# UNDERSTANDING THE VALUE OF SECTOR: A VIEW ON SECTOR-BIAS IN RECRUITMENT ACTIVITIES

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## Abstract

Mobility in the labour market, the movement of staff between roles and industries, is needed for a vibrant economy. However, mobility across both the private and public sector appears to be close to its lowest in almost 30 years. There is a propensity to focus on the differences between the sectors within the literature, particularly so in the grey literature. This narrative of difference may have far-reaching implications, and specifically, could impact the perceived suitability of individuals moving from one sector to another. With an alleged 7.4 seconds given to scanning CVs in the recruitment industry (Ladders inc., 2018), keywords, including sector, maybe being used to 'rule out' what could be good hires, highlighting a presence of 'same-as -me' bias. A systematic literature review was conducted to examine research into the perceived differences between public and private sector values, behaviours, and attitudes. The studies included in the review identified several similarities, including on items such as Honesty, Reliability, and Intuitiveness. Differences were also found in items such as Achievement, Competitiveness, and Impartiality. These findings were used to inform the subsequent research stage, which specifically looked at sector bias in the recruitment decision-making process. In an exploratory investigation of sector bias in selection decisions, thirty Recruiters (working in the public and private sector and agency) were asked to rate CVs (either with or without employment history) and complete an Implicit Association Test. The Recruiters were actively working and making recruitment decisions in their daily employment. The findings indicated that the recruiters did not score CVs from their sector significantly higher than those CVs from candidates in other sectors (where they see employment history), although, as expected, CVs with no employment history scored higher than those with employment history. The IAT revealed that the recruiters did show an implicit bias towards their sector; however, there was not enough data to explore the relationships between these two datasets, so we could not understand whether this implicit bias has any relationship with the selection decision. This research contributes to the recruitment and selection literature and our understanding of the impacts on recruitment decisions and ideas about how broadly we may need to think about candidates' demographic details to reduce bias in the recruitment process further. The implications of this work on research and practice are discussed.

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## List of Abbreviations/Acronyms

ANOVA: Analysis of Variance test (statistical test)

BPS: British Psychological Society

CCG: Clinical Commissioning Group (A Health Authority, part of the NHS – see below)

CIPD: Chartered Institute of Personnel Development (HR Professional body, UK)

COVID/COVID-19: Coronavirus disease

CV/CVs: Curriculum Vitae(s) (may also called a resume in other literature)

HR: Human Resources

HRM: Human Resource Management

IAT: Implicit Association Test

iCAT: Name of online library for Kingston Univesity

ICO: Information Commissioner's Office (UK)

OBR: Office of Budget Responsibility (for Great Britain)

OD: Organisational Development

OECD: The Organisation for Economic Co-operation and Development

ONS: Office for National Statistics (in Great Britain)

NHS: National Health Service (Public sector health service of Great Britain)

NPM: New Public Management

SLR: Systematic Literature review

UK: United Kingdom (also known as Great Britain)

US: United States of America

## Part 1. Professional Practice

As a Chartered Occupational Psychologist, I am exempt from the first module (Professional Practice Portfolio) of the Professional Doctorate. This thesis, therefore, satisfies the requirements for Part 2 of the doctorate (Research Thesis). I provide a summary of my professional practice as a context for this thesis.

I completed my chartership programme with the British Psychological Society in 2015, following three years of activity, supervision, and logbook submissions. During that time, I worked for an NHS organisation, Portsmouth City Teaching Primary Care Trust (now replaced by Portsmouth CCG), at which I was able to complete ten pieces of work covering the requirements of the chartership programme. The following are the areas, in brief, covered by my supervised practice.

The demonstrate my professional practice, I submitted seven logbooks and provided a summary of the breadth of work:

I. I developed a Workforce Planning and Development Training Programme, which aimed to cover both workforce planning and the redesign/development of the workforce and delivered across seven sessions to managers. This included theoretical underpinnings of change management and job design and well a leadership and performance management. This was then tied into the organisations' strategy, and participants left the session having gained a practical understanding of workforce transformation via job enrichment and enlargement, skill mixing and performance indicators, and broader strategic financial planning.

II. I led the organisations' Workforce Strategy and subsequent annual plan. I worked with individual services within the organisation to identify and understand the workforce requirements. Advise and consult with service managers on the implications of current performance issues to understand how these could be resolved and their impacts on service delivery and quality outcomes. I also advised on the content and layout of service-specific workforce strategies. This culminated in a Workforce Strategy which gave an overall understanding of the workforce needs and drivers for change (local, regional and national drivers) and a direction for the future (also, to act as a guide for individual service strategies).

III. A review of performance management information being used across the business. I undertook a review of the process as a whole so that the organisation could make this more manageable and ensure that the information and subsequent advice on improving performance were being utilised at a service level, including what actions were required to rectify concerns and where we were seeking to create a devolved culture of responsibility, with managers taken the lead on the performance of their teams.

IV. The creation of a satisfaction and engagement strategy (Employee Relations & Motivations). This work resulted from staff survey trends and informal feedback from staff that both engagement and satisfaction were decreasing. Rather than recreate something or start something potentially 'faddy', the work revolved around linking together ongoing processes and practices and consolidating the elements and forums already in existence for engaging staff. The programme of events met the needs of staff and the organisation, in order to benefit both. This leads very nicely into the fifth instalment of supervised practice, where I focussed on staff wellbeing (deign of environments). This involved drawing on psychological practice to help establish the future provision for employee wellbeing, extending it beyond just the traditional Occupational Health provision, which focused mainly on physical wellbeing and broadens this to look at how the organisation could benefit from a happier 'well' workforce. In addition to this, ensure adherence to the Health and Safety executives management standards for managing stress in the workplace.

V. A focus on Change Management and Performance appraisal within the organisation. The change management piece included the introduction of Lean processes and, for the logbook entry, this revolved around the learning of the organisation's recruitment processes. The aim was to ensure a smoother, quicker process, which ensured the organisation remained attractive, welcoming, and reduced attrition. This included designing and delivering workshops across the business to create sustainable change and ensure that processes were put in place to achieve longer-term benefits. Reviewing and refreshing the Appraisal policy and process was linked to staff survey results indicating problems with the existing process and wanting to understand the blocks to performance appraisal. The outcome was a new, fit for purpose appraisal policy and process for the organisation, which helped raise self-awareness of own competencies and working practices, highlight development opportunities, and provide Motivation, reward (monetary and non-monetary), and progression in return for effort given in employment.

VI. The final entry focused on the organisation and integrated knowledge and practice from across the discipline. This comprised of work around the use and development of the Staff opinion survey, 360-degree appraisal and Coaching for the team and individual development, and Culture Change. These were much more ambitious work programmes, with the first surrounding the need to produce a meaningful picture of staff perceptions, take forward action plans, and encourage staff to generate ideas and own the resulting actions. The challenge was embedding this as part of the business's 'listening strategy' (engagement with staff) and identifying mechanisms and formats for taking results back to staff in a meaningful way. Linked to this, and indeed, an action identified from engagement with the staff was a need to implement 360-degree feedback and coaching for both individuals and teams. I took a regional process and tailored this to the local needs while attaining senior stakeholders' buy-in for this approach to be rolled out within the organisation. The third logbook at level three was about effecting culture change across the business after the business's divestment and working with those left to re-establish what the business was about and how it wanted to operate. This included a relaunch of organisational values, creating a campaign for this and gaining buy-in from staff to become ambassadors for the business.

Since completing my chartership, I have been working in human resources and organisational development roles, both in house and independent consulting.
I progressed to Director of HR and OD positions in the NHS and Further Education in in-house roles. I have diagnosed, designed, implemented, and evaluated various interventions in these roles, including employee development programmes, leadership

development, recruitment campaigns, workforce planning, and People Strategies. As a consultant, I have worked with clients to produce management development programmes, manage change and restructures across the workforce, and design organisational structure.

My professional practice, particularly working on large-scale change management, led me to question practices regarding outsourcing, search activities and the ability to resettle those with experience in one sector into another sector post-change. I have worked on numerous redundancy and restructure programmes in the Public sector, leaving thousands at risk over the years and needing support. The work required to engage them in roles, mostly away from the Public sector, can be challenging for both in house and commissioned teams. Knowing more about what would help, whether behaviours, values, or skills would better support staff transition in these situations, has led me to this professional doctorate.  During the first seven months of the global Covid pandemic, I was back applying my skills in the NHS, setting up a fast-track recruitment bureau to cover the organisations need for extra beds and staff absences. I am now applying my knowledge and skills to the development of psychometric solutions for the workplace.

# Part 2. Systematic Literature Review: An evidence bases for promoting sector switching – Examining the differences between public and private sector workers.


## Abstract

The differences between the public and private sectors appear to be reduced; with changes in governance (UK Corporate Governance Code) and continued effects of austerity (OECD), the UK's civil service is at its smallest since the Second World War. To avoid upturns in unemployment, individuals will need to seek work in various sectors and industries. However, mobility in both the private and public sector are close to their lowest in almost 30 years (Cribb & Sibieta, 2015a). Are the two sectors so different that people just cannot transition? Or are there similarities that could support the movement between the public and private sectors? This systematic literature review aimed to investigate whether the differences or similarities between individuals in the public and private sector are tangible. This builds on Boyne's work in 2002, following several workplace changes since the start of the century, to examine the differences and similarities in values, behaviours and attitudes.

Using a systematic approach, this review identified 5331 studies, of which 12 studies across 11 countries met the inclusion criteria and were narratively synthesised. Overall, there were 19 shared values, behaviours and attitudes and 25 differences. There was overlap for some values, behaviours, and attitudes, whereby one study found differences and one found similarities for the same point (such as Lawfulness and Accountability). This leaves a mixed picture still and several questions for recruitment practices. Results are also discussed in the context of impact on practice and what future research is needed.

## Introduction

Labour market projections suggest that the public sector is shrinking, with the OECD reporting ("Governments at a Glance", 2017) that many countries are showing a sizeable reduction as a result of austerity since the 2008 financial crisis, and as the effect of Brexit negotiations are felt in the UK. In the UK, the Office for Budget Responsibility (OBR, 2015) has reported that the Civil Service is "at its smallest since the Second World War" and that the public sector has experienced an 8% loss in jobs between 2010 and 2015. There are expected to be higher losses of roles within the public sector between now and 2025, with not enough jobs created in other sectors to mop up the excess in employees (CIPD, 2015). If the current projections are realised, there will be a need for thousands of public sector employees to seek employment within the private sector. However, mobility in both the private and public sector are close to their lowest in almost 30 years (Cribb & Sibieta, 2015).

Piatak (2019) found that government employees were 36% more likely to seek roles in other sectors due to layoffs in the US. In the UK, while there has been an increasing movement of staff between the public and private sector (approx. 4.5% of the sector), the move from private to the public sector had been decreasing (only 1.5%; 2010-2013 changes) (Cribb & Sibieta, 2015a).

There are suggestions that fewer people can move into the private sector from the public as they do not have the necessary 'fit' for being more 'commercial' (Stanbridge Hoggarth, 2010, p13; Neville, 2015, p1). This perceived difference has significant implications for unemployment if public sector staff are not supported to cross into other sectors (Crush, 2015; Stanbridge & Hoggarth, 2010; Cribb & Sibieta, 2015a). This paper aims to review the available evidence for answering the question: Do perceived differences between private and public sector employees exist? Moreover, if so, what are the implications of this?

The Institute of Fiscal Studies (2015) reported that public sector workers seem less able to move around to secure work; around 1.7% of net outflows from the public sector are into non-employment per year (although this was as high as 23.2% to non-employment in 2011). A lack of willingness to move between sectors has been identified as a barrier to public-private sector switching. Stanbridge and Hoggarth, 2010, for Hays (p14) reported that only 44% of those asked said they would move from the public to the private sector; this appears, from the Hays survey, to be related to differences in pay, benefits, and conditions. According to an article in the Guardian in 2012, these barriers may also be from the private sector being more 'fast paced' and 'focused around financial performance'. However, it is not clear from this whether the differences between public and private sector reduces movement (do Monte, 2017; Su & Bozeman, 2009; Bozeman & Ponomariov, 2009). Cribb and Sibieta (2015) noted that the movement between sectors was likely to be more comfortable for younger workers and areas where there were no sector-specific occupations, further suggesting limitations in the scale and range of movement across sectors. Others suggest that fewer people can move into the public sector from private as they lack the correct values to fit in and sustain employment. For example, Baldwin (1990) reviewed the differences and aimed to characterise how these impacts cross-sector working. He mainly found that public sector stereotypes of being lazier (more inefficient), less motivated and more incompetent were not supported. These stereotypes may lead to a lack of optimisation of employees and reduce the competitiveness of hiring, especially in the public sector.

Wright (2001) built on these findings and identified that there was little in the way of empirical evidence regarding consistent sector differences in worker characteristics. However, Wright's paper was a narrative review and did not systematically review the available evidence.

However, these differences may represent the private and public sector management practices rather than the individuals themselves. Boyne (2002, p118), in a review of 34 empirical studies, found that while there may be a belief that "management techniques cannot be exported successfully from one sector to another because of differences in organisational environments, goals, structures and managerial values"; the evidence for sharp differences between sectors is limited. This study reviewed the theoretical differences between public and private firms by evaluating 34 studies on differences between the sectors. Boyne's study mainly looked through the lens of New Public Management (NPM), whereby private sector techniques for management and organisation are transferred or 'learnt' by public sector leaders and managers.

Much has changed in terms of climate and the workplace since Boyne's review, which will bring further changes to perceptions of differences or similarities between sectors. For example, the new millennium has bought changes to how staff see the "structure, process and content" of work (Heerwagen, 2016, p1), and there has been a shift in what is the 'standard' working pattern (Personnel Today, 2008[1]). Reviewing data from across the OECD (McOrmond, 2004), the changes to working patterns were most noticeable in those working from home; 14% for men in 2003 than just 8% women working from home in 2003. In 2018, that number had again risen, with the Global Workplace Analytics reporting that regular working from home had grown 173% since 2005[2], with estimates that 56% of employees had a job that at least some of which could be done from home. Added to this scenario, the effects of the global COVID pandemic in 2020/2021, and that number rose again, with the UK Office for National Statistics reporting approximately 46.6% of the workforce working from home by July 2020 (57.2% for London)[3]. The 'standard' work has shifted from a western template of Monday to Friday 8-hour day, emphasising shift and temporary working to create flex in the workforce better to meet changes in demand for goods and services.  The perception of the public sector and its workers as being slower and more bureaucratic may not meet the new 'standards' of what is needed to advance business in the private sector.

Changes to workplaces and developments in practices across the years have led to a broad range of research on differences and similarities between the private and public sectors. There are areas of interest in strategy, processes, knowledge management and management techniques. Where humans respond to stimuli, interact with others and forge relationships, create teams, and approach their work is where this research

[1] Déjà vu: the changing world of work in the past 20 years - Personnel Today
[2] Latest Work-at-Home/Telecommuting/Mobile Work/Remote Work Statistics - Global Workplace Analytics
[3] Coronavirus and homeworking in the UK - Office for National Statistics (ons.gov.uk)

sits. Especially in terms of understanding if things are tangibly different between sectors as far as values, behaviours and attitudes are concerned.

Workplace values, behaviours, and attitudes might be understood as guiding principles related to how employees work, which the Employer defines. These principles help employees understand "how things are done around here" about the workplace. The values and behaviours help establish a tone for an organisation's culture[4], and they identify what the organisation attends to. Cohen (2009) suggests that values play a functional role in organisations as both moderator and predictor for issues such as Commitment and satisfaction and being a determinant of Person-Organisational Fit.

## Values and their Impact of Workplace Values for Practice

The research into values demonstrates that they are fundamental in human behaviour and Motivation, which can affect the effective running of a business. As such, organisations may believe it necessary to recruit staff with aligned values, and a value fit to progress their organisation's mission and goals. This, of course, predicated on the belief that there are differences, particularly across sectors[5].

## Defining Values

It helps reflect on the nature of worker characteristics such as values and why they appear to be of such importance. Schwartz (2012) identified ten culturally universal values. Values are defined as 'trans-situational goals, varying in importance, that serve as guiding principles in the life of a person or group'; they characterise groups, societies and individuals, helping to explain the motivational bases of attitudes and behaviours. Schwartz's theory postulates that while there appear to be ten constant values, these may be expressed as different priorities at the individual level. Values are seen as beliefs, desirable goals and serve as 'standards' (for evaluating people, actions, policies and events); hence they have become an essential part of business as linked to Motivation. Values are described here as being a continuum of related motivations

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[4] Build a Culture That Aligns with People's Values (hbr.org)

[5] Public and private sector HR in 2014: what are the key differences? - Personnel Today; How to successfully move from the public to the private sector | Guardian Careers | The Guardian; Comparing Leadership Challenges: Civil Service vs. Private Sector - Center for Creative Leadership (ccl.org)

that provide structure and holds societies together. Concerning the workplace, it is clear how the priority order of values, as defined in an organisation, focuses on what may motivate employees and what the organisation considers important.  For example, if an organisation focuses on Achievement values, it will focus on ambition, recognition, and capability. In doing so, they provide an environment that may encourage workers to develop and stretch themselves to achieve more on behalf of the organisation (perhaps through meeting targets, achieving growth in sales, etc.). Where an individual coming into that organisation does not prioritise Achievement values, which focus on self-enhancement and perhaps instead prioritises Benevolence values (where there is a more significant concern for the welfare of others over self). There would likely be an issue with 'fit' between employer and employee, which may lead to non-achievement of work targets and a lack of Motivation in the individual as there is conflict in pursuing a value at a different end of the continuum than the individuals' priorities.

The link between values and job satisfaction is well established (Cennamo & Gardner, 2008; Valentine et al., 2011). Specifically, values have been proposed as the mechanism through which job satisfaction leads to business outcomes such as absenteeism, turnover, and teams' cooperation (George & Jones, 1997; Karl & Sutton, 1998). To a lesser or greater extent, these demonstrate the nature of values conflicts (or lack of 'fit') on achieving organisational goals and efficient and productive workers.

Malbašić, Carlos and Potočan (2015) introduced the concept of balanced values, how an organisation can support the achievement of different and potentially conflicting goals, and why this is important in its success. They concluded that the two main conflict areas with values arise between organisational value toward the environment and organisational value toward change. There is conflict in self-versus social orientation values (environmental)and tension between progress and stability (change). They suggest a Mission-based values approach for business would mean clarity from the business about where they position themselves to achieve balance rather than contradiction. Balanced values are presented as logical for effective life and successful outcomes, necessary for individuals and businesses.  This speaks to the need to see organisational values as necessary to support the achievement of organisational goals and mission and impact business operations' longevity. Indeed, it may have implications for employees transferring from public to private sector roles as there would appear to be some evidence toward a difference between those two sectors (Boynes, 2002; Buelens & Van den Broeck, 2007).

## Defining Behaviours and Attitudes

As well as values in the workplace, the workforce's right behaviours and attitudes are necessary to secure specific business outcomes. Attitudes are defined as being the process of thinking and feeling (cognition and affect), as evaluating something important in one's life through this lens (such as job satisfaction) (Saari & Judge, 2004). 'Behaviour' seems to have many definitions, so perhaps, Lazzeri (2014, p78) provides a complete view in suggesting that "behaviour is said in at least four ways: (i) as the occurrence of an organism's action or reaction; (ii) as a class or pattern; (iii) as group behaviour; and (iv) as a change or movement of an object". It can be concluded that workplace behaviours are patterns of individual or group reactions and actions within the workplace.

In terms of attitudes and behaviours that are seen as driving business outcomes, Innovation, or being Innovative, is seen as being a key component for a successful business (Highsmith & Cockburn, 2001; Pisano, 2015) in dealing with economic and social challenges (Bysted & Hansen, 2015). Bysted and Hansen (2015) found little difference between public and private sector workers' innovative behaviour. However, there were differences within the sector, depending on the job functions and tasks; for example, they found that teaching and research showed the most innovative behaviours. Rainey (1999) had previously found little evidence for differences in attitude to innovation between private and public employees.

Organisational citizenship behaviours, discretionary behaviours, the "go the extra mile" type behaviours are also seen as an 'inevitable' factor in deciding the success of an organisation while also providing some competitive edge (Santhosh, 2015, p21). Although Santhosh (2015) also found no differences in the mean scores of citizenship behaviour between private and public employees. Organisational Commitment seemingly encompasses positive attitudinal traits, loyalty and attachment, and increasing organisational and social performance (Zeffane, 1994).

## Public and Private Values, Behaviours and Attitudes

Understanding that values and behaviours in the workplace are critical in achieving organisational goals leads to an understanding that they are essential for many businesses. Both values and behaviours have and will continue to find their way into the recruitment and selection processes of many businesses, including to measure Fit (Ma & Allen, 2009; De Cooman & Pepermans, 2012). If values are to be a component of the recruitment process, as a way to both communicate something about the organisation (De Cooman & Pepermans, 2012) and to assess Fit (Cennamo & Gardner, 2008; Valentine et al., 2011), then it is crucial to understand whether there are differences between sectors. Data from the Institute of Fiscal Studies (Cribb, 2015b) indicates that public sector workers seem less willing to move location to secure work (UK), and in the US government, employees are looking to find roles in other sectors as a result of layoffs (Piatak, 2019). This is happening in the context of 2020 and 2021, where there is a COVID global pandemic. It is vital, then, for those in positions in selection and talent acquisition to understand if differences exist and what that might mean for organisations seeking new employees. If values and fit impact the selection decision (Miles & Sadler-Smith, 2014), those should be well-informed decisions, not based on gutfeel, stereotypes or perceptions that may exist.

