, family, or are self-funded PhD researchers. Unlike undergraduates, they are less likely to take on placements/consultancy with little or no financial remunerations. In order to encourage participation and ensure fair access to opportunities, it is necessary for universities to ensure that businesses remunerate researchers fairly for their contributions. The provision of a fair pay would also transform researchers' perception of placements/consultancy as unpaid or lowly paid positions, thereby increasing receptivity towards placement/consultancy opportunities.

Above and beyond payment for the work performed, universities have a role to play in ensuring that the logistical needs of researchers are met, in the event that relocation is necessary to complete placements/consultancy. It is key that universities ensure that the accommodation needs of researchers are met, and that businesses are providing adequate financial and logistical support to researchers in their relocation. For placements/consultancy where long commutes to the workplace is necessary, universities may also intervene by negotiating with businesses for alternative work arrangements for researchers, perhaps adopting a hybrid work model where the researcher would not be required to make long travels to work daily.

9.1.9   Increase participation among SMEs, charity and voluntary organisations

Smaller businesses, charities and voluntary organisations benefit significantly from working with postgraduate social science researchers. However, these organisations are less likely to participate in placement/consultancy schemes as broader societal concerns which can influence the competitive advantage of businesses may be perceived as less relevant to organisations at a lower playing field, of a smaller scale and working with limited resources. Universities have a key role to play in demonstrating to SMEs, charity and voluntary organisations how they can benefit from the inputs of researchers through consultancy work. Universities need to consider facilitating the participation of SMEs, charities and voluntary organisations in university-led networking events and placements/consultancy schemes, through sponsorships of financial, time and human resources.

In addition, since universities are recognised by businesses as a hub of academic knowledge, they have a role to play in translating academic knowledge into practice to help businesses, especially SMEs, understand and forecast the future of the business environment. Universities can engage with businesses by organising research conferences targeted at all scales of businesses. In so doing, universities can promote the learning of businesses, while at the same time create opportunities for researchers to demonstrate the industrial relevance of their research, potentially forging new researcher/employer relationships. Universities can potentially partner with mid and large scale businesses to help SMEs understand and forecast the future of the business landscape, pointing out to SMEs where and how researchers can contribute to the long-term developments of their businesses.

9.1.10 Connect with businesses across the UK and internationally to offer consultancy

Researchers demonstrate a significant degree of reluctance to participate in placements virtually. However, broader choices of opportunities afforded by the virtual platform was considered a key strength of virtual placements. If SeNSS DTP universities were to consider delivering consultancy virtually, there is need to work towards creating more diverse work opportunities. Through increasing the range of consultancy opportunities, universities can justify virtual delivery post-Covid, increasing its acceptance among researchers.

9.2 Suggestions for employers

9.2.1 Recognise the contribution of businesses to the successful design and implementation of consultancy schemes

While the onus is on universities to provide the framework and human resources for developing an effective consultancy scheme, businesses need to recognise that their input is key towards the successful design of schemes which meets business needs. Employers need to respond to the attempts of universities to engage them in conversations, so as to help universities understand the business perspective on consultancy. In addition, while it is important for universities to communicate clearly with businesses as highlighted earlier, employers also need to understand that communication is two-way. For effective communications between businesses and universities, businesses need to demonstrate willingness to engage with universities, to adopt an open, inquisitive mind and explore the different initiatives offered by universities. It is only through the willingness of employers to engage with universities, can universities understand the specific needs of businesses and the challenges faced by businesses in offering consultancy opportunities. Through such an understanding, universities are better able to cater more business-oriented opportunities and solutions.

9.2.2 Be specific about researchers' job scope

With universities seeking to achieve clarity on what businesses can expect from consultancy schemes, businesses also need to play their part in being specific about the expected job scopes of researchers within their organisations, and what they can offer researchers in terms of career development and networking opportunities. Communicating with universities to set specific and clear expectations for researchers can be beneficial not only to making the consultancy scheme more attractive to researchers, but also to businesses as they are able to measure and evaluate the outputs of researchers.

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9.2.3 Ensure researchers on virtual placements are well-adapted to the organisation

While universities are largely responsible for the welfare of researchers, businesses need to play a part in ensuring the appropriate on-boarding of researchers, especially where work arrangements are virtual. Researchers beginning their placements virtually expressed feelings of disorientation and distancing from the organisation. Employers need to ensure that they conduct a proper orientation programme to familiarise researchers with the business and points of contact within the organisation. Businesses can also consider assigning researchers a direct mentor to ensure that they are well adapted to the organisation. Unlike employers who are more in favour of homeworking in virtual placements, many researchers were hesitant about doing placements virtually due to the lack of day-to-day interactions within the workplace. Providing researchers with opportunities for direct forms of interactions would make the virtual format of placements more attractive to researchers. Businesses can consider hybrid work arrangements or organising online social events to ensure that researchers are provided with adequate networking opportunities during their placements. Researchers would be more productive in their work when they feel a sense of belonging and accountability towards the organisation, an outcome which is beneficial to businesses.

9.2.4 Develop preparedness for a shift to a hybrid placement delivery model

The Covid-19 pandemic spearheaded a shift towards homeworking, with the hybrid model of working increasingly becoming accepted and adopted among many businesses and researchers. Businesses which have yet to consider adjusting post Covid-19 work practices to meet the emerging needs of employees may need to develop preparedness for potential shifts towards a hybrid working model. Since businesses need to adapt to remain competitive, it is important that businesses are open to, and equipped for the possibility of delivering hybrid placements, in order to attract research talents in academia.

9.3 Suggestions for researchers

9.3.1 Create an online profile to market specialist skills and knowledge

Most researchers who did placements in this study were engaged for their specialist skills and knowledge. In order for businesses to understand the unique contributions that postgraduate researchers can make to their organisations and set them apart from undergraduates, it is first necessary for researchers to establish their value to businesses. By maintaining an online profile to demonstrate their experience and strengths in a manner which is relevant to businesses,

researchers can help businesses to visualise how they can contribute to organisational needs, thus aiding the design and offer of a suitable consultancy. Researchers need to maintain a business profile separate from their academic profile online, setting out both their general skills and technical knowledge in a clear structure that is understandable to employers.

9.3.2   Participate in university-organised networking opportunities with businesses

Researchers need to develop networks both inside and outside of academia, in order to increase their access to consultancy opportunities. Through networking events, researchers gain opportunities to articulate their knowledge and skillsets to employers, and demonstrate to them how their research is relevant to the business. This mutual understanding between researchers and employers can potentially lead to consultancy opportunities, or to a further broadening of the researcher network as employers can connect them to other businesses in the industry who may be interested in the researchers' work. In order for positive outcomes from networking, researchers need to rethink how they can discuss their research in practical as opposed to academic terms, and to refocus their thinking on what the industry needs. Researchers also need to reflect on the more general skillsets they acquired through their research work, and rethink how they can market these skills to employers in a way which sets them apart from undergraduates and Masters' level candidates.

9.3.3   Acquire supervisor support for consultancy work through an impact framing

Supervisors value impact factor and stakeholder engagement as a measure of positive research outcomes. Postgraduate social science researchers can demonstrate to supervisors how consultancy work can influence their research work in these particular aspects, to gain support for participation in consultancy schemes.

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