### *Implications for Practice*

There is a coming together of sectoral practices, through things such as the UK Corporate Governance Code, which changed in 2018, which will increase the influence of Public Administration practices in the private sector, after decades of New Public Management influencing the practices in the public sector. This will mean that all sectors will require practitioners in human resources and occupational psychology to react to maximise recruitment and selection processes to attract and retain the right staff the first time. Having a vast talent pool to draw from, not restricted by perceptions of difference versus actual differences or similarities, will be an essential factor in recruitment practices. As Hansen (2014) put it, the dynamics of recruitment, selection and attraction are essential in keeping people in work, and this process often encompasses the use of values. The evidence presented so far indicates reduced movement between sectors, with a notion that 'values-fit' may be contributing to this, whereby those in each sector do not seem to possess the correct values for the other sector.

### Rationale for the Present Study

This study uses a systematic approach to understand whether there are tangible differences between the private and public sectors values, behaviours, and attitudes. It is essential to understand this to support practitioners in their ability to support staff in the workplace, whether that is in a recruitment and hiring capacity or supporting staff facing redundancy or change and helping them find their way to their next role (or next business) so that non-employment is not the next step.

This is very much a piece grounded in the desire to support practitioner psychologists working in organisations create and manage programmes of change within the workforce and ensure that the right steps can be put in place to support those coming in from other sectors (whether that is private to public or public to private).

This study aims to answer the questions, do perceived differences between private and public sector employees exist? Moreover, if so, what are the implications of this?

## Method

This review was conducted using a systematic approach outlined by Briner and Denyer (2012) and as described in the Oxford Handbook of Evidence-Based Management. This is an approach applied by Donaldson-Fielder, Lewis and Yarker (2018). The review protocol was registered with Prospero on 20th June 2018.

### Search Strategy

In March 2018, a computerised literature search was conducted of four databases: ABI/INFORM Global, Web of Science, PsychInfo, Business Source Premier (EBSCO), and Business Source Premier. The search parameters were: (Compari* OR similarities OR differences (Ab)) AND (private OR corporate OR commercial (Ab)) AND (public OR civil

OR state OR third sector (Ab)) AND (values OR skills OR competen* OR culture OR Behavio* OR Performance (Ab)). The keyword searches were derived from a strategy group comprising the researchers, psychologists in practitioner roles and experts working in the industry within the recruitment or psychometric field (Appendix A, Mind maps of words from Strategy group).

Only studies published or translated in English since 2002 were sought; this was based on shifts in attitudes and approaches to work and the climate within the workforce following the millennium (McOrmond, 2004; Heerwagen, 2016).
Grey literature and thought or opinion pieces were excluded. A digital dropbox was used to store and manage the studies identified. Duplicate records were removed before the selection process was conducted.

*Table 1: Inclusion and Exclusion Criteria for SLR*

| **Include** | **Exclude** |
|---|---|
| Real workplace data | Student populations, artificial environments |
| Empirical studies | Military studies |
| Comparisons between the private and public sector | Studies from Non-OECD countries *(based on Accenture and ONS highlighting differences in practices and policies regarding workplace between OECD and Non-OECD countries)* |
| Peer-reviewed articles | Grey literature and non-empirical |
| Similarities or Differences are focussed on staff attributes | Process-based, structure-based organisational differences or similarities (i.e., policy, finance, regulatory or governance models) |
| Range of values, behaviours and attitudes measures | Single Studies/case study (where evidence is sought for a particular style of working, rather than a comparison of similarities or differences) |
| Dated after 2002: a critical review of 34 empirical studies (Boyne, Dec 2002) | Any studies pre-2002 |

## Selection of Papers for Inclusion

Papers were selected for inclusion, where they were published in peer-reviewed journals, empirical studies, and published in the English language. A list of 5331 studies was compiled from the four electronic databases cited above. After the 1487 duplicates were removed, this became 3844. Initially, records retrieved from the literature searches were subjected to a broad screening process based on their titles: those titles that suggested the reference was about comparisons between sectors and were based on staff attributes (as opposed to a process, for example) were retained, and abstracts were obtained for the retained records. Seventy-five studies were excluded at this stage when they did not include comparisons related to processes (i.e., financial processes), limited to one sector and within sector comparisons, or the research included military samples. Two independent researchers reviewed the titles, and where there was disagreement over inclusion or exclusion, a third reviewer was consulted. The abstracts obtained were then subjected to a narrow screening process using specific inclusion and exclusion criteria as set out in table 1. Particular attention was paid to removing from this stage any papers that focused on the moderator (e.g., a Union) instead of the subjects themselves. One hundred fifty-two papers were identified at this stage, and full abstracts retrieved.

At this stage, abstracts were subjected to a narrow sift using the inclusion and exclusion criteria, at which stage, 77 further studies were identified as relating to processes within organisations rather than individuals, and these too were removed. During the abstract sift, and further to the search terms above, studies from non-OECD countries were also excluded, on the basis that OECD countries share a common framework within the public sector, such as the Principles of Corporate Governance (2004). More recently, the Recommendation on Public Integrity (2017; Institute of Public Administration Comparing Public Administration report in 2007, an update on the 1998 Recommendation of the OECD Council on improving ethical conduct in the Public Service) has also been released. This led to the removal of 40 papers, including where abstracts revealed the study was not outcome-based. The exclusion criteria of no studies pre 2002 led to a further 13 papers being removed. Unfortunately, two studies in the title sift that could then not be retrieved for the full text sift as they were no longer available from the resources available to the author (either directly or via inter-library loans), and there was no response to the researchers' attempts to contact the authors directly. Where abstracts appeared to meet the full criteria, full papers were sought.

The full text sift was subject also to a narrow sift process using the inclusion and exclusion criteria, including the additional OECD criteria. Ten of the studies included at the title and abstract stage were discarded in the full text sift as they did not include a comparison of the public and private, rather public and third sector only (Lee, 2011; Miller-Stevens, Taylor, & Morris, 2015). Alternatively, they looked at the occurrence of a behaviour rather than differences between individuals (Huma et al., 2017) and did not meet the inclusion criteria. Twelve studies remained following the final sift. The flow diagram in Figure 1 sets out the literature retrieval and selection process.

*Figure 1: Flow diagram of the Systematic Review process*

Step 1: database search applying search terms as detailed in Table 1

| | | | |
|---|---|---|---|
| Potentially relevant studies identified, and abstracts screened<br>ABI/INFORM Global (PROQUEST) = 1879 | Potentially relevant studies identified, and abstracts screened<br>PsychInfo (OVID) = 1296 / 731 filtered for peer reviewed only | Potentially relevant studies identified, and abstracts screened: Web of Science = 485 (for Psychology related publications) | Potentially relevant studies identified, and abstracts screened: Business Source Premier (EBSCO) = 2245 |

Merged databases Total = 5331

Duplicates = 1487

(3844)

Step 2: Sift Titles according to criteria set out in table 2

Literature in Title Sift = 3844

Titles within criteria = 152

Step 3: Abstract sift according to criteria set out in table 2

| | | | |
|---|---|---|---|
| Excluded: Did not meet inclusion criteria; 77 | 1st sift on Abstract = 75 (*incl 17 differences to be checked by JY*) | 2nd sift (to remove non OECD and non-outcome based) = 35 | 3rd sift (to remove any pre-2000 studies – changes in workplace in 21stC) = 22 |

Step 4: Full text sift according to criteria set out in table 2

Full text sift = 12

## Synthesis

A review matrix was created to process data extraction and synthesis. A narrative synthesis was considered most appropriate for this systematic literature review, as multiple questions are being asked across the studies. Because the research question of this study was broad, the search was designed to include studies that may have been defined as values or behaviours. Authors such as Snilstveit, Oliver, and Vojtkova (2012) and Briner and Denyer (2012) have been used to help frame and implement the narrative synthesis to the guidance provided by the author's supervisors. The narrative method also allows a story to develop from work under review and draw together the themes identified, including those ideas and descriptions given in the data's narrative interpretation. The data extracted included information on the study design and purpose, participants, conceptual framework, analytical methods, study findings and significant differences or similarities found in each paper. Each paper was fully reviewed at this stage, and the relevant data extracted into the matrix for synthesis and analysis.

# Results

Twelve empirical studies were reviewed systematically, after reducing this from an initial 3844 (after duplicates removed), using a broad and narrow screening process. The studies within these 12 papers span a ten-year range from 2005 to 2015 and represent various research questions and interests. The 12 papers considered suitable for inclusion in the review were: Becker and Connor (2005); Stackman, Connor and Becker (2006); Lyons, Duxbury and Higgins (2006); Bellou (2007); van der Wal and Huberts (2008); de Graff and van der Wal (2008); Andersen (2010); Taylor (2010); Jelovac, van der Wal and Jelovac (2011); Bysted and Jespersen (2014); Sungu, Ilgan, Parylo and Erdem (2014) and Top, Akdere, and Tarcan (2015).

## Study Characteristics

### *Country of origin*

The 12 studies covered 11 countries in total within the OECD area. The USA (Stackman, Connor & Becker, 2006), Canada (Becker & Connor, 2005; Lyons, Duxbury & Higgins, 2006) and The Netherlands (van der Wal & Huberts, 2008; de Graff & van der Wal, 2008; Jelovac, van der Wal & Jelovac, 2011) were represented in three of the papers, with Turkey (Sungu, Ilgan, Parylo & Erdem, 2014; Top, Akdere & Tarcan, 2015) and Sweden (Andersen, 2010; Bysted & Jespersen, 2014) each represented in two papers, and Slovenia (Jelovac, van der Wal & Jelovac, 2011), Greece (Bellou, 2007), Denmark (Bysted & Jespersen, 2014), Norway (Bysted & Jespersen, 2014), Japan (Becker & Connor, 2005) and Australia (Taylor, 2010) each represented in one paper. Of these 12 studies, three papers made comparisons between countries (Becker & Conner, 2005 – Canada and Japan; Bysted and Jespersen, 2014 – Denmark, Norway & Sweden; Jelovac, Van der Wal & Jelovac, 2011 – Slovenia and The Netherlands; and Stackman, Connor and Becker, 2006 – Canada and USA).

### *Study design and measurement*

Of the 12 studies, 11 were cross-sectional surveys (Becker & Connor, 2005; Stackman, Connor & Becker, 2006; Lyons, Duxbury & Higgins, 2006; Bellou, 2007; van der Wal & Huberts, 2008; Andersen, 2010; Taylor, 2010; Jelovac, van der Wal & Jelovac, 2011; Bysted & Jespersen, 2014; Sungu, Ilgan, Parylo & Erdem, 2014 and Top, Akdere, & Tarcan, 2015), and one was a qualitative study using Interviews (de Graff & van der Wal; 2008).

A range of instruments was used, although all those using a survey had a self-report tool. Two of the studies used the 36 items Rokeach Values Survey (Becker & Connor, 2005 and Stackman, Connor & Becker, 2006), and two used a 7-page self-rate tool for which no title was given (van der Wal & Huberts, 2008 and Jelovac, van der Wal & Jelovac, 2011).

Four of the studies used multiple survey assessments (of varying item length) on their samples: Lyons, Duxbury and Higgins (2006) used both the 44-item Schwartz Value

Survey and the Lyons 31-item Work Values survey. Andersen (2010) measured Leadership style using the 10-item CPE (change, production, employee) instrument, Decision-Making style was measured using the 32-item Keegan type Indicator, and Motivation was measured using the 24-paired-question, Andersen Motivation Profile Indicator. Sungu, Ilgan, Parylo and Erdem (2014) had participants complete a Teacher Satisfaction scale (about self) and a Principals Supervision Behaviour Scale (about their Line Managers). Top, Akdere, and Tarcan (2015) used a combination of 4 tools within the survey they administered: The 29-item Transformational Leadership Inventory (TLI), The 36-item Job Satisfaction Survey (JSS), the 24-item Organisational Commitment Scale (OCS) and the 12-item Organizational Trust Inventory (OTI).

### *Data collection*

Of the 12 studies, 11 were quantitative, and one qualitative. Except for the qualitative research by de Gaff and van der Wal (2008), all other studies in the review used a survey approach. In the work by Andersen (2010), the research also included managers' in situ ratings by subordinates. Two papers used secondary data; that is, they used data that they did not collect directly but had been collected as part of more comprehensive programs or research running in that country/countries. Bysted and Jespersen (2014) used a survey integrated into the European Employee Index, and Taylor (2010) used a sample from the 2005 Australian Survey of Social attitudes. Although not strictly secondary data, one paper included older data gathered in a previous study as a comparator against new data in a new country (Jelovac, van der Wal & Jelovac, 2011).

Of the 11 survey studies, five were administered via the post (van der Wal & Huberts, 2008; Andersen, 2010; Taylor, 2010; Jelovac, van der Wal & Jelovac, 2011 Bysted & Jespersen, 2014). Another three were delivered 'personally' (provided on-site / face to face to the participants). These were: Bellou (2007); Sungu, Ilgan, Parylo and Erdem (2014); Top, Akdere, and Tarcan (2015). For two of the studies (Becker & Connor, 2005 and Lyons, Duxbury & Higgins, 2006), it is unclear how the surveys were distributed. Stackman, Connor and Becker (2006) used a mixed approach to their survey administration, the majority (70.5%) of participants were provided with the survey following attendance at a workshop, and the rest (29.4%) were sent by post. de Graff and van der Wal (2008) conducted face-to-face interviews with their 60 participants, all of which were held on the interviewees' work site and lasted between 45 and 90 minutes, using open-ended standardised questions.

## Participant Characteristics

### *Sample size*

A total of 16 855 participants across the 12 studies; approximately 49% were from one paper by Bysted and Jespersen (2014). Bysted and Jespersen (2014) used a sample from those who were undertaking the European Employee Index; whilst this large sample was randomly selected, they did have to meet the requirements of being 18+ years old and working a minimum of 25 hours per week – meaning they were employed persons.

### *Sector*

The sector breakdown of the total participant pool was 3604 in the public sector, 4634 in the private sector, and 307 were para-public, or Non-Profit, sector staff. Although the sector is a variable within the study, Bysted & Jespersen (2014) do not specify how many of their participants are within each sector or industry, which means we cannot account for the same sector of 8310 participants.  All studies used working-age participants, who were actively employed, which was necessary to enable comparisons between sectors.

### *Occupations*

Four of the quantitative studies expressly referred to using Managers (Becker & Connor, 2005; van der Wal & Huberts, 2008; Jelovac, van der Wal & Jelovac, 2011; Stackman, Connor & Becker, 2006) and one to Senior Officials in Schools (Andersen, 2010). While Lyons, Duxbury and Higgins did not specify the level or type of employee, they highlighted that their sample was 'knowledge workers' from large employers (those with 500+ employees). In Top, Akdere and Tarcan (2015), the participants comprised 14% physicians, 50% nurses, 13% were other healthcare professionals, and 23% were administrative staff.

In Bysted and Jespersen (2014), the type of worker was not established due to the instrument and data collection process's nature. Taylor (2010, p1088) also did not define the workers' level or role in their sample, although we can say that 67% worked full time, 61% worked in a permanent role, and 20% had annual incomes of between $52000 and $77999.

The qualitative study by de Graff and van der Wal (2008, p86) provided information about the level of post holders that the interviewed, 43% Management, 44% 'Staff' and 13% are shown as 'Other'. This also shows that 20 of the 60 interviewees worked in a 'Human Resources' role.

### *Demographics*

In de Graff and van der Wal (2008), 63% of the sample were male and 37% female. Eight other studies (Becker & Connor (2005); Stackman, Connor and Becker (2006); Lyons, Duxbury and Higgins (2006); Bellou (2007); van der Wal and Huberts (2008); Taylor (2010); Sungu, Ilgan, Parylo and Erdem (2014) and Top, Akdere and Tarcan, (2015) reported some gender information, which showed that 55% of these samples were male, and 45% female.  Neither Andersen (2010), Jelovac, van der Wal and Jelovac (2011) or Bysted and Jespersen (2014) reported gender data for their samples.

Age was not reported in all studies, and in those where it was reported, there was no consistency in the manner they reported it. In four studies, there is the average age of participants given, and these were Becker and Connor (2005), who reported an average age of 40 years in their Canadian sample and 45.6 years in their Japanese sample. Stackman, Connor and Becker (2006) reported averages of 37.5 years in their USA sample and 40 years in their Canadian sample; Taylor (2010) found an average age of 50 years; while Top, Akdere and Tarcan (2015) reported an average age of 37 years. In an additional four papers, age was reported as < 45 years, then 46 years and over. Bellou (2007) reported 28.4% of her sample as under age 45 years and 71.5% aged 46 years and above. For van der Wal and Huberts (2008), they reported an average of 19% of their sample being aged below 45 years and 91% being above 46 years of age. With Jelovac, van der Wal and Jelovac (2011), it is found that for their Slovenian sample, 60% were aged below 45 years and 40% aged 46 years and above, whilst in the sample from The Netherlands showed there to be just 19% aged below 45 years and 81% aged 46 years and above. In Jelovac, van der Wal and Jelovac (2011), they reported using data from an earlier study as a comparator. This earlier study is data collected and reported in van der Wal & Huberts (2008).

The final piece of demographic information to note is that some of the papers contained details of their participants' educational attainment. This was only included in three papers, but within those, we can see that for Taylor's (2010) sample, 30% had achieved a Degree or higher; in Top, Akdere and Tarcan (2015), this was 45% achieving a degree of Higher; and in Bellou (2007) it was reported that 54.2% of those in the Public sector cohort had achieved a degree or higher in their education.

## Comparison Characteristics

Of the 12 studies, six referred to their focus as being Values (Becker & Connor, 2005; Lyons, Duxbury & Higgins, 2006; Stackman, Connor & Becker, 2006; de Graff & van der Wal, 2008; van der Wal & Huberts, 2008 and Jelovac, van der Wal & Jelovac, 2011), and five as Behaviours (Bellou, 2007; Andersen, 2010; Bysted & Jespersen, 2014; Sungu, Ilgan, Parylo & Erdem, 2014 and Top, Akdere, & Tarcan, 2015), with one citing Attitudes of participants (Taylor, 2010) being the focus.

There were various values and behaviours reviewed within these studies, with some cross over between studies. For example, Organisational Commitment was included in three of the studies (Lyons, Duxbury & Higgins, 2006; Sungu, Ilgan, Parylo & Erdem, 2014 and Top, Akdere, & Tarcan, 2015), with two of those looking at behaviours considered 'mechanisms', that is processing type behaviours (Bysted & Jespersen, 2014 and Sungu, Ilgan, Parylo & Erdem, 2014). Then decision-making styles were part of two studies (van der Wal & Huberts, 2008 and Andersen, 2010). Leadership style was also included in two studies (Andersen, 2010 and Top, Akdere, & Tarcan, 2015).

*Table 2: Summary of Studies included in SLR*

| Author | Year | Aims | Sample | Country | Study Design | Value | Behaviour | Attitude |
|---|---|---|---|---|---|---|---|---|
| Andersen, JA | 2010 | To find out whether there are behavioural differences between public and private sector managers.<br><br>Additionally, are there differences between groups of public sector managers. | Four samples in total:<br><br>1. 61 senior officials (regional social insurance offices) - 58 responses<br>2. 176 principles and deputy Principles in primary and secondary schools - 123 responses<br>3. 148 Swedish managers rated by 1561 subordinates (in situ) - all responded<br>4. 222 managers in manufacturing and service companies - 158 responses<br><br>487 responses | Sweden | Survey by post for 3 of the four samples (1, 2 and 4) and one administered in -situ (sample 3) at one point in time.<br><br>Three constructs measured via three tools:<br>Leadership Style was measured through the 10-item CPE (change, production, employee).<br>Decision-Making style was measured using the Keegan Type Indicator, containing 32 items, 24 of which are bipolar statements, and of which 8 are statements to be ranked.<br>Motivation was measured through the Andersen Motivation Profile Indicator, a forced-choice instrument of 24 pairs of questions, eight pairs of items for each variable. | | X | |
| Becker, BW & Connor, PE | 2005 | To compare the personal values of private and public sector managers in two cultural contexts. To examine whether private | Canada: 624<br>382 were private sector and 232 public sectors<br><br>Japan: 275<br>101 were private, and 174 were public | Canada and Japan | A survey administered at one point in time in each of the two countries.<br>The survey was translated into Japanese for the Japanese sample.<br>The Rokeach Values Survey measures two types of values - Terminal (18 items) and | X | | |

| Author | Year | Aims | Sample | Country | Study Design | Value | Behaviour | Attitude |
|---|---|---|---|---|---|---|---|---|
| | | and public sector managers' values will become less similar to the role's tenure length. | | | Instrumental (18 items), with a total of 36- items to be ranked. | | | |
| Bellou, V. | 2007 | Identify the organisational obligations that are most valued by employees and potential variations in perceptions regarding the ideal psychological contract between employees in the public and private sector. | 398 public sector and 747 private-sector employees. | Greece | Survey personally administered at one point in time.<br>40 items covering the construct of 'Organisational Obligations' linked to the Psychological Contract (i.e., Honest and open communication with supervisor; life balance and performance feedback) | X | X | |
| Bysted, R. Jespersen, KR. | 2014 | The effectiveness of managerial mechanisms (financial, participative and decentralisation) creates an internal climate | 8310 respondents Participants had to be over 18years of age, working at least 25 hours a week (paid) and not self-employed | Denmark, Norway, and Sweden | Survey (collected 2011 as part of the European Employee Index via Post).<br>All questions were translated in each country survey was administered at one point in time.<br>Constructs include:<br>Innovative work Behaviour (7 | | X | |

| Author | Year | Aims | Sample | Country | Study Design | Value | Behaviour | Attitude |
|---|---|---|---|---|---|---|---|---|
| | | of idea generation and realisation. | | | items);<br>Financial Mechanisms (3-items);<br>Participative Mechanisms (6-items) and,<br>Decentralisation Mechanisms (7-items) | | | |
| de Graff, G & van der Wal, Z | 2008 | Examine “experienced differences in values” between employees in the public and private sector from those who have switched. | 60 interviewees:<br>30 public sector and 30 private sector - all sector switchers<br>Contacted by writing to approx. 100 organisations | Netherlands | Interview with standardised open-ended questions, conducted in the Interviewee’s work setting, face to face.<br>Interviews were between 45-90 minutes in length. | X | | |
| Jelovac, D, van der Wal, Z & Jelovac, A | 2011 | To offer empirical insights into the organisational preferences of public and private sector managers in Slovenia.<br><br>Compare new data from Slovenia to existing findings from the Netherlands. | Slovenia (collected in 2009): 123 from the public sector and 148 from private (plus snowball sampling).<br><br>382 managers from the 2008 study (the Netherlands, collected earlier). | Slovenia and the Netherlands | Survey administered once to each sample, via Post. Survey was translated to Slovenian.<br>7-page self-rated survey; 20 Moral, Instrumental and Core Values were rated from 1 (not important) to 10 (very important). | X | | |

| Author | Year | Aims | Sample | Country | Study Design | Value | Behaviour | Attitude |
|---|---|---|---|---|---|---|---|---|
| Lyons, ST, Duxbury, LE & Higgins, CA | 2006 | Investigate differences in values, general values, and organisational Commitment in public, para-public (i.e., charity) and private sector knowledge workers. | 549 knowledge workers from large employers (+500 staff):<br><br>230 Public Sector<br>121 Private sector<br>198 Para Public sector | Canada | Survey administered at one point in time.<br>Total of 75 Items covering including:<br>Schwartz General Values - 44 items<br>Lyons Work Values - 31 | X | | |
| Stackman, RW. Connor, PE & Becker, BW | 2006 | To examine managers' personal values systems in each sector, public and private, and draw inferences regarding each sectoral ethos. | 260 managers from two sources: Alumni of a graduate management programme (western US) and participants in various university-sponsored management workshops (Canada).<br><br>451 Private<br>261 Public | USA and Canada | Survey, administered at one point in time, via Post.<br><br>The Rokeach Value Survey (form D) was used for measuring two types of values - Terminal (18 items) and Instrumental (18 items), a total of 36 items to be ranked. | X | | |
| Sungu, H. Ilgan, A. Parylo, o & Erdem, M. | 2014 | To further the understanding of how teachers assess their principles instructional supervision behaviours and their job | 984 responses returned from 110 schools across five provinces, both primary and secondary age schools.<br><br>741 Public schools<br>241 Private schools | Turkey | Survey personally administered, at one-time point, between January and February 2013.<br><br>Constructs include satisfaction and supervisory behaviours. Measured by the 14-item Teacher Job Satisfaction Scale (TJSS) and the 23-item Principals | X | X | |

| Author | Year | Aims | Sample | Country | Study Design | Value | Behaviour | Attitude |
|---|---|---|---|---|---|---|---|---|
| | | satisfaction levels. | | | Instructional Supervision Behaviours Scale (PISBS). | | | |
| Taylor, J | 2010 | Compares public service motivation, civic attitudes and actions of public, non-profit and private sector employees. | 109 non-profit employees, 553 public sector and 1569 private sector. | Australia | Survey; administered at one point in time (part of the Australian Survey of Social Attitudes in 2005) via Post. Total of 19 items covering five constructs:<br>Public Service Motivation – 5 items<br>Confidence in Public Institutes – 6 items<br>Citizen rights – 5 items<br>Non-electoral activities – 8 items<br>Prosocial Acts – 1 item | X | X | |
| Top, M; Akdere, M & Tarcan, M | 2015 | To investigate public servants and private employees' perceptions of transformational leadership, org Commitment, and job satisfaction behaviours. | 804 total:<br><br>459 employed as Public Servants<br>345 Private employees (via outsourced contracts) | Turkey | Survey administered at one point in time, distributed to staff on their worksite.<br><br>Four constructs were measured through 4 tools:<br>The 29-item Transformational Leadership Inventory (TLI),<br>The 36-item Job Satisfaction Survey (JSS),<br>The 24-item Organisational Commitment Scale (OCS) and, | X | X | |

| Author | Year | Aims | Sample | Country | Study Design | Value | Behaviour | Attitude |
|---|---|---|---|---|---|---|---|---|
| | | | | | The 12-item Organizational Trust Inventory (OTI). | | | |
| van der Wal, Z & Huberts, L | 2008 | To study organisational values preference - which organisational values most important in decision making. | 382 Managers:<br>231 government managers<br>151 Business managers<br><br>Sample retrieved with the help of professional bodies (Professional associations Senior Public Sector – ABD; and Dutch centre of Executive and non-Executive directors – NCD) | Netherlands | Survey administered at one point in time via Post.<br>7-page self-rated survey; 20 Moral, Instrumental and Core Values were rated from 1 (not important) to 10 (very important). | X | | |

### *Measurement of similarity and difference*

Of the 12 studies, only two shared a measure, the Rokeach Values Survey (RVS, 1973), which described two types of values - Terminal (18 items) and Instrumental (18 items) (Becker & Connor, 2005 and Stackman, Connor, & Becker, 2006), and this is because they are linked studies of the two principal authors with the 2006 study drawing on the findings from the 2005 study. There appears to be little commonality of theoretical frameworks to shape the investigations, despite a number of these studies describing in the background sections, the impact of Public Service Motivation (PSM; Perry & Wise, 1990) theory and New Public Management (NPM, Gruening, 2001) as a paradigm for understanding sectoral changes.

## Similarities and Differences in Values

Of the 12 studies, nine include a reference to 'Values' as the basis of comparisons, six 'Behaviours' and one 'Attitudes'. There was much cross over in terminology. For example, van der Wal and Huberts (2008, p268) describe "Innovativeness" as a value, whereas "Innovative" is described as a work behaviour by Bysted and Jespersen (2014). It may be that over time this concept and what it means in the workplace has changed, or it may be that authors, and the tools they select, are using these interchangeably based on the context in which they use them. Van der Wal and Huberts (2008, p271) designed their measure for the study based on a "content analysis of relevant literature", what is not clear is whether this was defined as either value and behaviour in the literature they referred to. Bysted and Jespersen (2014) used the European Employee Index as the basis for their data set, and again, this does not give a clear enough definition of the differences between behaviour and value, and therefore values and behaviours are presented together in Table 3.

*Table 3: Overview of Similarities and Differences across studies*

Key

| | |
|---|---|
| ✓ | Similarities |
| X | Differences |

| **Theme** | **Monetary** | **Support** | **Purpose** | **Security** | **Honesty** | **Responsibility** | **Commitment** | **Ambition** | **Self** | **Power** | **PSM** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Study / Items** | *Financial Perf / Salary / Reward / Profitability* | *Peer / Manager* | *Meaningful work / Interesting work* | *Job / Family / Personal* | *Honesty / Lawfulness / Citizens' Rights / Impartiality* | *Responsibility / Reliability / Accountability* | *Satisfaction / Commitment / Dedication* | *Ambition / Advancement / Efficiency / Prestigious work* | *Wisdom / Self-respect / Competence / Intuitive / Imaginative* | *Power* | *Public Service Management* |
| Taylor, 2010 | | | | | ✓ | | | | | | X |
| Lyons, Duxbury & Higgins, 2006 | | | X | ✓ | | | | X | | | |
| Becker & Connor, 2005 | | | | | ✓ | ✓ | | X | ✓ X | | |
| Bysted & Jesperson, 2014 | X | | | | | | | | X | | |
| Bellou, 2007 | | ✓ | ✓ | X | | | | | | | |
| van der Wal & Hubert's, 2008 | X | | | | ✓ | ✓ | ✓ | X | X | | |
| de Graff & van der Wal, 2008 | X | | | | X | X | | | | | |
| Jelovac, van der Wal, & Jelovac, 2011 | X | | | | ✓ | X | | X | | | |
| Andersen, 2010 | | | | | | | | | ✓ | X | |
| Top, Akdere & Tarcan, 2015 | | ✓ | | | | | ✓ | | | | |
| Sungu, Ilgan, Parylo & Erdem, 2014 | | ✓ | | | | | ✓ | | | | |
| Stackman, Connor & Becker, 2006 | | | | X | | | | | | | |

### *Review of differences and similarities between sectors*

The review aimed to discover if there were perceived differences between the public and private sectors, and what if any, are its implications. As such, the data were synthesised to compare values, behaviours, and attitudes across all studies. Table 4 gives an overview of these differences and similarities, and where appropriate are shown in ranked order of importance to those asked:

*Table 4: Similarities and Differences between Values, Behaviours and Attitudes across papers*

| Study | Focus of Study | Values | Behaviours | Attitudes | Differences: Public Sector | Differences: Private Sector | Similarities |
|---|---|---|---|---|---|---|---|
| Andersen, 2010, pp135-137 | To find out whether there are behavioural differences between public and private sector managers.<br><br>Additionally, are there differences between groups of public sector managers. | ✔ | | | Change-Style (leadership); t = 3.66, p<.01<br><br>Achievement motivation: t = 2.33; p<.01<br><br>Intuition decision making; t = 3.03, p=<.01 | Relationship-Style (leadership); t = -10.08, p<.01<br><br>Power motivation; t = -2.59, p=<.05<br><br>Sensing decision making *(though Intuition has a higher Mean) :* t = -2.26, p=<.05 | Both Public and Private managers utilise Intuition as a decision-making style (m = 49.68 public, m= 46.43 private). |
| Becker & Connor, 2005, p112 | To compare the personal values of private and public sector managers in two cultural contexts. To examine whether private and public sector managers' | ✔ | | | **Older (42yrs+) Japanese managers: p<.05**<br>***Terminal values:***<br>Equality (p<.05)<br><br>***Instrumental values:***<br>Polite (p<.05); Self-controlled (p<.01) | **Older (42yrs+) Japanese managers: p<.05**<br>***Terminal values:***<br>Self-respect (p<.05); Wisdom (p<.01)<br>***Instrumental values***:<br>Ambitious (p<.05)<br>Imaginative (p<.05) | **Japanese Sample:**<br>Instrumental Values: Responsible ranked 1 in both sectors (older managers)<br>Honest ranked 2 for Public, 3 for the private sector (older managers)<br>Obedient ranked 18 in both sectors and age groups |

| Study | Focus of Study | Values | Behaviours | Attitudes | Differences: Public Sector | Differences: Private Sector | Similarities |
|---|---|---|---|---|---|---|---|
| | values will become less similar to the role's tenure length. | | | | **Younger (41 and below) Japanese Managers:** Terminal value: Family security (p<.01) | | **Canadian Sample**: Rank correlations appear quite similar for values of younger managers in public and private sectors (Terminal values r=.91; Instrumental values r=.90) and Older managers in public and private sectors (Terminal values r=.90; Instrumental values r=.90). |
| Bellou, 2007, p613 | Identify the organisational obligations that are most valued by employees and potential variations in perceptions regarding the ideal psychological contract between employees in the public and private sector. | ✔ | ✔ | | Fair supervision (F = 5.834, p<.016)<br><br>Enough resources to do the job (F = 11.360, p<.001)<br>Involvement with decisions affecting self (F = 4.487, p<.034)<br>Constant informing on corporate issues (F = 4.125, p<.042) | Flexible Work Schedule (F = 4.016, p<.044)<br><br>Rewards for increased performance (F = 14.545, p<.001) | **Similarities in (rank order) of 'Organisational Obligations':**<br>Timely payment of wages (1)<br><br>Healthy working environment (2)<br><br>Safe working environment (4)<br><br>Non-Stressful working (9)<br>Interesting Job (15) |

| Study | Focus of Study | Values | Behaviours | Attitudes | Differences<br>Public Sector | <br>Private Sector | Similarities |
|---|---|---|---|---|---|---|---|
| Bysted & Jespersen, 2014, pp228-234 | The effectiveness of managerial mechanisms (financial, participative and decentralisation) creates an internal climate of idea generation and realisation. | | ✔ | | Work performance and reward lower (u = 37.95)<br><br>Idea realization higher (B = .02)<br><br>Higher levels of educational achievement (F (1,8211) = 255.99)<br>Innovative behaviour motivated more by managers ability to act<br>Ability to act (self) lower (u = 66.9314)<br>competence development - innovative work behaviour = 33% lower on creativity and 57% lower on realisation | Work performance and reward connection higher than in public (u = 48.65)<br><br>Ability to act (self) higher (u = 68.1804) | Level of Idea Generation<br><br>Innovation trust not moderated by sector context |
| De Graaf & van der Wal, 2008, pp88-97 | Examine “experienced differences in values” between employees in the public and private sector, from those who have switched, via interviews | ✔ | | | "top-down" management<br><br>Conflicts between personal and organisational values often seen as POLITICAL<br>Rules and explicit norms play large role | Competitiveness<br><br>“Businesslike” contact with management<br><br>Conflicts between personal and organisational values | Job characteristics outweigh sector in determining whether employees perceive their activities result in a contribution to society |

| Study | Focus of Study | Values | Behaviours | Attitudes | Differences: Public Sector | Differences: Private Sector | Similarities |
|---|---|---|---|---|---|---|---|
| | | | | | ("lawfulness", "accountability", "legitimacy", responsiveness") Goal complexity and ambiguity | often seen as pressure to perform financially | |
| Jelovac, van der Wal & Jelovac, 2011, pp134-135 | To offer empirical insights into the organisational preferences of public and private sector managers in Slovenia. Compare new data from Slovenia to existing findings from the Netherlands. | ✔ | | | Incorruptibility (p = 0.000) Impartiality (p = 0.002) Transparency (p = 0.006) | Profitability (p = 0.000) Obedience (p = 0.001) Reliability (p = 0.022) | Honesty (ranked one private and two public – Slovenia, one private and three public – Netherlands) Lawfulness (3 public, four private – Slovenia; 5 public, eight private – the Netherlands) |
| Lyons, Duxbury & Higgins, 2006, pp611-615 | Investigate differences in values, general values and organisational Commitment in public, para-public (i.e., charity) and private sector | ✔ | | | **Public:** Working on tasks that challenge your abilities (intrinsic values) p = <.02 Doing work that is intellectually stimulating (intrinsic values) p = <.02 | Opportunity for advancement in your career (prestige values) p = <.001 Work that is prestigious (prestige values) p <.02 | No significant differences in General Values (p = <.06) No Significant differences in Social work values (p = <.35) |

| Study | Focus of Study | Values | Behaviours | Attitudes | Differences<br>Public Sector | <br>Private Sector | Similarities |
|---|---|---|---|---|---|---|---|
| | knowledge workers. | | | | **Para-public:**<br>Work that makes a difference (Altruistic values) p = <.001 | | |
| Sungu, Iglan, Parylo & Erdem, 2014 | To examine managers' personal values systems in each sector, public and private, and draw inferences regarding each sectoral ethos. | ✔ | | | | Instructional supervision behaviours displayed more often (p = <.05)<br>Job Satisfaction higher (p = <.05)<br>A positive relationship between supervision behaviours and job satisfaction (p = <.01) | None |
| Stackman, Connor & Becker, 2006, pp586-591 | To further the understanding of how teachers assess their principles instructional supervision behaviours and their job satisfaction levels. | ✔ | ✔ | | Preference for Delayed Gratification (p= <.01 female; p = <.05 males)<br>Competence preferred over Conscience (p = <.05) | Preference for Competence (p = <.0.5)<br>Family Security (p= <.01 male; p = <.05 female)<br>Self-direct (the US, Males, p =<.05) | |
| Taylor, 2010, p1090 | Compares public service motivation, civic attitudes, public, non-profit, and private sector | ✔ | | ✔ | **PSM: Scale level - Non-Profit sector (p = <.001)**<br>Item level:<br>Help people worse off than self in Australia (p = <.05); in world (p = <.001) - Public | | **Importance of citizen's rights (scale level)** |

| Study | Focus of Study | Values | Behaviours | Attitudes | Differences: Public Sector | Differences: Private Sector | Similarities |
|---|---|---|---|---|---|---|---|
| | employees' actions. | | | | Confidence in Key Institutions (p = <.05)<br><br>**Importance of Citizens rights Item level:**<br>Item: 'Public Service' (p = <.001) - Public sector<br>**Engagement in non-political activity:**<br>Scale level Non-Profit (p = <.001)<br>**Prosocial Acts: Scale level (1 item) - Public sector (p = <.01)** | | |
| Top, Akdere & Tarcan, 2015, pp1267 - 1268 | To investigate public servants and private employees' perceptions of transformational leadership, org Commitment, and job satisfaction behaviours. | ✔ | ✔ | | | **Job Satisfaction Scale (JSS):**<br>Item level:<br>Communication (p = <.047)<br>Pay (p = <.034)<br><br>**Transformational leadership (TLI): Scale Level (p = <.0.36)**<br>Item level:<br>Provide an Appropriate model (p = <.018) | No significant difference in **Organisational Commitment Scale (OCS)**: m=3.15 public, m= 3.31 private<br>No significant difference in **Organisational Trust (OTI)**:<br>m=3.15 public, m = 3.31 private |

| Study | Focus of Study | Values | Behaviours | Attitudes | Differences | | Similarities |
|---|---|---|---|---|---|---|---|
| | | | | | Public Sector | Private Sector | |
| | | | | | | Provide individualized support (p = <.032) | **Job Satisfaction Scale (JSS):**<br>Operating procedures (m=3.48 public, m =3.49 private)<br>Co-workers (m=3.36 public, m = 3.37 private) |
| Van der Wal & Huberts, 2008, p272 | To study organisational values preference - which organisational values most important in decision making. | ✔ | | | **General Values:**<br>Accountability (p = <.001)<br>Impartiality (p = <.001)<br>incorruptibility (p = <.001)<br>Lawfulness (p = <.01)<br>Obedience (p = <.01)<br>Serviceability (p = <.01)<br>Social Justice (p = <.05)<br>Transparency (p = <.05) | **General Values:**<br>Efficiency (p = <.0.01)<br>Innovativeness (p = <.001)<br>Profitability (P = <.001) | **General Values:**<br>Collegiality (m= 7 public; 7.1 private)<br>Dedication (m = 7.6 public and private)<br>Honesty (m= 8.3 public; 8.2 private)<br>Reliability (m = 8.1 public; 8.2 private)<br>Self-fulfilment (m = 6.3 public; 6.4 private) |

### *Differences*

The results from across all studies show several differences between public and private sectors. Looking at specific differences, “Security” was presented as an item on several the tools across the 11 quantitative studies, of which there were mixed responses. Becker and Conner (2005) found that younger public sector managers value Family Security as significantly higher than private sectors, yet a year later, Stackman, Connor and Becker (2006) found that this was significantly higher in the private sector. Bellou (2007) had found that Job Security was more prominent in public sector respondents, yet at a ranking level, this was only a two-place difference (third and fifth for private). Bellou (2007, p615) describes their differences as being "in accordance with sector characteristics" whereas Becker and Connor (2005, p112) found that there was a "general managerial value orientation" overall with there being "degrees of difference" and values becoming "less similar with length of tenure".

There were consistent differences across both sectors as shown by Sungu, Iglan, Parylo and Erdem (2014) and Top, Akdere and Tarcan (2015) for instance where job satisfaction was higher in the private sectors; Becker and Connor (2005, p112) and Lyons, Duxbury and Higgins (2006, p612) similarly found "Ambitious" and "advancement (career)" to be significantly higher in the private sector. Van der Wal and Huberts (2008, p273) and later Jelovac, van der Wal and Jelovac (2011, p135) found "Impartiality" to be significantly more critical to the Public sector.

The variety in differences reported across sectors, and the variety of measures used in each of the studies, produces results that are hard to synthesise as being of a 'public sector orientation' and 'private sector orientation'. Therefore, this is perhaps best summed up by Becker and Connor's (2005, p112) finding of a "general managerial value orientation" that crosses sectors, rather than there being distinctly things which are public sector or distinctly private sector. As an example of this variety, Jelovac, van der Wal & Jelovac (2001) show Obedience as being significantly higher in the business sector ($p = <.001$), yet van der Wal and Huberts (2008) found Obedience to be significantly more important to the public sector ($p = <.01$).

Where Lyons, Duxbury and Higgins (2006) and Taylor (2010) used para-public sector and non-profit comparisons, the rest of the studies did use managerial samples or "knowledge workers" (Lyons, Duxbury & Higgins, 2006, p610) and those with “significant” managerial responsibilities (Principals and deputy principals; Andersen, 2010, p134; Sungu, Iglan, Parylo & Erdem, 2014, p104) as part of their roles, allowing for comparisons between these studies despite the variety of tools used to measure values, behaviours or attitudes. The noticeable exception to this was Top, Akdere and Tarcan (2015), for whom 77% of the sample across two Turkish hospitals included Physicians, Nurses and other Healthcare Workers.

Bellou (2007) and Van der Wal and Huberts (2008) studies did find significant differences in the values people held and the reward structures between sectors. For example, van der Wal and Huberts found 11 significant differences on the general values scale (for items such as Efficiency and Impartiality), and Bellou found differences in rewards for performance and fair supervision. However, it is worth noting that for both of these studies, the number of items that were different, compared to the total items on the scales used, is relatively small: for van der Wal & Huberts (2008), this was just 10% of the total items measured (11 out of 101 items across four scales), and for Bellou (2007) this was just 15% of the total items (6 out of 40). In other studies, such as Lyons, Duxbury and Higgins (2006), just 7.5% of items show significant differences, and for Sungu, Iglan, Parylo and Erdem (2014), it is just 8% of all items measured. Therefore, this suggests that there are also many similarities between the two sectors.

### *Similarities*

Several studies show similarities across sectors. In these studies, they looked for differences, so a lack of significant difference implies similarity. However, as shown in table 4, we have highlighted those where there are either close mean values or rank values.

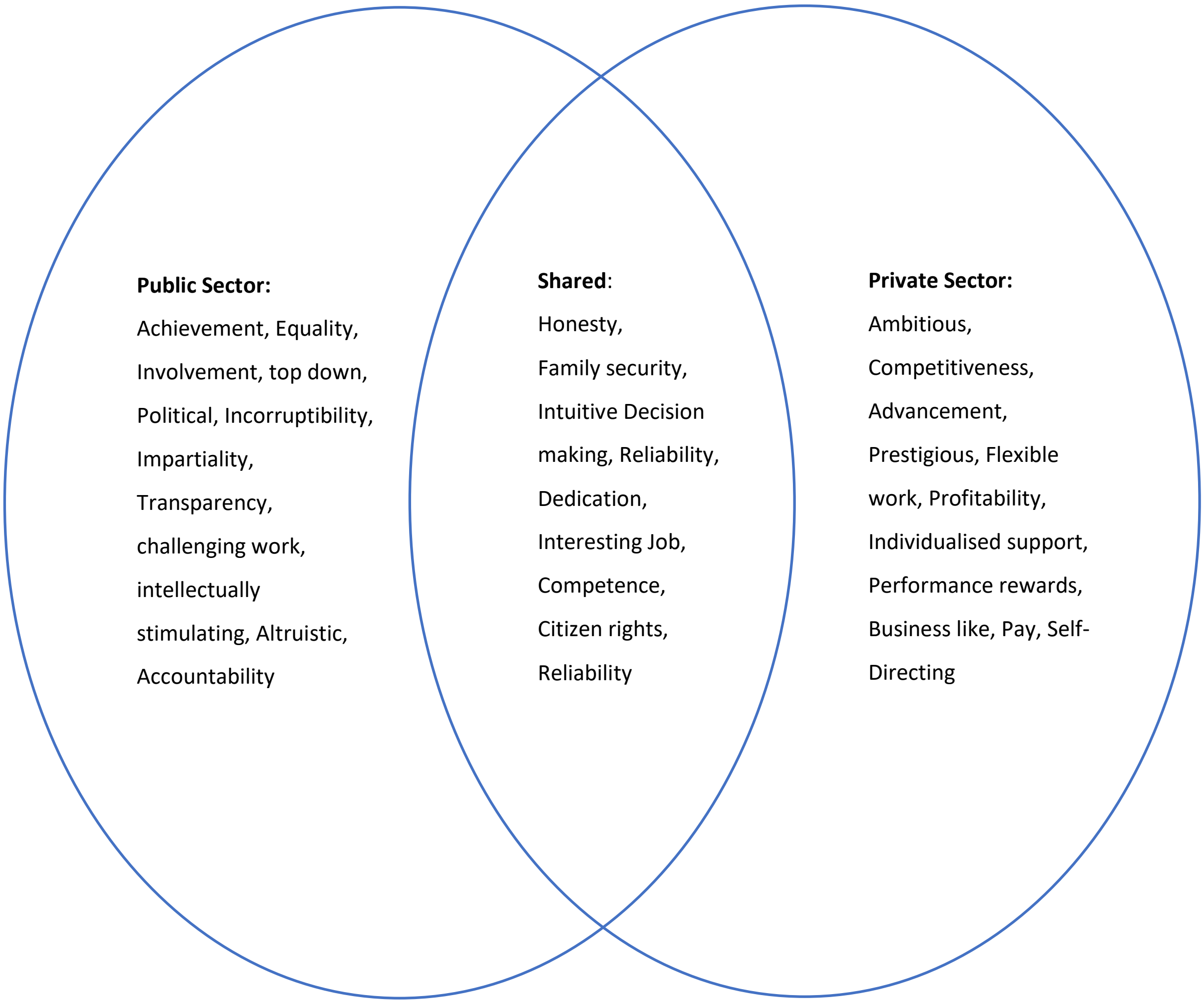
We can see that Van der Wal and Huberts (2008) results showed Dedication (m=7.6 public and private), Collegiality (m=7 public; 7.1. private), Honesty (m= 8.3 public; 8.2 private), Reliability (m= 8.1 public; 8.2 private) and Self-fulfilment (m = 6.3 public; 6.4

private) were as crucial to each sector (where "M ≥ 7.5, scores above average", p273). Jelovac, van der Wal and Jelovac (2011) also found the item Honest to be similar across sectors, with this ranked in first position and the second position for Private and Public samples in Slovenia, and ranked first and third in their Netherlands sample. Furthermore, Becker and Connor (2005) found Honesty to be of importance across sectors, ranking second in their public sector managers and third in their private-sector managers (in the older sample group).

Other similarities found include the papers by Andersen (2010), where both public and private managers used an intuitive decision making style; in Jelovac, van der Wal and Jelovac (2011), who found that Lawfulness ranked third (public) and fourth (private) in their sample, and Taylor (2010), who found no differences between sectors for Importance of Citizens rights (scale).

In three studies, multiple similarities were found: Bellou (2007) identified that Timely Payment of wages was ranked first in both sectors, followed by a Healthy working environment (ranked second) and Safe working environment (ranked fourth). Furthermore, a Non-Stressful working environment was ninth important for both sectors and an interesting job fifteenth. Bysted and Jespersen (2014) found similar Idea Generation levels between their sector samples and finding that Sector did not impact Innovation Trust. Top, Akdere and Tarcan (2015) found similarities in Organisational Commitment ($m = 2.91$ public; 3.06 private), Organisational Trust ($m = 3.15$ public; 3.31 private) and for two items on the Job Satisfaction Scale, for Operating procedures ($m=3.48$ public, $m =3.49$ private) and Co-workers ($m=3.36$ public, $m = 3.37$ private). To synthesise the similarities and differences between sectors for public and private employees, Figure 2 presents the emerging themes in a Venn diagram.

*Figure 2: Venn Diagram showing similarities and differences in Values, Behaviours and Atttudes between sectors*




## Implications of Demographic Factors:

Across the 12 studies in this review, only five reported results by demographic information relating to their participants (see table 5). It appears that older workers, often reported in these studies as being over 40 years of age (Jelovac, van der Wal & Jelovac, 2011; Lyons, Duxbury & Higgins, 2006; Taylor, 2010) hold greater significance for a range of values which includes expertise, incorruptibility, and pro-social activities. For four studies (Jelovac, van der Wal & Jelovac, 2011; Stackman & Connor & Becker, 2006; Taylor, 2010; Lyons, Duxbury & Higgins, 2006), female participants rated a range of values significantly higher than male counterparts, values such as Reliability, Innovativeness, and Citizen Rights. Two studies reported outcomes against education level, generally indicating that a higher level of education was positively associated with a higher level of significance for General Values (Lyons, Duxbury & Higgins, 2006) and Prosocial Activity (Taylor, 2010). Although four studies had multiple country participants, only two reported results across countries, and these were Jelovac, van der Wal and Jelovac (2011) for Slovenia and The Netherlands, and Becker and Connor (2008) for Canada and Japan. The two that did not were Bysted and Jespersen (2014) and Stackman, Connor and Becker (2006).

*Table 5: Impact on Values, Behaviours or Attitudes from Demographic factors*

| Moderator | Study | Impact |
|---|---|---|
| Age | Jelovac, van der Wal & Jelovac (2011, p134) | There was a difference in older (42 and over) and younger (41 and younger) participants. Age was significantly positively associated with impartiality, incorruptibility, and transparency, meaning that as the age of managers increased, they tended to rate the values as more important for the following values:<br>• expertise (p = 0.008)<br>• impartiality (p = 0.001),<br>• incorruptibility (p = 0.001),<br>• profitability (p = 0.050),<br>• sustainability (p = 0.009),<br>• and transparency (p = 0.023). |
| | Lyons, Duxbury & Higgins (2006, p611) | General Values Significance of p = <.001 for age<br>Prestige work values p = <.05 significance for age<br>Altruistic work values p = <.01 significance for age<br>Intrinsic Work values p = <.003<br><br>What Age was significant was not described. Age was used as a control variable |
| | Taylor (2010, p1092) | Older ages more likely to engage in prosocial acts (p = <.05) and have confidence in key institutions (p = <.001). |
| Gender | Jelovac, van der Wal & Jelovac (2011, p134) | Female participants were found to have rated significantly higher in the following 12 values:<br>- dedication (p = 0.002),<br>- impartiality (p = 0.049), |

| Moderator | Study | Impact |
| --- | --- | --- |
| | | - innovativeness (p = 0.045),<br>- lawfulness (p = 0.002),<br>- obedience (p = 0.000),<br>- reliability (p = 0.021),<br>- responsiveness (p = 0.000),<br>- self-fulfilment (p = 0.000),<br>- serviceability (p = 0.045),<br>- social justice (p = 0.001),<br>- sustainability (p = 0.010), and,<br>- transparency (p = 0.002).<br><br>In addition, effective-ness approached statistical significance (p = 0.053). Males rated all the values as significantly less important than female managers. |
| | Lyons, Duxbury & Higgins (2006, p611) | For General Values, each of the covariates was significantly affected by Gender p = <.05<br>Altruistic work values p = <.01<br>Intrinsic work values, p = <.003<br><br>The effect of gender on Prestige work values was not significant.<br><br>What Gender was significant was not described. Gender was used as a control variable. |
| | Stackman, Connor & Becker (2006, p. 587) | Within the Public Sector sample, female participants scored more significantly (p = <.01 vs .05) than in their preference for delayed gratification.<br><br>Within the Private Sector, male participants scored more significantly (p = <.01 vs .05) for a preference for Societal over Family.<br>In the Public Sector sample, Males also preferred Competence over Conscience (p = <.05). This |

| Moderator | Study | Impact |
|---|---|---|
| | | preference was not at all significant in female participants in the public sector and had no significant difference in the private sector. |
| | Taylor (2010, p1091) | The profile of a respondent who placed high importance on the rights of citizens tend to be female (p = <.01), older (p = <.05) belonging to a lower social class (p = <.01) and does not have obvious political affiliations (p = <.01). |
| Education | Lyons, Duxbury& Higgins (2006, p611) | General Values: each of the covariates has a significant effect on values (p = <.001 education) but no impact for education on Prestige Work Values, Intrinsic Work Values, or Altruistic Work Values. |
| | Taylor (2010, p1091) | Education (university) was a significant factor (p = <.001) in engaging in non-electoral political activities. |
| Country | Jelovac, van der Wal & Jelovac (2011, p135) | Slovenian sectors share more ‘‘common core’’ values than Dutch; there was a higher mean rating of all Slovenian values than the Netherlands.<br><br>Incorruptibility received the highest rating, and honesty is the second or third highest average rating in both countries' public sector. Lawfulness, transparency, and reliability also featured in the Top six of both countries. |
| | Becker & Connor (2008, p113) | The Canadian data was described as “somewhat ambiguous”, interpreted by the authors as suggesting both “self-selection and socialization”. In contrast, the Japanese data appeared to indicate more clearly that on-the-job socialization has a dominant influence. |

| Moderator | Study | Impact |
|---|---|---|
| | | The ranks assigned to specific values were inconsistent across the Canadian and Japanese samples. For example, older Canadian private-sector managers ranked obedient, polite, and self-controlled significantly higher than public-sector managers, while older Japanese private-sector managers ranked obedient and polite significantly lower than did the public-sector managers. |

The second of the two research questions in this review were understanding the implications for these differences or similarities between the public and private sectors. Table 6 describes the implications provided; however, it is worth summarizing here that this is largely that the organisation, and potentially politics, are likely to be the difference between workers values, behaviours, and attitudes. An interesting finding across three of the twelve studies was the reference to the country's impact and the political landscape (Bellou, 2007; Jelovac, van der Wal & Jelovac, 2001; Bysted & Jespersen, 2014).

*Table 6: Outcomes and Implications from differences in Values, Behaviours and Attitudes between Public and Private sectors*

| **Study** | **Implications** |
|---|---|
| Andersen (2010, p140) | Political environment of an organization leads to behavioural differences.<br>"Public and Private Managers may differ in behaviour, but basically face the same challenges of achieving organisational goals with or through other people".<br>Knowledge about work-related values can be useful in recruiting, selecting, and promoting managers. |
| Becker & Connor (2005, p113) | Values of public and private sector managers become less similar to the length of tenure in the role.<br>Self-selection (for organisation type) plays a role (looking for value congruity). |

| Study | Implications |
|---|---|
| | The meaning of the Public and Private sector may be culture-bound – this could be why differences exist between the samples.<br>The greater the prevalence in movement between sectors, the more cross-cultural differences may be inflated or hidden. |
| Bellou (2007, p616) | [In Greece] variation in values may be attributed to political interference.<br>Organisational characteristics impact the psychological contract.<br>Individual characteristics related to national culture (Greek) reflect on findings. |
| Bysted & Jespersen (2014, pp234-235) | The effectiveness of mechanisms depends on organisational objectives and manager traits.<br>Private workers: innovation linked to career advancement.<br>Public workers: innovation linked to institutional characteristics and 'top down' goals.<br>Socio-political impact on innovativeness – increases with innovation trust within the organisation (organisational characteristic). |
| De Graf & van der Wal (2008, pp97-98) | Values differences exist.<br>Perceived differences not related to the direction of the switching (public-private or private-public)<br>Values are culturally relative (in this case, to The Netherlands).<br>"overall image of both sectors always involves gross oversimplifications".<br>Differences in organisations – type and size, impact values. |
| Jelovac, van der Wal & Jelovac (2011, pp138-139) | Value congruence in the country (Slovenia) – "common core"; culturally driven, country – political ("post-sociality transition") factors; Historical legacy.<br>Potential EU value congruence (SIGMA values) |
| Lyons, Duxbury &Higgins (2006, p615) | Limited differences between sectors. No systematic differences in General Values.<br>In recruitment activity, one cannot rest on assumptions that the public sector attracts a particular breed of people. Health and Education could emphasise the Altruistic nature of roles to attract altruistic people to roles. |

| Study | Implications |
|---|---|
| | Organizational commitment was higher in private than public or para-public organisations.  This could negatively impact goal achievement for the organisation. |
| Sungu, Iglan, Parylo & Erdem (2014, pp110-111) | School status (public vs private) is behind differences in teacher satisfaction.<br>Private schools have higher levels of satisfaction and instructional supervision. Rating of Principal's instructional supervision behaviours significantly higher in private schools.<br>These findings may be related to the working conditions in private schools being better than in public schools.<br>Policymakers may need to revisit teacher supervision regulations in schools and work on improving conditions in public schools. |
| Stackman, Connor & Becker (2006, pp593-594) | Differences and similarities exist in values between sectors.<br>It may indicate a "public sector ethos" and private sector ethos", which may attract different candidates.<br>The public sector may attract people for their Terminal Values and repel them because of the Instrumental Values (how they work).<br>A requirement that managers operate flexible, especially as there are instances of public and private sector employees working together on the same tasks in the same offices.<br>Individuals values systems are a good predictor of behaviour. |
| Taylor (2010, pp1093-1094) | Public sector and non-profit share more similarities than public and private sector employees.<br>It is in the interest of public sector workers to be interested in pro-government activities.<br>Public bureaucrats can engage the community more by getting themselves involved in prosocial activities. |
| Top, Akdere & Tarcan (2015, pp1277-1278) | Operating procedures, communication, and organisational trust were significant predictors of overall organizational commitment for public servants, whereas individualized support, fostering acceptance, promotion, contingent rewards, and organizational trust were the significant regressors of overall organizational commitment private-sector employees. |

| Study | Implications |
| --- | --- |
| | Transformational leadership behaviour enables organizational leaders to embrace strong emotional ties with their followers. [Turkey] needs more transformational leadership in Hospitals. |
| Van der Wal & Huberts (2008, pp274-279) | Traditional values pattern for the public and private sector. Overall, the results do not lend support to the claim that classical public service values are devaluated or degraded by the emergence of classical business sector values. It is indeterminate whether convergence or intermixing between public and private sector organizational value patterns is taking place. Organisational characteristics may be a contributing factor. |

# Discussion

## Summary of Observations

There were two questions for this systematic literature review: Do perceived differences between private, and public sector employees exist? Furthermore, if so, What are the implications of this? These are potential implications identified within the papers for promotion, mobility, or selection of workers.

This review helps us understand the extant literature, demonstrating that a mixed view remains regarding perceived or actual differences between public and private sector workers; there is no single agreement. However, a view that there are absolute distinctions to be drawn between these two sets of workers appears to persist in the grey literature[6] used frequently by those in the recruitment sector. Further research is needed to challenge those current perceptions of absolute differences, as that perception may affect practitioners' recruitment decisions in the field.

The review identified that the terms values and behaviours are used inconsistently and measured in at least 18 different ways (reviewing the scales used). Regarding some

[6] https://www.hays.co.uk/career-advice/what-do-experts-look-for-when-they-recruit-1216932; Know how to move from the public to the private sector - Personnel Today

values or behaviours, such as Lawfulness, two studies found similarities across sectors and found differences; with accountability, this was one study for similarities and differences across sectors. The consistent areas were in similarities across the three studies that looked at it, for Honesty and transparency. Consistent differences were found across three studies for Innovative/Imaginative and Profitability (as a driver for behaviour). In both cases, this was more prevalent within the Private sector.

## Values, Behaviours and Attitudes

### *Summary*

The results of this review indicate that there are some repeated similarities and differences between public and private sector workers, in what authors describe as values or behaviours: of those differences, on multiple occasions, Security (job/family) and Impartiality have appeared as public sector preferences compared to ambition, and job satisfaction were higher for private-sector employees. In terms of similarities, there is consistency in desiring Honesty and Lawfulness.

Although the studies used different tools, it is surprising not to find greater congruity between the elements and the different or similar concepts. This is perhaps why from a recruitment and selection perspective, practitioners often find themselves working from client briefs that stipulate "must have experience of [sector]", which can be quite limiting in terms of talent.

### *Values*

The variability is captured well in de Graaf and van der Wal's (2008, p89) qualitative piece, where there was "no pattern in the questions on any of the questions". They further add that "the organisation had more influence on values than its respective sector". Bysted and Jespersen (2014, p234) reported that in creating an environment that ‘encourages employee innovation’, results relate to managerial traits and the organisation's objectives around innovation instead of just the sector. Van der Wal and Huberts (2008) raised an interesting point about whether the differences and similarities are related to organisational or individual differences. Taylor (2010) also discusses the possibility of organisational differences impact on values (as opposed to individual values) and does ask whether there is a greater tendency for public sector staff to engage in political activities because they are asked to because of the sector they work within. van der Wal and Huberts (2008, p277) asks whether it is vital for us to consider if the values differences are about the individuals' work choices or a "product of socialisation and rationalisation".

#### *Behaviours*

Top, Akdere and Tarcan (2015, p1277) examined leadership style directly, particularly of Transformational leadership style against organisational commitment, and found that it "[transformational leadership] encourages employees for higher organisational commitment". Whilst there were differences in aspects of this across public and private employees, perhaps it is the mechanisms of the style itself that has the most significant impact on employees, whether in private or public employment. Because their participants worked under the same roof, but for different management structures, they were able to add further that there are implications of different approaches on human resources management (HRM) practices, which could lead to more significant issues among the workforces. Perhaps some issues could be avoided if the focus were not on what makes workers different across sectors but on what is similar and works to create the right management relationships.

#### *Attitudes*

Taylor (2010) had explicitly looked at attitudes in their research in a way that others had not been so explicit. The findings in Taylor (2010) are mixed, as with other papers in the review. A few differences were significant for the public sector; Confidence in key institutions, 'Public Service', Engagement in non-political activity and Prosocial Acts. Perhaps, it is not a surprise that an item titled 'Public Service' was significantly important for public servants and not private-sector workers. These items are seemingly skewed more heavily towards the public sector in general. However, it is interesting to see that there were similarities in the importance of Citizens Rights as a broader community.

### Demographic Implications

The results of four of the studies show that there are differences in results of values and behaviours on the demographic values of Age, Gender and Education (Jelovac, van der Wal & Jelovac, 2011; Lyons, Duxbury &Higgins 2006; Stackman, Connor & Becker, 2006; Taylor, 2010). Whilst there were two studies (Becker & Connor, 2005 and Jelovac, van der Wal & Jelovac, 2011) that discussed country differences, these were not within the same countries and are not directly comparable. What is interesting, however, is when it comes to country effects more generally, is that, as seen in table 6, the political context of the country in which the study was made became a feature of the discussion in four of the papers (Andersen, 2010; Bellou, 2007; Jelovac, van der Wal & Jelovac, 2011; Sungu, Iglan, Parylo & Erdem, 2014). Regarding the demographic information provided, it appears that within these studies, older female managers are more likely to be more altruistic (Lyons, Duxbury & Higgins, 2006), prosocial (Taylor, 2010), impartial (Jelovac, van der Wal & Jelovac, 2011) and be more interested in citizens' rights (Taylor, 2010), than their male counterparts. This is generally supportive of gender differences found in more recent studies such as Álvarez-Pérez, Carballo-Penela & Rivera-Torres (2020), who found altruism was higher for women.

Looking at the samples within the studies, we have approximately Generations Y (Millennials) and Z as the 'younger' workforce and generation X and Baby Boomers in the 'older' category. Becker & Connor (2005) studied differences across generations, looking at differences in tenure length. They found that older managers were more different than younger managers (13 significant differences versus nine significant differences) between sectors. They attribute this to the influence of on-the-job socialisation, becoming more consistent with the occupational values the longer you are there. This study exemplifies that there are rank-order differences in values relevant to younger and older workers, so perhaps what this tells us is that candidates' ability to 'fit' with the organisations' values is not merely based on their previous experience in a sector but rather their stage in life and career.

## Limitations of the Current Literature

No field of study is without limitations. Indeed, four are noted here, including those related to the country, a lack of clarity in the breakdown of sampling across the private and public sectors, a lack of recruitment process examination and a lack of clarity between values, behaviours, and attitudes. Overall, as noted earlier in this paper, there was a lack of consistency across the studies, which impacted the ability to synthesise the data other than in a narrative way.

### *Country*

Our understanding of public and private sector values is limited here to a few OECD countries, none of which were in the UK. This has specific implications given the potential impact of Brexit on the labour market, which at this point is still somewhat unpredictable. As such, business across all sectors will need to prepare for more generous 'sharing' of key skills and resource in what may be a more limited pool to select from, without the free movement currently experienced. Future research may focus on samples in the UK to explore comparisons across sectors, given the current uniqueness of the political situation and its potential impact on the labour market. Additional research may also consider the similarities and differences in countries outside of the OECD, whilst this group shares familiar eco-social problems and works together to create jobs. For example, there may be merit in understanding how those countries outside of the OECD see values and behaviours in the workplace across private and public sectors and the relative importance of any similarities or differences. Future research may also examine the impact of cultural differences between countries that may impact the similarities and differences between values and behaviours.

### *Sample Breakdown*

The quantitative studies samples were suitable sizes, with a combined total of 8545 for those with sector breakdowns. However, the split across sectors was not always clear (i.e., in Bysted & Jespersen 2014) where secondary data was used, meaning that for 8310 participants, we do not have this information. Whilst the split between private and public was seemingly well spread, perhaps de Graaf and van der Wal (2008) had the most even split across their 60 interviewees, with 30 from each. Of the quantitative studies which described their split across sectors, 3604 (42%) in the public sector, 4634 (54%) in the private sector and 307 (4%) were para-public, or Non-Profit, sector staff.

### *Selection Processes*

Within the studies included in this review, none examined in detail the impact of the differences or similarities they found on the processes for section and recruitment. Andersen (2010) did include a discussion point on the knowledge of differences between sectors on recruitment processes, concluding that perhaps some individuals are attracted to public organisations. There was some discussion of implications on processes in two other papers; Taylor (2010) discusses the impact on community engagement and Sungu et al. (2014) on the implications of differences for Turkey's education policymakers.

### *Clarity Between Values and Behaviours*

Across the studies within the review, many failed to adequately discuss the intricate differences between values and behaviour, as in cases where 'Obedience' is used (Becker & Connor, 2005; Jelovac, van der Wal & Jelovac, 2011). This term is measured as a value within these studies but can also be measured as behaviour when taking a dictionary definition of it, meaning 'compliance or submission'[7]. As such, this may have implications for human resources management approaches; behaviours can be 'managed' in the workplace, can be subject to a process and linked to capability, whereas values seem harder to pin to a 'breach' in many cases. The impact of how values are discussed, how 'values-based recruitment' practices are utilised may need to be reviewed to better equip sector switchers in the future with the means to enter a new sector. For example, Van der Wal and Huberts (2008) and Top, Akdere and Tarcan (2015) examine Dedication/Commitment, yet the formers study is described as values, and the latter is as behaviours.

## Limitations of this Review

This review's main limitation is the small number of studies meeting the inclusion and exclusion criteria; future research could expand this, although maintaining the OECD criteria would be beneficial or comparisons between sectors designed in similar ways (especially the public sector in the OECD countries). Additionally, the criteria used did not specifically connect to the impact of perceived differences or similarities,

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[7] OBEDIENCE | meaning in the Cambridge English Dictionary

particularly on recruitment processes, and yet, moving into the subsequent stage of research, this is an important point.

## Implications for Research

The studies included in this review are predominantly survey-based, with just one qualitative interview. A survey approach does lend itself to securing more extensive and more dispersed samples than qualitative interviews (Bloch, Phellas & Seale, 2011); however, the nature of the survey instruments used in these papers lacks the lived experience it is possible to see within the qualitative study. For example, the Rokeach Values Survey used in Becker and Connor (2008, p112) and Stackman, Connor and Becker (2006, p584) asked participants to rank items which are one to three words such as “Freedom”, “An exciting life” or “True Friendship”. The survey items did not demonstrate what these values, behaviours, or attitudes mean for decision making and the impact of those decisions. The decisions made in recruitment and selection impact the move between sectors, or not, for those looking to change.

The studies in this review did not include samples in the UK, despite the range of UK based grey and unempirical literature available to practitioners on this subject. Therefore, it would be valuable for research to examine these perceived differences in the UK private and public sectors. Additionally, research comparing many OECD countries could provide international recruitment practitioners with appropriate evidence-based guidance to inform their selection processes.

There is a demonstration in the papers in this review that there would be some value in pursuing a qualitative approach for future research into the differences between the public and private sectors values, behaviours, and attitudes. de Graaf and van der Wal (2008) were able to review differences based on "experienced values" from those who have switched sectors, and as such, they were able to provide insight into whether the differences are significant enough to cause problems for individual workers in gaining and adapting to work in another sector. This could be pursued to understand differences and similarities between groups of workers and the impact of those perceptions in the workplace. If "job characteristics outweigh sector" (de Graaf & van der Wal, 2008), this is also an area worth pursuing in further research as there still tends to be a prominent practitioner and professional recruiter focus on "must have experience in [sector]" in job adverts; seemingly complying with the perceptions of difference between workers values, behaviours, and attitudes per sector.

At the time of writing this, a sweep of the Indeed jobs board (keyword search on Manager) found that phrases such as "commerciality" are widespread and appear to imply a private sector bias. This is an area of examination that future research may take as it is unclear what this kind of parlance hopes to achieve in terms of attraction and certainly in terms of selection (what would be 'scored' well as "commercial"?). With this kind of phrasing, it is possible that what recruiters are looking for are behaviours rather than values, but it does raise the question of whether these (whether we call them values or behaviours) could be 'constructed' in the workplace. Are these more malleable than we think, and can this transfer between sectors be made easier if we viewed values in this way?

How staff are recruited across sectors, the approaches and management practices within these areas has not been explored in the studies within this review. The studies represent a cross-sectional exploration of values and behaviours rather than an in-depth analysis of the recruitment process or the strategies employed by recruiters to make decisions. Future research may explore how recruiters make these decisions, the process they undertake to identify suitable candidates and 'score' those to provide an offer of employment. Understanding the recruitment process in more detail may help support and guide those who want to switch sectors.

## Implications for Practice

It is essential to understand the recruitment processes as they might drive limitations in the talent pool for any one sector, where there is a belief that significant differences exist, and as such, recruitment professionals apply a broad initial screening of candidates based on sector.

Practitioners may find themselves using 'values' 'behaviours' and 'attitudes' interchangeably, and there may be no consequence to this, or this may be having an impact on recruitment and selection practices in terms of both interview questions (is values-based values-based) and exercises or 'tests' designed at highlighting behaviours (again, is that what is coming through). This review does not answer whether these concepts' interchangeableness is negative, but it highlights that they are used interchangeably. The review was not designed around the impact of use/misuse of these concepts, and as such, it will have to be an issue consigned to future consideration for the time being. However, it is noted here, as ascribing these items to either values or behaviours could be creating perceptions and indeed, decisions of 'no fit' in interviews; assigning attributes as values when it is a behaviour could mean this is deemed 'missing', and therefore the person is not a good 'fit' for the organisation.

This paper has implications for using values-based recruitment and understanding what it means and tested in recruitment practices. If candidates' sifting assumes that those from opposing sectors will not have the correct values, the talent pool could be artificially reduced. This review highlights that there are several areas where there is overlap in the values (and or behaviours) between sectors; however, a belief, fuelled by grey literature, that the two are distinctly different may encourage recruiters (consciously or unconsciously) to pass over candidates who would work well in the organisation. This review highlights the need to be clear about the basis on which recruitment is done.

## Conclusion

There appears to be a wealth of espoused differences in the grey literature that reduce 'fit'. However, there was a very mixed picture within the academic literature and the papers within this review. The literature presented here provided only limited information regarding the existence of significant differences.

Within the twelve studies in this review, there is variability and differing opinions on whether public and private employees are tangibly different. There are some common areas established for both differences and similarities; however, there is a great deal of asymmetry in the approaches and tools used to identify those. Within the grey literature, the articles used by HR and recruitment practitioners, differences between sectors continue to be pushed as a reason for the difficulty, or nigh impossibility, in moving between sectors. In some of these articles, these differences suggest that the public sector is somehow an ‘easier’ job, requires less effort (do Monte, 2017; Hays[8]), operates at a slower pace and is more heavily bureaucratic (Personnel Today, 2010[9]), compared to the private sector; a perpetuation of these differences may mean that the best person for the role is not selected, but rather the person who appears to be the ‘best fit’. Questions have been raised in several studies about the drivers of differences and whether this is directly related to the sector. Proposed alternatives include the organisation itself, individual differences or perhaps socialisation once in employment. Whatever the driver of these differences, Andersen (2010, p140) concludes aptly (on this variability) that "Public and private managers may differ in behaviour, but basically they face the same challenges of achieving organisational goals with and through people".

[8] https://www.hays.co.uk/career-advice/what-do-experts-look-for-when-they-recruit-1216932
[9] Know how to move from the public to the private sector - Personnel Today

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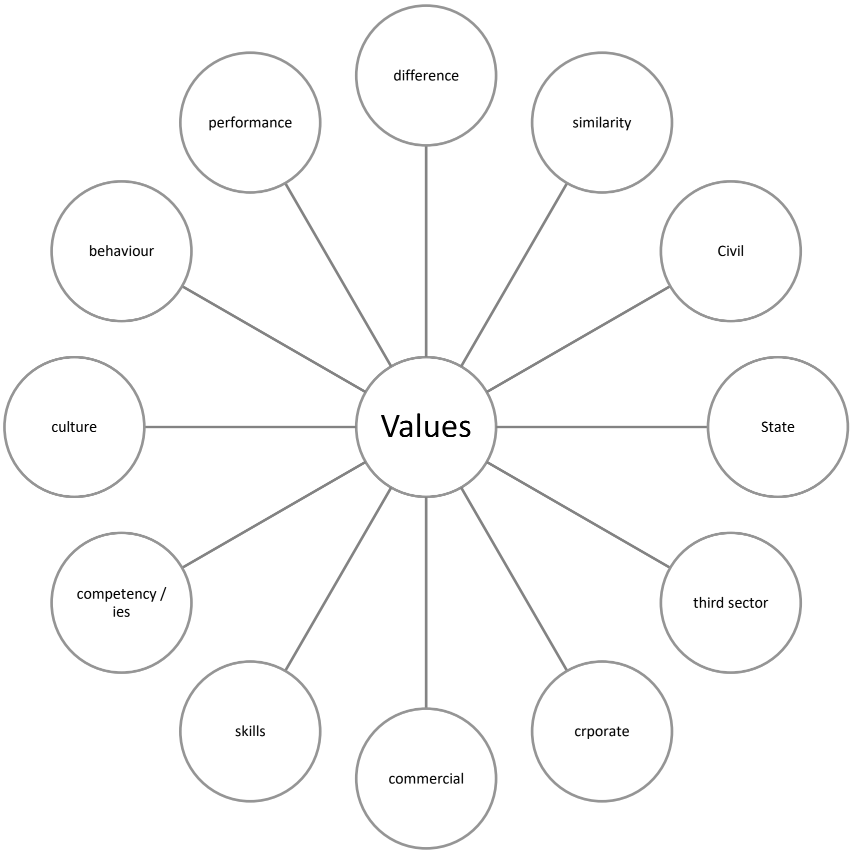
# Appendix A: Keywords from Strategy group (keyword search)

The following words and terms were gathered from a strategy group for weeks to inform the Key Word Search for the SLR.

This list is taken from a range of notes made during that time in various notebooks.



# Part 3. Empirical paper: The impact of Sector on Curriculum Vitae (CV) scores and the attitudes of those scoring


## Abstract

This study uses both CVs and implicit association tests to understand whether there is a blockage in the recruitment process, diminishing individuals' ability to sector switch in the UK. This is essential as recruiters operate in an economy coming through austerity, including ten years of public spending cuts[10]. These cuts were followed by a global pandemic (COVID-19), resulting in even greater activity in the labour market (people in need and potentially in need of work). In terms of the grey literature on this subject, values, or more to the point, a perceived difference in values, of those trying to move across sectors, impacts recruitment activities for both recruiters and, perhaps more negatively, on individuals. Using a field intervention study approach, we examined the responses of 30 recruiters (working in the public sector, private sector, and agency) on CV scores, combined with an Implicit Association Test (IAT), to Project Manager candidates. These recruiters actively worked in recruitment or with responsibility for recruitment as a part of a broader role. The Project Manager 'candidates' also actively worked in the field, with their own CVs that reflected this. Findings from this study indicate that CVs with no employment history have a greater mean score than CVs with employment history and that recruiters do not score CVs from their sector significantly higher than those from candidates in other sectors (where they see employment history). Secondly, findings show that recruiters did show an implicit bias towards their sector. There was not enough data to explore the relationships between these two datasets, so we could not understand whether this implicit bias has any relationship with the scores they assigned to CVs to candidates from either their sector or others. As such, more work is needed to understand why the grey literature, which garners the attention of many practitioners in the recruitment field, seems to persist in describing differences between sectors, potentially limiting movement.


[10] The lost decade: the hidden story of how austerity broke Britain | Public sector cuts | The Guardian

## Introduction

Change is the only constant[11]: This is the tag line to numerous business articles, and leadership talks to employees at business town halls looking to the year ahead (Vanka, 2020; Nairman et al., 2015; Farrington, 2013; Anthony, 2009). Forty years ago, there was seemingly a broken economy within Britain, with over powerful trade unions; in 2008, there were global financial crises that have led to years of austerity, and now with Brexit negotiations ongoing, the UK sees more uncertainty in the economy again, on top of which, a global pandemic struck in early 2020. Since 2008 there have been changes in the ruling party in Government in the United Kingdom (UK) that bought with it changes to how the Public Sector operated. There were extensive cuts made between 2010 and 2020[12], and the Private sector was given greater support to increase its share of the British economy[13]. Employment grew after the financial crash; however, the UK saw average salaries decline in that period[14], as the gig economy, zero-hours contracts and "platform workers" roles increased (Huws, Spencer, Syrdal & Holts, 2017, p10).

The UK's businesses must 'adapt to survive', says the business world (i.e., Matarelli, 2018 for Forbes). Some businesses will retrench when trying to survive; that is, they will divest of non-core assets and cut operating costs where they can, including reductions in employees. Others will adopt the opposite position, and investment will be their strategy, diversifying their markets and creating innovation (Kitching, Blackburn, & Smallbone, 2009). In both these cases, it can be seen that there will be movements in the labour market. Indeed, Kitching, Blackburn and Smallbone (2009) described that government interjection might be needed to bring together people who do not usually come together and promote the reframing of business models and promoting cross-sector initiatives.

[11] This phrase, or paraphrase, dates back in history to the Greek Philosopher, Heraclitus (c.500 BC)

[12] The lost decade: the hidden story of how austerity broke Britain | Public sector cuts | The Guardian

[13] Conservative Party manifesto, 2010, p3/5/23

[14] OECD, 2019

## Organisational Context

Austerity is the name given to difficult economic conditions created by government measures to reduce public expenditure; this happens in times of financial crisis, such as after the global financial crash of 2008. Austerity measures, which includes reducing spending on public institutions and reducing public sector employment[15] (Barej, 2017), coupled with a reduction in the availability of roles created by the financial crash, mean that more people are active in the labour market, i.e., looking for work. The Office for National Statistics (ONS) in the UK show that the global economy has seen a further downturn due to COVID-19 in 2019/20[16]. This economic shrinkage will continue to impact the labour market's state for many years, despite government interventions such as the Furlough scheme (UK)[17] that have been taken to sustain the labour market. Despite numerous challenges, unemployment shifted in 2020; the ONS reported a low of 3.6% in January 2020 and a rise by September 2020 to 4.8%. Avoiding a return to the early 00 ’s unemployment highs of 8.4%[18] will be a feature of this parliament beyond 2020.

Barej (2017) and the ‘Government Business’ magazine (2016) refer to reductions in public sector spending as a means to reduce the national deficit; these reductions can slow growth in the public sector[19]. This contrasts with previous government 'good times', when the public sector was a crutch for the economy, providing jobs for those displaced by other sectors when things there were challenging. In November 2015, the CIPD (Crush, p1) reported that the fallout of the Autumn statement could reduce jobs in the public sector by 100,000 in this parliament, with:

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[15] ONS Public and Private Sector employment: reduction of 325000 in Public sector employment, increase of 3.7m in Private sector since 2010

[16] Coronavirus and the impact on output in the UK economy - Office for National Statistics (ons.gov.uk)

[17] https://www.gov.uk/government/news/government-extends-furlough-to-march-and-increases-self-employed-support

[18] ONS reported 8.4% unemployment, aged 16 and over seasonally adjusted, in 2008. https://www.ons.gov.uk/employmentandlabourmarket/peoplenotinwork/unemployment/timeseries/mgsx/lms

[19] ONS Public sector employment, December 2019: Overall decline in Public sector employees between 2010 and 2019 (using figures excluding reclassification effects). https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/publicsectorpersonnel/bulletins/publicsectoremployment/december2019

*"The civil service [is] already at its smallest since the Second World War, while public sector now employs 17.2 per cent of the total workforce – its lowest share since records first started in 1999." And "the public sector has seen job losses of 8 per cent over the last five years...with the Office for Budget Responsibility (OBR) suggesting public sector employment could fall by as much as 400,000 by the end of the decade".*

*"Some 450,000 people have lost their job since the public sector workforce peaked at 5.7 million back in 2009. According to the OBR, there will be just one million new jobs created to mop up public sector job losses – half the number that were created in the previous parliament."*

## Labour Market and Sector Switching

There is often a need for people to move between sectors. This is especially the case as one sector size increases, and the other decreases. However, the ease with which people can move between sectors has been debated (for example, in Cribb & Sibieta, 2015a). In 2010, Hays' Public-Private Survey found that 71% of those in the private sector said they would move from private to the public sector for the same job, whilst only 44% of those in the public sector said the same.

Cribb and Sibieta (2015a) for the Institute of Fiscal Studies (IFS) noted that the movement between sectors was more comfortable for younger workers and areas where there were no sector-specific occupations. Cribb and Sibieta (2015b) also identified that the most significant cuts in the public sector were in public administration and that these had in some parts been picked up by protected areas such as the NHS and in education[20]. McKinsey &Co (2016) estimate that up to 162 million people work independently in Europe and the UK and the ONS indicate that as much as 14% of the UK workforce are self-employed (as of September 2020). This is a reduction from 15% of the workforce self-employed in 2017, but perhaps this drop is

[20] Primary and Secondary education in the UK, Further and Higher Education are no longer government bodies, though may still receive government funding.

unsurprising given the economy's nature in 2020. Relative to this study, it is interesting to note that self-employment is attractive for its ability to provide flexibility, a characteristic often found in public sector work alongside Work-Life Balance (Berry, 2005).

A Labour Market Outlook report from the CIPD and the Adecco Group for Summer 2017 (Crush, 2015) highlights that demand for labour will remain robust, in January 2020 this is a similar message, with the ONS Public and Private Sector employment figures showing reductions of 325000 in the Public sector and increases of 3.7m in the Private sector since 2010. By September 2020, the ONS put the UK labour market at 63% Private Sector, 23% Public Sector and 14% Self-employment. The labour market can see activity because of employees opting to move roles and organisations, from organisations downsizing (redundancy) or upsizing (job creation), because of industry creation (i.e., new businesses being established)[21] and because of technological and social changes[22]. These changes are supported and enabled by recruitment and selection practitioners, either in-house in organisations or working in agencies. When the market changes, so should practice, and these professionals can be the enablers for sector switching as their decisions as to who is right for a role will impact the amount of switching which takes place. Agencies can access wider talent pools and more extensive businesses; thus, many conduct their work across multiple industries and sectors.

The ONS figures emphasize the need for movement between sectors if the workforce is to remain buoyant, unemployment is to remain low and for the economy to recover from the impact of COVID-19.

Sector switching has been examined in the academic literature previously (i.e., Su & Bozeman, 2009a/b; Bozeman & Ponomariov, 2009; Hansen, 2014), with much of the research-based on surveys of employees who have moved sectors (to examine their motives for doing so, i.e., for greater salaries), while others used data from repeat national surveys to understand the probability of workers switching sectors during

[21] https://www.cipd.co.uk/knowledge/work/trends/economy-labour-market-factsheet#8355 /
[22] https://www.weforum.org/agenda/2016/01/four-changes-shaping-the-labour-market/

stable and unstable economic climates (i.e., Piatak, 2017). Much of the sector switching research has focused on the global feelings of sector switching from the candidate's perspective. It is often undertaken retrospectively (even in Piatak, 2017) with questions posed to those who have switched sectors, albeit that studies using the NASP-III survey (i.e., Su & Bozeman, 2009a) do contain questions about turnover intention. These studies feature less about the approaches people take to job searches and the recruitment process due to either moving or intending to move between sectors.

There are many challenges in changing employment, from navigating new relationships to understanding communication channels through knowing when and how decisions are made in an organisation (Church & Conger, 2018). There is always the potential for a clash of values one may experience with new colleagues and employers (Newman, 2010), and even desired transitions can be upsetting (Schlossberg, 2011). The changes people experience in transitioning from one sector to another may be affected by several factors, including perceived organisational values and behaviours.

### *Perceived Differences in Values and Behaviours*

Values and behaviours appear to play a role in a candidate's perceived organisational fit (Meglino, Ravin & Adkin, 1989; Arthur et al., 2006). Therefore, it is essential to understand how these values may be assessed in the selection process in more detail. Where values are assessed in informal ways, i.e., by an interviewer's gutfeel (Miles & Sadler-Smith, 2014), it is not always clear how, if at all, it is separated from behaviour, or indeed, skill (Lee et al., 2016). Values are defined in the Collins English Dictionary as "the moral principles and beliefs or accepted standards of a person or social group", and behaviours as "a typical and repeated way of behaving", or more specifically , "the aggregate of all the responses made by an organism in any situation". Psychology can become more granular and define workplace values as "conceptions of the desirable that guide the way social actors select actions, evaluate people and events" (Schwartz, 1999, p24) and workplace behaviours as a pattern of individual or group reactions and actions within the workplace (Lazzeri, 2014). In the systematic review by

Walter-Nelson, Yarker and Lewis (in preparation), they find that the two concepts of values and behaviours were used interchangeably with frequency.

Lewin (1947b, in Burnes & Cooke, 2013) asserted that behaviour arises from the person and the environment's interactions. Whereas Schwartz's (1999, p26) definition sees values as a "product both of shared culture and unique personal experience".

In the workplace, the shared culture and the interactions that take place help shape the perception of what is 'good' or desired. In terms of values and behaviours, these will be particular to a workplace or organisation and signal the 'local characteristics' (Sekiguchi, 2007, p123) of that business.

These interactions may then create a set of beliefs that the 'other' sector (from which the individual works) is somehow different in terms of their values. They may create stereotypes about those who work in the other sector from your own. With the prolific use of non-standardised selection processes (Piotrowski & Armstrong, 2006), this may only serve to confirm that a difference firmly exists, creating a form of bias (Miles & Sadler-Smith, 2014) between sectors. The use of these stereotypes will give rise to issues of 'similar-to-me' bias in selection (i.e., the inclination to give higher ratings to people with similar skills, backgrounds, and interests as the rater: Thornton, Rupp, Gibbons and Vanhove, 2019; Koch, D'Mello & Sacket, 2015; Pager & Shepherd, 2008), even in more standardised, or formal, selection processes.

Wright (2001) had previously found little empirical evidence regarding consistent sector differences in worker characteristics. There are some common areas established for both differences and similarities; however, there is a great deal of asymmetry in the approaches and tools used to identify those. Questions were raised in several studies regarding the cause or driver of differences and whether this comes down to sector or not. Proposed alternatives are organisation itself, individual differences or perhaps socialisation once in employment. Similarly, Boyne (2002) and Hansen's (2014) works agree that there is little in the way of consensus on actual differences. Studies included in Walter-Nelson, Lewis and Yarker's (in preparation) highlight this lack of consensus perhaps most clearly with the following two examples: Becker and

Connor (2005, p112) found a "general managerial value orientation" overall, and yet Bellou (2007, p615) describes there being differences “in accordance with sector characteristics”.

Regarding similarities between workers across sectors, Van der Wal and Huberts (2008) found significant similarities across sectors; for example, their results showed that Accountability and Lawfulness were crucial to each sector. Although not significant, they also found four items that the public and private sectors found to be less relevant to managers: collegiality, obedience, self-fulfilment, and sustainability. Becker and Connor (2005) also found similarities in obedience between the two sectors. Jelovac, van der Wal and Jelovac (2011) found that Lawfulness ranked within the top 4 values across both sectors in their samples. Interestingly, and of value to recruiters in any sector, Honesty showed as being similar across both sectors, with Jelovac, van der Wal and Jelovac (2011), Becker and Connor (2005) and Van der Wal and Huberts (2008) all finding that their respondents valued this (honesty).

Whatever the driver of these differences, Andersen (2010, p140) perhaps concludes aptly (on this variability) that "public and private managers may differ in behaviour, but basically they face the same challenges of achieving organisational goals with and through people".

Unfortunately, however, several grey literature and unempirical articles used by HR and recruitment practitioners advocate the difficulty, or nigh impossibility in, moving between sectors often because of the [perceived] differences in ‘values’ public and private sector employees hold. In some cases, these differences have been used to determine that the Public sector is somehow an ‘easier’ job with less effort (do Monte, 2017; Hays[23]), operates at a slower pace and is more heavily bureaucratic (Personnel Today, 2010[24]). These differences, and in some cases similarities, have been explored in academic works (Becker & Connor, 2005; Lyons, Duxbury, & Higgins, 2006; van der Wal & Hubert's, 2008; Top, Akdere & Tarcan, 2015).

[23] https://www.hays.co.uk/career-advice/what-do-experts-look-for-when-they-recruit-1216932
[24] Know how to move from the public to the private sector - Personnel Today

## Sector Switching and Selection

Literature in the area of selection and retention tells us that there needs to be congruence between the person and the organisation's Values (Kristof, 1996) and Behaviours (Arbour, Kwantes, Kraft & Boglarsky, 2014) to moderate turnover intention (Alniacik et al., 2013) and positively affect satisfaction (Kılıç, 2018). The presence of this congruence should lead to a range of better outcomes for both the individual and the organisation (Verquer, Beehr & Wagner, 2003; Westerman & Cyr, 2004), including how well new people 'settle in' when they join an organisation (Salau & Falola, 2014) their likelihood of staying (Pollitt, 2013), and their Fit (Kristof, 1996).

Person-Organisation Fit, an outcome of there being values congruence, can be operationalised in three ways; indirect-actual (ratings of an individual and organisation are compared, with at least two sources), indirect-perceived (ratings of individuals and organisations compared, but ratings are from the same source) and, direct-perceived (rater rates Fit between individual and organisation). These are each different ways of understanding Fit (i.e., dimensions of fit, validation design and calculation of fit), and each is a possible moderator on its outcomes (Arthur et al., 2006).

Having multiple lenses against which to understand Fit and selection process can be crucial to understanding how, or where, as assessment of Values and Behaviours sits within the selection process. Nolan, Langhammer and Salter (2016, p225) offer that, except for personality inventories, recruiters do not necessarily want to use standardised, or formal, assessments in selection, preferring non-standardized methods for their ability to help "read[ing] between the lines to size job candidates". However, the use of non-standardized methods means less transparency in how hiring managers make selection decisions (i.e., what criteria were used for each candidate and whether it was the same across each candidate, for example). Standardised processes would seem, then, preferable in helping with selection decisions and are supported by work in academic and professional circles, including the use of 'blind' CVs to produce better results and mitigate any biases (CIPD, 2015; Derous & Ryan, 2017). This lack of standardised, formal approach to selection methods extends beyond the scope of in-house recruiters and into recruitment agencies where advisors provide candidate feedback based on a mix of personal opinion and a desire to meet the recipient's needs (i.e., the hiring manager in the client organisations (Fabel, Hopp & Speil, 2020). This does not necessarily reflect the actual skill of the candidate, more the gutfeel of the recruiter.

The idea of Fit has always contained a link to fundamental human values on the part of the Person, and that for the Organisation, Fit is about culture and a shared set of values (Trevino et al. 2020). As such, there is potential for this 'holy grail' of finding someone who Fits to affect sector switching, as shared values with others indicate a presence of similarity. If values are essential, or rather, are a core component of Fit within an organisation (Meglino, Ravin & Adkin,1989; Arthur et al., 2006; Trevino et al. 2020), then any perceived differences in values across sectors that the hiring managers or recruiters have, could seemingly restrict the movement of staff between sectors, whether these differences are real or not.  If the recruitment process attempts to 'assess' values and Fit in a non-standardised way and at such early stages as sifting CVs by someone's gut feel, then they could conceivably be getting in the way of a good hire (Derous & Eve, 2017; Kausel, Culbertson & Madrid, 2016). Bias about sectors creeps in as interviewers look for 'similar-to-me' hires, as they seek those from the same sector, which they can identify via a scan of the employment history section. The selection methods most frequently used (Piotrowski & Armstrong, 2006; CIPD, 2015), i.e., the interview, do not seem to test the values of the individual against the Organisations 'must haves' in any meaningful way; instead, they are relying on the 'feeling' that they will Fit into the organisation.

These perceived differences seem to be long-standing and regularly repeated in the grey literature (i.e., Hays, INSEAD etc.). Personnel Today, a leading magazine for those in HR and selection, wrote in 2018 that "almost all HR Leaders feel the cultural fit is crucial". They say that 92% of HR leaders were using targeted questions in interviews to find this. This article highlights how, in practice, robust measures and tools are not in general use, and the age-old gutfeel is still leading the way in assessing candidates. The informal, non-standardized approach persists despite evidence that tools, such as those measuring Schwartz's values, provide more comprehensive accounts of values types (De Clercq, Fontaine & Anseel, 2008).

An interesting finding is that the guidance provided by the CIPD does not discuss the concept of 'Fit' at all. Thus, there is no professional body advice for CIPD registered HR practitioners regarding assessing or measuring Fit. Perhaps this makes it surprising then that so many still have a "stubborn reliance on intuition" (Miles & Sadler-Smith, 2013, p620) in finding a candidate with the right Fit, despite this lowering the accuracy of such decisions (Kausel, Culbertson & Madrid, 2016).

Not all practitioner material promotes standardised practice as the CIPD does. Alistair Cox (2019)[25], CEO of Hays, the recruitment specialists, wrote in a blog that candidates must 'prove' that their character is a good match for the company they are applying to. Hays is one of the most successful, and indeed most significant, recruitment agencies in the UK (and abroad)[26] and therefore, this kind of opinion piece could have considerable sway over those recruiting both in house and in recruitment agencies. Their publications, given their size and reach and in some cases where Hays works with government departments, can be considered first tier grey literature (Adams, Smart & Huff, 2017). The degree of sector switching possible may not always happen because of perceived differences between the sectors in terms of values, behaviours, and organizational fit. Although much literature has talked about this from a candidate perspective (i.e., Su & Bozeman, 2009a; de Graf & van der Wal, 2008), the judgement about difference, and therefore access into organisations, may come down to the selection processes. Understanding these differences and similarities between private and public sectors will be critical as there will be a need for a more fluid workforce moving forward. Not just in the wake of Brexit and its impact on available labour, but also on the economy itself, especially in a post covid world[27].

Additionally, while there has been much made in the way of previous research on the Public sector taking on private sector behaviours (i.e., New Public Management principles), in the UK in July 2018, a new UK Corporate Governance Code was published for quoted businesses (those listed on the London Stock Exchange,

[25] https://www.hays.co.uk/career-advice/what-do-experts-look-for-when-they-recruit-1216932

[26] Hays is listed on the London Stock Exchange and is a constituent of the FTSE 250 Index; £764m+ net fees generated in 2020, operating in 33 countries with 250 global offices

[27] National retraining scheme: key findings paper (publishing.service.gov.uk)

incorporated in the UK or elsewhere). Described by the Financial Reporting Council as a "shorter [and] sharper" code, the code mirrors Public sector principles and structures in demanding greater board engagement with the workforce and a requirement to address public concerns over remuneration by considering all workforce salary levels when setting those of directors. The need for greater transparency and diversity and inclusion at all levels of a business and having the workforce represented at the Board level will create change within the business sector. In contrast, Public sector organisations in the UK continue to use more competitive processes (i.e., in procurement) previously seen as a private sector issue. There is a coming together of sectoral practices, and the changes that mean for each side will require practitioners in human resources and occupational psychology to react in ways that maximise recruitment and selection processes to both attract and retain the right staff the first time. Recruiters could then use a mixture of both subjective and objective measures to get better outcomes (Nolan, Langhammer & Salter, 2016; Kausel, Culbertson & Madrid, 2016) for Fit at the job and organisation level (Sekiguchi, 2007) as informal selection processes continue to introduce bias into the recruitment process. This work aims to explore the sector as a form of bias and the recruiter's role concerning this.

### *Use of CVs in the Selection Processes*

In these initial stages of the recruitment process, there are estimates of it taking a recruiter only seconds to review a CV. Work conducted by the American career site, Ladders inc. (2018), used eye-tracking technology to analyse how much time was spent on this task and gave an average time of just 7.4 seconds. It says that recruiters skim the document looking for job titles, text flow and keywords. It is not clear how this study was conducted or with what sample size. It is also possible that increased supply in the labour market (i.e., more people available for work) impacts these types of studies (i.e., more CVs, less time on each one), alongside factors such as the recruitment process, company image, social situation and location (Islam, Habib & Pathan, 2010; Harding et al., 2006; Zheng, Jiang & Zhang, 2015). These factors can help create conditions in which CVs are scanned for longer or shorter amounts of time, which may negatively impact candidates. With bias creeping into the selection process and at such early stages as CV sifting, it is critical to determine whether there are similarities or differences across sectors.

A potential difficulty arises because of the hiring managers, or anyone who reviews the CVs of those in alternate sectors, potentially ignoring or disregarding someone from a different sector because they believe that they are not aligned (in values or behaviours) or similar enough, based on preconceived stereotypes. Research by Durous & Ryan (2019) highlighted the issue of bias in selection processes involving resume (CV) screening, suggesting that when stigmatising applicant information is presented in resumes, the hiring managers could be prone to Type 1 processing. This then increases the risk of bias in their impression of an applicant, resulting in discriminatory outcomes. Applicant information on CVs that gives away 'clues' about the individual can be found in many sections, going beyond the candidates' name. This could include school dates which infer age, ethnicity extrapolated from language skills (Behaghel, Crèpon & Le Barbanchon, 2015) and neighbourhoods, implying socio-economic status. In the same vein, Employment History provides employers with details about the candidates current (and previous) sectors, creating a form of biographical information.

Along with the CV sifting, the interaction of the interviewer's demeanour and the issue of Fit can create negativity (Farago, Zide & Shahani-Denning, 2013), as well as bias (Chen, Chen & Lin, 2013) when interviewers bring with them limiting beliefs (Chamberlain, 2016) about the sector. Nevertheless, despite academic and professional guidance on the subject, Nolan, Langhammer and Salter (2016) are still finding a 'feeling' about a candidate used in decision-making processes as recently as 2016, despite academic research finding that anonymous ('blind') CVs or application forms produce better results and mitigate any biases (Derous & Ryan, 2017). A process based on ability encompasses various methods, including those approved by the British Psychological Society (i.e., assessment centres).

There is limited research examining sector as a form of bias with CV examination; however, other types of CV studies have revealed that both names and their perceived ethnic origin (Bertrand & Mullainathan, 2004; Gaddis, 2017; Derous & Eve, 2019) and gender, are factors of bias. Seinpreis, Anders and Ritzke (1999) found that gender bias was present in the review of CVs, even though there were no "differences in terms of the qualities men and women were looking for in a colleague”. These biases that present themselves are not limited to protected characteristics such as gender, ethnicity and age, biases, or preference; they can exist across sectors and values (Baarspul & Wilderom, 2001; van der Wal, De Graf & Lasthuizen, 2008). Research examining recruiter reactions using CV studies have focused on whether selection or call-back decisions are made (i.e., Bertrand & Mullainathan, 2004) and do not routinely include feedback from the recruiter. As such, there appears to be a gap in understanding sector switching using CV studies, despite Sandstrom (2009) finding it useful to combine CVs with additional data and that CV studies have been used to highlight bias in recruitment practices (i.e., Bertrand & Mullainathan, 2004; Gaddis, 2017). There is a need then for real-world studies that explore if differences in attitudes towards the public and private sector exist in recruiters and if bias is seen in terms of CV sifting.

## Aims and Research Questions

This work aims to explore the potential of the Sector being a source of bias in the selection process and whether recruiters are more likely to attach higher scores to those candidates with experience from their current sector when evaluating candidate CVs. It is the intention that this study will add value to the recruitment and selection literature and provide more knowledge with which to guide 'applicants' who want to switch sectors and future research.

The first research question (RQ1) is whether the inclusion of employment history on CVs makes a difference to the scores given to that CV [candidate] during a CV sifting process (matching the CV to a job outline)? This is related to Employment History being a form of biographical data, and therefore a way to identify the sector in which candidates have and are working. Moreover, if so, Hypothesis 1 (H1) is that those CVs in the With Employment History group will receive lower scores than those in the Without Employment History group, as the employment history can be a cue regarding the person and used as a form of stereotyping (or bias, i.e., Behaghel, Crèpon & Le Barbanchon, 2015).

The second research question (RQ2) is: To what extent does the Sector act as a form of bias in the recruitment process? This will be assessed in two ways. Hypothesis 2 (H2) is that Recruiters will be influenced by sector, and as such will give a higher score to those candidates' CVs in the same sector to themselves (With Employment History group only). Hypothesis 3 (H3) is that the results will show that Recruiters will show an implicit bias toward their own (current) sector.

Although there are two distinct data sets here (CV and IAT), they are related, and as such, we will explore any relationship they may have to each other, though we do not intend it to be predictive. Therefore, Hypothesis 4 (H4) states that the recruiters' preference for their sector will lead to higher CV scores for candidates from the same sector (using the With Employment History group). It is hoped that the results of H2 and H3, combined with H1 outcomes, may give us greater insight into recruitment practices.

## Research Strategy

The research method is a strategy of enquiry, which moves from the underlying assumptions to research design and data collection (Myers, 2009). This work takes on a quantitative, cross-sectional design using a field intervention study approach. The researcher is taking on an empathetic stance in this project due to personal experiences, both direct and observed, for sector switching and potential bias or restriction in the processes, particularly outsourcing activities. Although generally applied to qualitative studies, the researcher hopes to provide an exploratory analysis generalisable to recruitment practices and further research. This study is one of the first steps in understanding the value, meaning and quality of recruitment activities and where changes are needed. Whether this is in the recruitment processes themselves or the mindset of organisations and their hiring managers when they set out their requirements for roles, this understanding may allow sector switching to be made easier for candidates to navigate.

# Method

## Participants

All participants were recruited initially via LinkedIn, using the researchers' network of over 2000 connections, then using a snowballing methodology, recruited further participants from their networks or workplaces. Based on a power analysis, the desired sample for the study would be 39, for large effect size ($d$ = p <.05), so with 30 participants, it is estimated that there will be a medium to small effect ($d$ = p <.5), for the one-tailed hypotheses.

### *Candidates*

The population from which 'Candidate' participants were recruited were all working-age professionals with a minimum of one job role involving project management: either a Project Manager position (job title) or a role involving effective management of projects. These criteria mean that candidates could then meet the Project Manager Role Outline. The researcher undertook a matching process between the role outline and the candidate's CV as submitted by them (Appendix 6). This process is recognised and generally applied during an organisational change (i.e., a merger or redundancy situation). The full details in Appendix 6 highlight the process's full steps and those particularly relevant to this research. In this research, the candidate CV had to match at least 75% against the role profile to be included.

Ten 'Candidates' were recruited from the public sector, private sector, or who had been sector switchers. They had each worked in roles that involved Project Management. The Candidates had valid experience in project management – the CVs were not edited to artificially match the project manager's role outline.

*Table 7: Candidates' Demographic information*

| | | Years' Experience | | | | |
|---|---|---|---|---|---|---|
| | | **4-10** | **10-15** | **15-25** | **25+** | **%** |
| Age | 25 -34 | 1 | | | | 10% |
| | 35 - 44 | | 1 | 3 | 2 | 60% |
| | 45 -54 | | | 1 | | 10% |
| | 55 - 64 | | | | 2 | 20% |
| | | | | | | |
| | *% Yrs exp* | *10%* | *10%* | *40%* | *40%* | |
| Gender | Female | | 1 | 3 | 3 | 70% |
| | Male | 1 | | 1 | 1 | 30% |
| | | | | | | |
| | *%F vs Yrs* | *0%* | *14%* | *43%* | *43%* | |
| | *%M vs Yrs* | *33%* | *0%* | *33%* | *33%* | |
| Sector | Public | | 1 | 1 | 1 | 30% |
| | Private | | | 1 | 1 | 20% |
| | Sector Switcher | 1 | | 2 | 2 | 50% |
| | | | | | | |
| | *%Pub vs Yrs* | *0%* | *33%* | *33%* | *33%* | |
| | *%Pri vs Yrs* | *0%* | *0%* | *50%* | *50%* | |
| | *%Swit vs Yrs* | *20%* | *0%* | *40%* | *40%* | |
| Employment History (CV) | Yes | | | 3 | 2 | 50% |
| | No | 1 | 1 | 1 | 2 | 50% |
| | | | | | | |
| | *%Yes vs Yrs* | *0%* | *0%* | *60%* | *40%* | |
| | *%No vs Yrs* | *20%* | *20%* | *20%* | *40%* | |

As the researcher assigned the candidate to either With or Without Employment History, even distribution could be achieved, as shown below, in table 8.

*Table 8: Candidate numbers in each CV Group (With or Without Employment History)*

| | | Candidate Sector | | | |
|---|---|---|---|---|---|
| | | **Public** | **Private** | **Sector Switcher** | **%** |
| Employment History | Yes | 1 | 1 | 3 | *50.00%* |
| | No | 2 | 1 | 2 | *50.00%* |
| | | | | | |
| | *% Sector* | *30.00%* | *20.00%* | *50.00%* | |

### *Recruiters*

Thirty hiring managers ('Recruiters') in both Private and Public sectors and Agencies were recruited to review the CVs of the 'Candidates' for their suitability to proceed ('would take forward') against the role outline for the project manager. The Recruiters were actively engaged in recruitment activities in their current employment and could not participate in this task without that, as this study sought to be as close to 'real-life' as possible.

*Table 9: Recruiters' Demographic Information*

| | | Years of experience | | | | |
|---|---|---|---|---|---|---|
| | | **1 - 3** | **4 - 6** | **7 - 9** | **10+** | **%** |
| Age | 18-25 | 2 | | | | *6.7%* |
| | 25-34 | 3 | 3 | | 1 | *23.3%* |
| | 35-44 | 2 | 1 | 3 | 8 | *46.7%* |
| | 45-54 | 1 | | 3 | 2 | *20.0%* |
| | 55-64 | | | | 1 | *3.3%* |
| | | | | | | |
| | *% Yrs exp* | *26.7%* | *13.3%* | *20.0%* | *36.7%* | |
| | | | | | | |
| Gender | Female | 4 | 3 | 3 | 4 | *46.67%* |
| | Male | 4 | 1 | 3 | 8 | *53.33%* |
| | | | | | | |
| | *%F vs Yrs* | *28.6%* | *21.4%* | *21.4%* | *28.6%* | |
| | *%M vs Yrs* | *25.0%* | *6.3%* | *18.8%* | *50.0%* | |
| | | | | | | |
| Sector | Public | 3 | 2 | 1 | 1 | *23.3%* |
| | Private | 4 | 2 | 3 | 6 | *50.0%* |
| | Agency | 1 | 0 | 2 | 5 | *26.7%* |
| | | | | | | |
| | *%SecPub vs Yrs* | *42.9%* | *28.6%* | *14.3%* | *14.3%* | |
| | *%SecPri vs Yrs* | *26.7%* | *13.3%* | *20.0%* | *40.0%* | |
| | *%SecAge vs Yrs* | *12.5%* | *0.0%* | *25.0%* | *62.5%* | |
| Employment History (CVs) | Yes | 4 | 3 | 2 | 6 | 50% |
| | No | 4 | 1 | 4 | 6 | 50% |
| | | | | | | |
| | *%Yes v Yrs* | *26.7%* | *20.0%* | *13.3%* | *40.0%* | |
| | *%No vs Yrs* | *26.7%* | *6.7%* | *26.7%* | *40.0%* | |

Initially, there was an intention to seek an even spread of recruiters, with ten in each category of Public, Private or Agency. However, there was an initial drop out of volunteers to the Agency group's research once they had seen the research details. It was fed back that the 'scoring' of CVs was not necessarily a task undertaken daily in agencies; instead, they had a 'feel' for which CVs to send through to a client (the hiring organization). This resulted in a larger group of 'Recruiter' participants (50%) from the Private Sector.

This study's approach, the field intervention study method, is used as the groups will not be randomly assigned, and types of candidates (groups which exist) have been recruited for their specific characteristics, i.e., Project management experience, actively engaged in recruitment activities, have worked in sectors of interest to the researcher and for specific types of organisations (in the case of the Agency recruiters). This is similar in many ways to other CV studies, such as Dietz et al. (2009), who used actual job seekers CVs and limited themselves to specific industries.

## Procedure

### *The CV*

Once the ten 'candidates' had sent their CVs to the researcher, they were transposed to a REED skills-based CV template (Appendix 5). This type of CV template is used by recruiting agencies and has also been used with graduates and other leavers of education where there is limited work experience. This format promotes the transferable skills a candidate possesses; REED refers to this as suitable for "…those without much practical experience in an industry, people looking to change careers, or jobseekers looking to turn a hobby or passion into a job." (Reed.co.uk). It was selected for this study as it allowed each of the candidates' skill and experiences to be shown in a separate section to their employment history, making it easier to remove this for half of the group and leave on for the other half of the Candidates. Half of the Recruiters would receive CVs With Employment History. The other half would receive the CVs Without the Employment History. Once transposed, this was then returned to the candidate for checking that it still represented them, and where necessary for additional detail (for example, to quantify the size of a project in monetary terms), all of this was conducted by email. Examples of email correspondence can be found in Appendix 9.

The Candidates recruited for this study were from either the public or private sector or had switched sectors during their career. The criteria for them to be a Candidate was that their CV has demonstrated that they had been either a Project manager (job title) or in a role where they demonstrated significant Project Management responsibility. A

Project manager role was selected based on two factors: it is a common role across both Public and Private sectors, and that ‘Project Manager’ has been equally accessible to younger and older workers (Derous & Decoster, 2017, p7). This role's right skills were assessed using a standard Project Manager role profile from the Project Management Institute (an impartial source not directed at any particular sector). A CV ‘matching’ exercise was undertaken (Appendix 6) to ensure that they had at least a 75% match between their CV and the role outline's skills and responsibilities. Any participant who could not meet this level of match was not considered for the study.

Candidates were assigned to either the With or Without Employment History groups based on where they had worked, to have Public, Private and Sector switchers distributed across both groups. After editing in line with the new template for conformity, candidates were sent their CVs that they agreed still reflected their own experiences. In some cases, the editing required some more detail from the candidates, which was returned by the candidate (not fictitiously added by the researcher); this, for example, included details about the number of people supervised, the monetary value of projects managed or scale of the project (i.e., national, international etc.). This was to ensure a similar amount and level of detail of information on CVs across candidates; this was an attempt to combat any quality issues between candidates regarding this level and detail of information (Dietz et al., 2000; Sandström, 2009). The ten CVs were not duplicated as with and without employment history as, because of the snowball method, some of the recruiter participants knew and worked with each other. With the recruiters having access to each other and undertaking the research at their locations, not at the researchers’ site, it mitigated the risks of them discussing candidates to have recruiters attend to different CVs. The recruiters were asked to complete the scoring within a specified timescale, but even this period would have provided enough time for the recruiters to share information.

Once the CVs were all in the skills-based CV template and agreed, half had the employment history removed and a note instead saying, “Employment History: purposefully left blank” (in line with the non-equivalent grouping) as a reminder to the ‘recruiters’. The ‘recruiters’ were sent a pack containing five CVs, the Project Manager role outline (Appendix 4) and a scoring sheet (Appendix 3). Removal of this information provides truly anonymous or ‘blind’ CVs (Behaghel, Crèpon & Le Barbanchon, 2015). These were all sent electronically via email at the email address given by the participant. They were asked to score each CV against the role outline and had space on the sheet to provide some feedback if they wanted to. This was not a mandatory component, as the researcher was made aware in conversations with Agency recruiters that this process was akin to the first stage of sifting CVs for a client. At that point, they were looking at content and match to requirements, with commentary generally coming after a telephone interview with a candidate, which would happen after this initial sift.

The ‘recruiters’ were asked to return the CV scoring sheets within approximately two weeks; instructions were given clearly, and estimated times to complete had been shared with participants to mitigate drop out or non-completions. If the CV scores were not returned, an email was sent reminding them to complete and return (see Appendix 10). The Recruiters were assigned to one of two groups: one for CVs with employment history and the other groups for CVs without. The researcher appointed the group to each participant as they were recruited, ensuring distribution in each group of Private, Public, or Agency worker – the intention was to avoid all public sector recruiters, for example, being in either the group With or Without Employment History.

Once the scored CVs had been returned, an email was sent to the ‘recruiters’ within one week, with a link to the IAT (via the Millisecond site). The IAT was completed online, allowing participants to complete the test from their home or workplaces rather than attending the researcher’s site. The Inquisit software was available to participants following a ‘download’ option once they had received the link. This was an option to download a ‘player’ to complete the test without having the full software on their devices. The IAT items, but not the IAT itself, was shared with a reference group (Appendix 10), who had also been used for Walter-Nelson, Yarker and Lewis (in preparation). The purpose of this was to identify if these Traits and Attributes were familiar and consistent with expectations of each sector; as the IAT relies on differences in the speed in “gut reactions”, it felt necessary to ensure that these items were not onerous and, did not need deep thought as a concept. The results were that these were well aligned, and no items were changed. The IAT results were shared with participants immediately on the test's final screen, with a short description of what that score meant. These results were then stored in a file on the Millisecond website, accessible to the researcher via a secure login.

### *CV Scoring*

Recruiters scored the CVs; participants had experience in Recruitment Agencies or In-house recruitment roles in either the Public or Private sector. The scoring system selected was consistent with those used in practice by recruiters. The recruiters were assigned to either a With or Without Employment History group by the researcher. The recruiters were scoring the CVs for whether they 'would take forward' for an interview, based on comparison to the Role Outline (job description) of Project Manager (using a role outline from the Project Management Institute (Appendix 4). The recruiters, once they had completed their consent and reviewed the Participant Information Sheet (Appendix 2), were sent a pack of CVs either with or without employment history via email. No CVs contained names or demographic information about the candidates. They were also sent the scoring sheets (one per candidate) and instructions for using the scoring sheets (Appendices 3 and 4) and the role outline. Other scoring measures, which are much more detailed, have been used in academic research, such as Braileanu et al. (2020), were not used here as we believed that this would not be close enough to the daily practice of recruiters[28] (Moss, 2013).

### *IAT*

The recruiters completed an Implicit Association Test (IAT) after they had scored the CVs. 'Recruiters' were sent a link to the online IAT (hosted on Millisecond, Inquisit software) via email after submitting their scoring sheets. They were informed of the time needed to complete the IAT as a way to mitigate drop out. A reminder was sent via email to Participants after one week, for those who had not completed, with a further reminder sent the text of the reminder emails is in Appendix 9.

[28] Using CIPD guidance as a proxy for how recruitment processes work in practice.

With the IAT data being collected, we acknowledge Landy's (2008, p384) points that most IAT studies do not necessarily represent "the real work setting", and his arguments that the individuating information that supervisors hold could mitigate the use of stereotypes in decision making, however, this is unlikely to be the case in everyday recruitment activities. Most recruiters are unlikely to know the applicants for roles they are assessing; in some cases, they will have internal applicants that in-house recruiters see or where an agency has seen a candidate more than once. However, we believe that most recruiters receiving a CV will be doing so for the first time or skimming it so quickly (Ladders, 2018, p2) that they may well be falling back on stereotypes and biases hold for different sectors.

## Measures

### *CVs*

Recruiters were asked to rate each CV for suitability for a project manager role in either public or private sector and, therefore, their likelihood they would put them forward to a shortlist for an interview. The ratings were from 0-3, where scores of 0 or 1 meant that the candidate failed to meet the criteria, or more specifically, 0 is little or no evidence of meeting the specification and one that there is weak evidence for meeting the job specification. A score of 3 or 4 meant yes, the candidate would be taking through to the next stage, and more specifically, that three means they met the minimum requirements of the role and four they exceeded the requirements of the job specification. There was also space on the scoring sheet for the recruiters to provide feedback commentary as desired. However, this was not a mandatory request. This scale was derived from the examples of CV scoring within the Grey literature, as this is a large source of material and guidance accessed by practitioners in the field of recruitment[29]; the grey literature does not always propagate the inclusion of a numerical score; however, to generate data for analyses, this was a requirement of this research.

[29] Volume recruitment: Six sifting technique pros and cons - Personnel Today

In a 2010 survey of 579 UK organisations, Zibarras and Woods (2010) found that CVs appeared to be the most prevalent selection method, despite being described as an Informal method of selection. In this study, there was a difference between sectors using formal versus informal selection methods, with public and voluntary sectors more likely to use formal methods. Although CV (or resume) screening as a practice has been vulnerable to hiring discrimination (Derous & Ryan, 2019), it is still the most widely used tool, even in other countries; with 98% of North American countries using this method (Piotrowski & Armstrong, 2006). The use of CVs as a method for research has been growing; Cañibano and Bozeman's review in 2009 describes this as a burgeoning research approach, followed some years later by Bawazeer and Gunter (2016), highlighting the number of ways in which CV research can be applied as both a primary and complementary method. Whilst this has primarily been used in research involving faculty staff (Sandström, 2009; Bawazeer & Gunter, 2016; Braileanu et al., 2020), there is a need to link the use of CVs with hiring decisions made by HR staff as this is vulnerable to bias (Derous & Decoster, 2017).

The innovations and ways of working that come from practice (i.e., grey literature) in various fields (Adams et al., 2016) help drive what practitioners do daily. As a result of this, a standardized scoring system is not currently in use. Advice about the use of 'blind' recruitment is generally circulating (Simmons, 2016; CIPD, 2015), but even this, to reduce discrimination, is not a mandatory practice across the HR and recruitment professions. In Recruitment Agencies, it is not a requirement even to be a registered member of the CIPD[30]. As a result, practice varies, and as one agency told the author, they do not always use scores when sifting, just what they feel would be a good match; amounting to relying on a kind of 'perceived wisdom' in terms of their practice (Briner & Rosseau, 2011), and certainly not evidence of evidence-based practice being regularly implemented (Briner, 2015).

[30] On August 15th, 2020 of 4236 jobs returned on Indeed search engine, in the first 2 pages, 8 roles were to work at recruitment agencies, and none of the adverts specified CIPD as a requirement. In some cases, only 12 months experience earned in the workplace was listed as a requirement for the role.

### *IAT*

The study used the Inquisit software (Millisecond Software LLC, Seattle) for building and administering the test.  The Inquisit software provided by Millisecond, allows the researcher to download a blank script, that is, a script which has the formatting for upload into the software pre-set with blank spaces into which the researcher can add their own attribute-pairings. This allows the researcher to 'build' the correct script for testing the two variables (in this case Public and Private Sector), from their own list of attributes but without the researcher having to spend time coding in the elements required for the system to display the pairings on screen for the participant. The IAT script used here then, was built using information from Walter-Nelson, Yarker and Lewis (in preparation); Values and behaviours that were statistically significant and distinct in each sector were used for the Public and Private sector attributes and traits. The script followed the Inquisit script template for where two comparisons are being made (Private vs Public Sector in this case). Other script templates are available for different numbers of comparisons; these scripts also come pre-formatted for upload to the software package in terms of layout, coding and colours (please see Appendix 7 – IAT screens for how colour is used to distinguish the two variables).

The Attribute-Trait pairing for the IAT are as follows:

Public – Bureaucratic / Private – Ambitious. Each of these pairings contained 16 items (see Appendix 6). These items were a product of the systematic literature review from Walter-Nelson, Yarker and Lewis (in preparation), where studies found statistically significant differences between sectors. The statistically significant items became the Attribute – Trait labels.

The strength of an association between concepts is measured by the standardized mean difference score of the 'hypothesis-inconsistent' pairings and 'hypothesis-consistent' pairings (d-score), this is "computed from the performance speeds at two clarification tasks in which association strengths influence performance" (Greenwald, Nosek & Banaji, 2003, p.197). Inquisit calculates d-scores using the improved scoring algorithm described in Greenwald et al. (2003). Faster responses for the Public-Bureaucratic/Private-Ambitious task than for the Public-Ambitious/Private-

Bureaucratic task indicate a stronger preference for Public – Bureaucratic than for Private-Bureaucratic. Error trials are handled by requiring respondents to correct their responses according to the recommendation.

The IAT used assessed the strength of associations between the Private and Public Sectors by determining response latencies in computer-administered categorization tasks. The process involves seven blocks in total, with three blocks of Practice tasks and four blocks of the test conditions (Table 7). Participants classify their responses by rapidly pressing keys (e.g., 'e' key for one stimulus and 'I' key for the other).

*Table 10: Overview of Implicit Association Test Blocks*

| Block | Trials | Function | Left Button (E) | Right Button (I) |
|---|---|---|---|---|
| 1 | 20 | Target Sorting Practice | Bureaucratic | Ambitious |
| 2 | 20 | Attribute Sorting Practice | Public | Private |
| 3 | 20 | Test 1 | Public & Bureaucratic | Private & Ambitious |
| 4 | 40 | Test 2 | Public & Bureaucratic | Private & Ambitious |
| 5 | 20 | Target Sorting Practice | Ambitious | Bureaucratic |
| 6 | 20 | Test 3 | Public & Ambitious | Private & Bureaucratic |
| 7 | 40 | Test 4 | Public & Ambitious | Private & Bureaucratic |

*NB: Half the participants started with Test 1 through to Test 4 as per the table, and half-completed in the opposite order.*

The IAT was selected as this allows for a demonstration of preference across the recruiter sample; it seeks to demonstrate the associations that people make to concepts; in this case, we take the concepts that the SLR says exists, or not, between values and the public and private sector. While the IAT has been criticised in some circles, concerns have been raised that it is a 'fad', Greenwald Nosek and Banaji (2003) suggest that the D score fared more favourably than other measures about explicit-implicit correlations, demonstrating construct validity. Carpenter et al. (2019, p2205), in reviewing the use of IAT, explicitly reviewing the use of Inquisit software for the administration of IAT's, as used here, found that "Survey-software IATs appear to be viable and valid", this appears to be consistent with Greenwald, Poehlman, Uhlmann and Banaji (2009, p30) “the incremental validity of IAT measures was relatively high”. The IAT provides a rating for each participant on a scale of -2.0 to 2.0. Anything above 0.65 or below negative 0.65 indicates a "strong" link (Azar, 2008, p44).

Whilst Gawronski et al. (2017) highlighted a potential issue with IAT’s, in that implicit associations have lower stability over time, this was not felt to be a barrier to its use here as the ‘recruiters’ were asked to undertake the IAT within a week of scoring the CVs, and so, close to the task. There are also some questions raised at the nature of implicit associations in this Gawronski et al. (2017, p310) study, in terms of “implicit measures [are]… being…less anchored in the past than explicit measures”, potentially implying that recruiters and hiring managers do not ‘hang on to’ any implicit bias. From a practitioner perspective, although a legal one rather than a psychologist, Landy (2008, p384) offered that the IAT and stereotyping research is too far removed from “real work” to draw any usable inferences. The author agrees that research conducted solely in laboratory or classroom environments on the nature of workplace decision making may be untenable in a litigious setting. However, this research is conducted with participants active in the field (not student populations) and utilizes more than just the IAT to understand whether these biases exist. The lack of ‘validity’ Landy speaks of is concerning a form of ‘evidence’ in a court of law, which the researcher acknowledges is not where this research is heading; this is about understanding if bias creeps into decisions that could reduce a talent pool or diminish mobility in the labour market.

## Analytic Strategy

Data analysis was conducted using Inquisit software (IAT; Millisecond Software LLC, Seattle, 2019) as well as Microsoft Excel (O365) and SPSS Version26 (IBM Corp, 2016) There was an IAT dataset missing, as Recruiter 5 did not complete this task. This participant was in the With Employment History group; for examining correlations between IAT and CV scores in the With Employment History group, the pairwise deletion was applied in SPSS.

### *CV data analysis*

The CV data was from independent groups (With and Without Employment History) and answered Hypotheses 1 and 2. To do this, descriptive statistics were calculated, such as central tendency and dispersion, and were followed by an independent samples t-test. The data is shown analysed by group (H1), and then by Recruiters Sector, By Group (H2) Effect size were also calculated, using Cohens *d.* An ANOVA was used to assess the scores by recruiters' sector: Public, Private and Agency. In the With Employment History group, the recruiter's data was to be used again to understand whether there is any relationship to the recruiters IAT scores.

### *IAT Data Set*

The IAT, the D and its distribution calculation were used to understand the recruiter participants' implicit bias. This data spoke to Hypothesis 2 (H2). According to Greenwald, Nosek and Sriram (2006, p57), the IAT's association strength measure was labelled with the letter D "to acknowledge its relation both to signal detection theory's *d* measure and to Cohen's (1977) *d* measure of effect size for differences between means". When reviewing IAT scores as calculated using the Inquisit software, we used Greenwald, Nosek and Sriram's (2006) interpretation, where 0 indicates no difference in strengths between the pairs of associations. The standard IAT score ranges from –2 to +2 with conventional breakpoints of >.15, >.35, and >.65 signifying slight, moderate, and strong implicit preference, respectively (Al-Hoorie, 2016).

The power calculations and Greenwald, Nosek and Banaji (2003) suggest that approximately 39 participants would normally be required for an IAT using the improved scoring algorithm, meaning our sample is lower than required at 30. However, the population used are high-cost; they are inevitably busy individuals and attracting them to participate in research is challenging. The distribution of IAT scores was examined first and then examined further for potential relationships between the IAT D scores and the mean CV scores from the With Employment History group, where the Candidate and Recruiter sector are the same. This was conducted using Pearson's correlation (assuming normal distribution based on a sample size of n=30). This data was to be used to explore Hypothesis 4 (H4).

### Ethics

Ethical approval was sought and granted by the University of Kingston Ethics Committee. Participants were provided with information relating to the CV and questionnaire process and what would happen to the data gathered. Each participant gave informed consent and was made aware of their opportunity to withdraw at any research stage. Data were stored confidentially on a password-protected site in a pseudonymised format.

Data within this research is processed under the legal basis that it is in the public interest, as described by the UK Information Commissioners Office (ICO) and British Psychological Society (BPS) guidance for researchers about the GDPR legislation of the UK (Data Protection At 2018). The data has been pseudonymised to protect participants personal data, and participants were informed of how their data would be stored in the informed consent form they completed before taking part in this research (Appendix 1).

The personal data used in this research include the gender of participants and length of experience (in years); their age, ethnic group or disability status were not of interest to this piece of work, and thus, were not collected. These data were processed so that there could be meaningful comparison and statistical analyses to produce research to be added to occupational psychology's academic literature and fulfil a professional doctorate.

## Results

### Research Question & Hypothesis Testing

*CV Scores:*

No missing data were found in the CV scoring exercise carried out by recruiters in either group (With Employment History or Without Employment History). Table 11 shows the measures of central tendency for the CV scores across candidates. For CVs With Employment History, the mean score was 1.65, and 2.24 for those Without Employment History, the potential scores were 0 – 3 (0&1 no taking through and 2&3,

would take through to interview). There is a difference of 0.59 between the two groups, indicating that recruiters were more likely to rate CVs higher where there was no employment history.

*Table 11: Measures of Central Tendency (CV scores) by Employment History Group*

| Group | n | Mean | SD |
|---|---|---|---|
| With Employment History | 5 | 1.65 | 0.24 |
| Without Employment History | 5 | 2.24 | 0.14 |

The five participants in the With Employment History (M=1.65, SD = 0.24) compared to the five Without Employment History (M=2.24, SD=0.14) received significantly lower scores $t$ *(8)* =4.748, $p$ = .001, $d$ = -3.00, 95% Confid, for their CVs. Hypothesis 1 (H1) is accepted. There is a large effect, d = -3.00 within the data, where a negative difference indicates a higher average for the Without Employment History group. This follows the effect size conventions introduced by Cohen (1988), where <0.2 is not a considerable difference, 0.2 to 0.5 is small effect size, 05 to 0.8 is medium effect size, and >0.8 is large effect size (these scores can be either positive or negative values). The data in table 11 indicates that recruiters in all groups scored CVs without employment history higher than those with it.

*Table 12: Measures of Central Tendency (CV scores) by Recruiter's Sector*

| | | Overall | | With Employment History | | Without Employment History | | With Emp History – Same sector (Recruiter & Candidate) | |
|---|---|---|---|---|---|---|---|---|---|
| **Sector** | **n** | **Mean** | **SD** | **Mean** | **SD** | **Mean** | **SD** | **Mean** | **SD** |
| *Public* | 7 | 1.59 | 0.15 | 1.60 | 0.32 | 2.10 | 0.01 | 1.44 | 0.04 |
| *Private* | 15 | 1.84 | 0.09 | 1.88 | 0.12 | 2.40 | 0.01 | 1.75 | 1.19 |
| *Agency* | 8 | 2.25 | 0.17 | 1.25 | 0.15 | 2.25 | 0.01 | *NA* | *NA* |

Further analysis was conducted on the returned scores to see the Recruiter's sector's results in the With Employment History group. This is to understand whether CVs were given higher scores, where the candidate and recruiter sector were the same, to answer Hypothesis 2 (H2). Table 12 is an overall view of the CV scores by recruiters Sector for With and Without Employment History. Interestingly, the recruiters gave their sector CVs a lower combined mean score than the combined mean of all sectors in the With Employment History group.

An ANOVA was used to examine whether recruiters scored CVs more favourably for those in the same sector than the other two sectors (Public, Private, Sector Switchers). There was no statistically significant difference between the three candidate groups in terms of their CV scores, Public, $F(2)=2.244$, p .129; Private, $F(2)=1.62$, p.239; Mixed (sector Switchers), $F(2)=1.612$, p.239.

*Table 13: CV Score means, by Recruiter sector, by CV sector.*

| Recruiter sector | n (recruiters) | With: Public | | With: Private | | With: Mixed | |
|---|---|---|---|---|---|---|---|
| | | **Mean** | **SD** | **Mean** | **SD** | **Mean** | **SD** |
| Public | 3 | 1.44 | 0.77 | 0.67 | 1.15 | 0.67 | 1.15 |
| Private | 8 | 1.71 | 0.38 | 1.75 | 1.16 | 1.75 | 1.16 |

The posthoc Tukey tests were conducted, and no significant differences were found. Because group sizes were unequal and a harmonic mean (M=4.235) used, Type I error levels could not be guaranteed. Hypothesis 2 (H2) was, therefore, rejected.

In table 13, Recruiters from an Agency were not shown against “Same Sector” as recruitment agencies typically provide a service to public and private organizations. Below, in table 14, the Agency recruiters CV Scores are shown by the Candidate’s sector.

*Table 14: Agency Recruiters CV scores, for all sectors*

| | | With Employment History | | Without Employment History | |
|---|---|---|---|---|---|
| ***Candidate Sector*** | ***n (Candidate)*** | **Mean** | **SD** | **Mean** | **SD** |
| Public | *4* | 1.00 | 0.82 | 1.75 | 0.43 |
| Private | *3* | 0.75 | 0.83 | 2.63 | 0.48 |
| Mixed (Sector Switchers) | *3* | 2.50 | 0.50 | 2.13 | 0.93 |

The Agency recruiter's CV scores appear to follow a similar direction to the other two recruiter groups, in that the Without Employment History CVs have fared more positively.

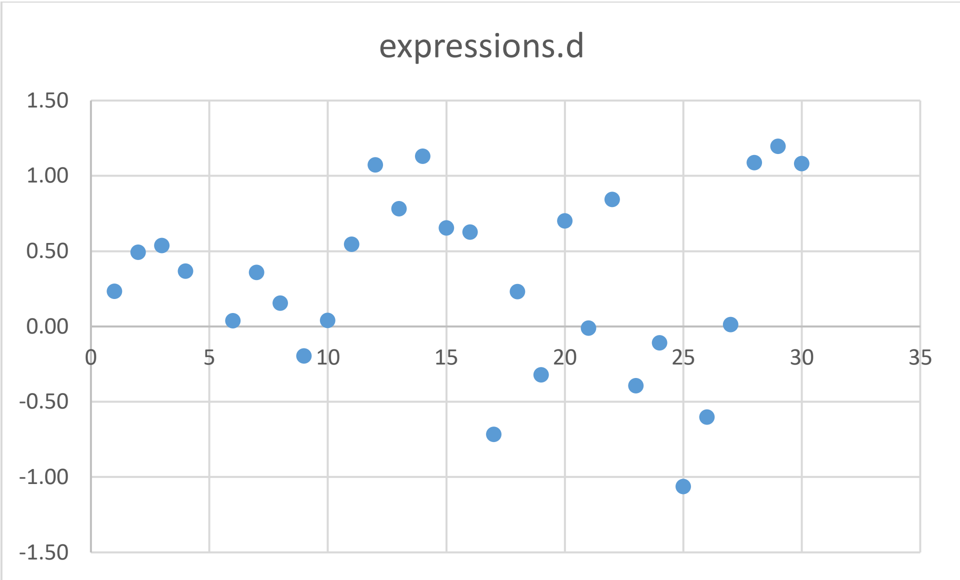
### *Implicit Association Test (IAT)*

The IAT data were examined for extreme responses as described by Greenwald, Nosek and Banaji (2003), and there were 0.002% above the 10,000-latency threshold (combined practice and test conditions), 0.01% of which had latencies less than 300ms for more than 10% of trials (Greenwald, Nosek & Banaji, 2003) and as such were removed from the analysis. Some research suggests that other exclusions can be applied to participants who, for example, have either large errors or few items completed (Schwartz et al., 2003). However, the Millisecond software, which uses the improved scoring algorithm, means that the participants corrected the errors on-screen during the task, thereby forfeiting the need to make these exclusions in this data.

The IAT scores test hypothesis 3 (H3) and will be used for hypothesis 4 (H4). In this IAT, positive scores indicate an automatic preference for Public Sector (The Attribute-Trait pairing for the IAT are as follows: Public – Bureaucratic / Private – Ambitious.).

The D score is the combined score from the practice and test blocks, with da scores representing the practice blocks and db scores representing test blocks only. A visual inspection of the D score was made and is shown here in figure 3; this provides the first view of data and where scores lie; in this case, the majority of recruiters were on the positive side of scores, indicating an automatic preference for Public Sector (18 of the 29 responses, removing No Preference).

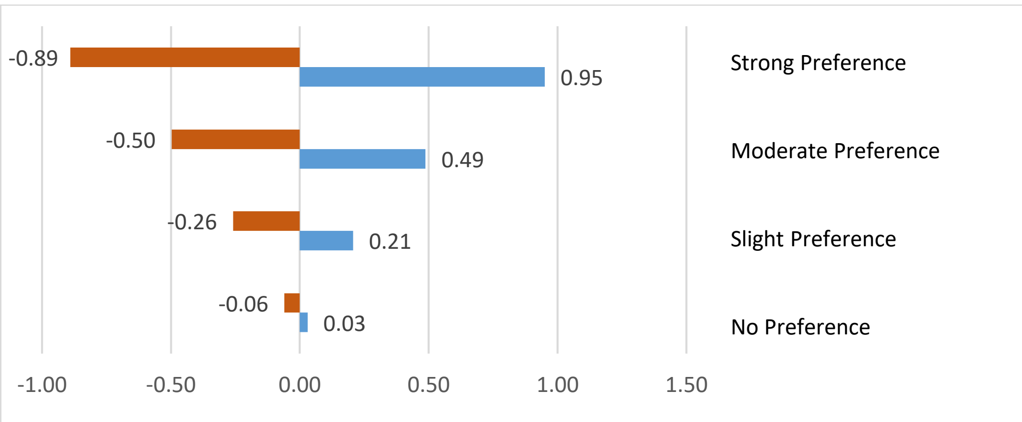
*Figure 3: Distribution of d, recruiters IAT scores*




The standard score ranges of -2 to +2 were used, with breakpoints of >.15, >.35, and >.65 to signify slight, moderate, and strong implicit preference, respectively (Al-Hoorie, 2016).

Figure 4 shows the participants D scores by preference strength across both With and Without Employment History groups.

*Figure 4: Participants (recruiters) preferences, by Strength of Association (IAT) for both CV groups*



The overall preference for Public Sector was significant, compared to a preference for the Private sector $t$ (27) = 2.97, p=<.006, across all recruiters (in with and without employment history). However, the hypothesis (H3) was that recruiters would show a preference for their sector (i.e., Private recruiter - Private preference), regardless of the CV group they were part of. Table 15 shows the number and preference of recruiters by recruiters' sector.

*Table 15: IAT scores for recruiters by recruiter's sector, showing sector preferences*

| | ***Overall*** | | | **Public preference** | | | **Private Preference** | | |
|---|---|---|---|---|---|---|---|---|---|
| ***Recruiters Sector*** | *n* | *M* | *SD* | *n* | *M* | *SD* | *n* | *M* | *SD* |
| **Public** | *7* | *0.15* | *0.048* | 5 | 0.42 | 0.041 | 2 | -0.52 | 0.714 |
| **Private** | *10* | *0.07* | *0.090* | 6 | 0.50 | 0.069 | 4 | -0.93 | 0.970 |
| **Agency** | *7* | *1.00* | *0.397* | 7 | 0.88 | 0.437 | . | . | . |

Using the standard breakpoints, we can see that overall, public sector recruiters had a slight preference for the Public sector (m=0.15), private sector recruiters had No Preference (M=0.07), and Agency recruiters had a Strong preference Public Sector. Examining the differences between scores for the public and private sector, by recruiters' sector, it can be seen that more of the public sector recruiters had a greater preference for the Public sector than Private (n=5 versus n=2), and a t-test revealed this preference was significant $t$ (5) = 3.50, p<.02, though this only falls into a Moderate preference (m=0.42) using the IAT's standard breakpoints.

Looking at the private recruiters now, Table 15 shows that although more of the recruiters showed a preference for Public Sector (n=6 vs n=4), there was a significant preference for Private Sector in this group using the IAT D; $t$ (8) = 38.49, p<.001. For those private-sector recruiters showing a Private sector preference, this was a Strong Preference (m= -0.93).

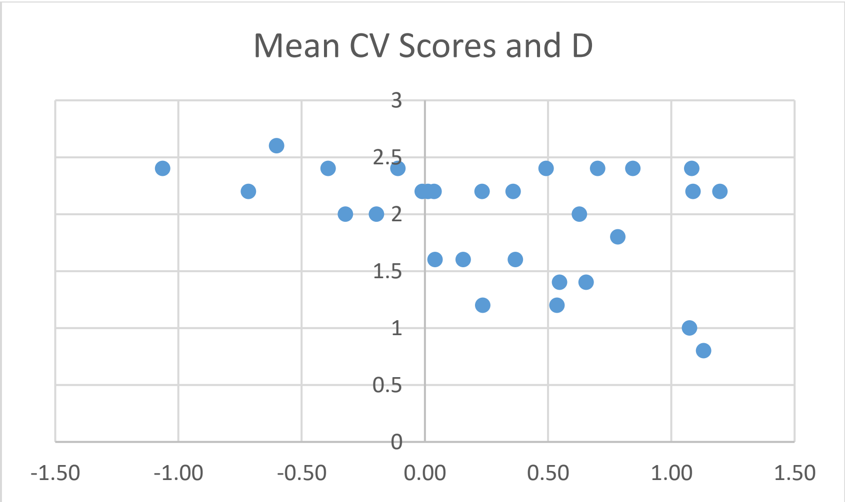
As a result of these tests, we can accept Hypothesis 3 (H3); the recruiters did show a preference for their sector over the other.

Agency recruiters are technically within the Private sector themselves; however, their role is generally to work across both sectors. No statistical tests were conducted on their data as they showed a Strong Preference for Public Sector, and no scores were registered in favour of the Private Sector at all (see Table 15).

### *IAT and CV Scores*

To test hypothesis 4 (H4) involved looking at whether a relationship existed between IAT scores and CV scores, there is a positive relationship between IAT scores and CV scores for the own sector. The initial inspection of this data, across both groups (n = 30), did not appear to show a real relationship, as shown in Figure 5.

*Figure 5: IAT scores and CV Mean scores (all groups)*




As Hypothesis 4 (H4) would then only be answered by looking at With Employment History only group result (n = 15), it was felt that they were not suitable for further report. This does, however, help us to understand that further work is needed in this area.

## Summary of Results

With three different data sets, a summary seems prudent for understanding what the results tell us concerning the acceptance or rejection of the hypotheses and research questions, shown in Table 16 below.

*Table 16: Summary of Hypothesis acceptance or rejection*

| Hypothesis | Accepted / Rejected |
|---|---|
| 1. Those CVs in the With Employment History group will receive lower scores than those in the Without Employment History group | Accept |
| 2. Recruiters will be influenced by sector, and as such will give a higher score to those candidates' CVs in the same sector to themselves (With Employment History group only) | Reject |
| 3. Recruiters will show an implicit bias toward their own (current) sector | Accept |
| 4. The higher the preference shown for own sector, the higher the CV scores will be for CVs from the same sector as the recruiter (using the With Employment History group) | Data set too small |

# Discussion

## Overview

Recruitment is a significant business (a reported £38.9bn Industry in the UK in 2019[31]), and even though 2020 and 2021 have been affected by the global COVID pandemic, the figures are still somewhat optimistic (there was a "softer expansion[s] in both permanent and temporary candidate numbers" according to KPMG). Practitioners, whether they are in-house recruiting / talent acquisition staff or providing this service through an Agency, have a clear role to play in acquiring the right person for the job, the first time; the UK Employment Law firm, Croner, estimate the costs of replacing a member of staff to be around £11,000 per person[32], making it an expensive mistake if not done well. Having the right process then is an essential step in avoiding that mistake.

[31] UK – Recruitment industry took in a record £38.9 billion revenue despite a difficult year, 85% generated through temp/contract placements (staffingindustry.com)
[32] How Much Does Employee Turnover Cost Your Business? | Croner Group 2018

This research was exploratory, looking at the issue of bias related to the sector (Private or Public) and whether that bias impacts selection decisions. By extension, could this reduce movement in the labour market.

### *CV scores*

The main findings were mixed; there were better scores for those CVs without employment history (difference in means of 0.59, in favour of Without Employment History), leading us to accept Hypothesis 1 (H1). This supports academic and professional circles' work that 'blind' CVs produce better results and mitigate biases (CIPD, 2015; Derous & Ryan, 2017). Bias can creep into the process (Thornton et al., 2019; Koch, D'Mello & Sacket, 2015; Pager & Shepherd, 2008), and there have been studies regarding this for a range of characteristics such as gender (Seinpreis, Anders & Ritzke, 1999), race (Bertrand & Mullainathan, 2004; Derous, Ryan & Nguyen, 2012; Gaddis, 2017), age (Derous & Decoster, 2017) and 'similar-to-me' biases (Sekiguchi & Huber, 2011; Lee et al., 2015). Any bias in the selection process can aid inequality in the workforce. This study took those ideas of bias and stereotyping and examined if that applied to a candidate's sector. Although a bias against sector would not create the type of conditions we see from other biases, namely discrimination as a result of a protected characteristic, it does speak to the possibility of shortening the talent pool, ignoring skilled candidates (as with Derous & Decoster, 2017 and their older workers), and reducing the movement of labour across the marketplace (sector switching). Given the changes we continue to see from the fallout of COVID in 2020 and 2021, this would not be a comfortable place for either businesses or individuals (as candidates).

These results could indicate that recruiters spend more time assessing the CV when there is less 'key word' information to search for, such as sector information found in employment history. We did not control for these variables or time the recruiters when assessing the CVs, so further research would be required to understand this better. Interestingly, the candidates with a varied history (having been a sector switcher) proved to be more highly prized by the recruiters, which contrasts with the grey literature on sector switching – that it is difficult. Additional feedback was not sought from the recruiters on their choices over and above their scores for the CVs but had it been, then it may have been possible to analyse what it was about these more impressive candidates, or indeed if these CVs were of better quality (although all met the role profile at 75%). This may be a question for future research, to understand in more detail the skills, competence, or 'value' that these candidates seemingly offered over non-sector switchers.

Although the results were significant at the With and Without group level, we found no evidence to support Hypothesis 2 (H2), that recruiters would score CVs of candidates in their sector higher than CVs not in their sector. For private sector recruiters, the mean score across all candidates were very similar (Public m = 1.71, Private and Mixed both m = 1.75). The reasons for this could be related to the generic nature of the role profile being assessed against (project manager), as this is a role with a core set of skills applicable to a range of projects no matter what the sector[33] or project subject (i.e., technology, construction, health etc.). This role was selected because it would allow us to compare the scores on a role that could attract candidates from either sector, therefore offering more 'real world' conditions to the recruiter participants. Additionally, we did not know what biases the recruiters may have held prior to this research, it is not known whether there was a similar-to-me bias, as the recruiters may have already held a preference for the other sector.

### *IAT*

There were an overall majority and significant preference for the Public sector regarding the IAT data set, even for those recruiters in the private sector. Although worth noting that this level of the analysis (all groups) was not the focus of Hypothesis 3 (H3). The IAT words used for the Attribute-Trait pairing were gathered from the SLR outputs undertaken as a precursor to this study. The words could lend themselves to both sectors, and therefore it may have been difficult for recruiter participants to separate these words into two distinct sectors. The values of Support and Honesty, for example, were significantly associated with the private sector (support) and the public sector (honest), respectively, in Walter-Nelson, Yarker and Lewis (in preparation); therefore, used as such in the IAT attribute-trait pairings. However, conceivably, these have become more critical values to the place of work in all sectors. This may be

[33] 17 essential project management skills | APM (Association of Project Management)

because the world of work around us is changing; from increases in the awareness of, and support for, mental health issues in the workplace (requiring more honest conversations) (CIPD[34]) to the loss of the public's trust in industries such as banking[35] (Hurley, Gong, & Waqar, 2014). These factors may be why values such as honesty and support are sought after and appeal to both sectors' recruiting managers. Walter-Nelson, Yarker and Lewis (in preparation) highlighted that many studies found differences between sectors as found similarities. This potentially indicates a change in the way we perceive these values across businesses. It may not simply be a case that the Private and Public Sector are different 'beasts' anymore. The move to incorporate public sector (NHS) values in the Governance Code[36], for large UK companies, for example, as well as the drive for more 'competitive' processes within government departments (i.e., use of Official Journal of European Union [OJEU] for procurement procedures[37]), has perhaps eradicated the differences that may have once existed. It is possible that grey, unempirical literature is not keeping up to date with these changes.

Whilst the results themselves being significant is interesting (public $t$ (5) = 3.50, p<.02; private $t$ (8) = 38.49, p<.001.), it is also interesting to examine the strength of that preference across those groups. For the public sector recruiters, their preference for the public sector was only Moderate (m = 0.42), whereas the private sector recruiters demonstrated a Strong preference for the private sector (m = -0.93), despite fewer actual participants in the private sector recruiters group showing a preference at all for the private sector; only four of the ten did. The results of an overall preference for the public sector may therefore lie in the number of participants having an implicit preference for this, rather than a strength of preference for this when grouped up. These results could be reflective of a similar to-me bias (Sekiguchi & Huber, 2011), the kind that we see in both formal and informal selection methods (Thornton et al., 2019) and which can be driven by stereotypical views (Pager & Shepherd, 2008; Koch, D'Mello & Sacket, 2015) of what a particular sector in this case, 'looks' like.

[34] Mental Health in the Workplace | Factsheets | CIPD
[35] Honest approach is right approach for economy says bank chief | TheBusinessDesk.com
[36] 2018-UK-Corporate-Governance-Code-FINAL.PDF (frc.org.uk)
[37] What is OJEU? Everything You Need to Know About OJEU Tendering (supply2govtenders.co.uk)

### *IAT and CV scores*

We saw that recruiters had an implicit bias, preference, for their sector, as Hypothesis 3 (H3) was accepted, but we also saw that the scores in the With Employment History group revealed no preference for their sector (CV scores; Hypothesis 2 [H2]).

Unfortunately, the With Employment History group (n = 15) sample was too small to carry out statistical checks to confirm Hypothesis 4 (H4). The Without Employment History group could not be included in this analysis as it would be unlikely that they would incur sector bias as recruiters could not see what sector had been worked in by the candidates they assessed (the nature of the CV format dealt with that).

These results would have provided some interesting insights regarding whether an implicit bias impacts a practical issue such as selection decision. In other studies, stereotypical views of workers have negatively impacted decision-making, albeit based on more sensitive categories than Sector (for example, race and age in Lee et al., 2015) and trust in institutions (Knoll et al., 2019). Using these more sensitive categories, the similar-to-me bias for own social group may have been more potent because of the strength of ties, over a lifetime, with ones social groups, as opposed to the work group, which some people may simply “fall into” (Corby and Stanworth, 2009, p163).

## Strengths and Limitations

### *Data sets*

It was essential to the researcher that there be a range of measures taken to ascertain whether Sector can be a form of bias in the selection process, as, from a pragmatic approach, one data set on its own may not be able to tell the whole story (Sandstrom, 2009; Cañibano and Bozeman, 2009). There is a need to go beyond single streams of information and to examine multiple data points, especially for practitioner psychologists and HR professionals. Multiple data points can aid data exploration (Grimm, Jacobucci & McArdle, 2017) and help create an overall picture of the scenario, increasing the evidence-based approach in selection and assessment processes. There is, it appears, a reliance on a range of unempirical information (Briner, 2015) within the practitioner community, and as such, views can become skewed, and those ‘ideas’ which are shared can become embedded in the processes they undertake. Gutfeel is one such issue, as is the seeming inability to move between sectors without a degree of difficulty (i.e., Forbes 2019; Black, in the Financial Times, 2018; INSEAD business School blog 2019).

The ability to have retrieved multiple data sets for comparisons, and a brief exploration of relationships, adds a richness to the results, and progresses Cañibano and Bozeman (2009, p89), in that: “The use of curricula vitae combined with other data sources is contributing to shedding light on the actual effects of mobility”. As a result of not emulating classic CV studies, this work was not a true field experiment, and so does introduce a risk that participants were influenced by the knowledge this was an experiment. In addition to these theoretical concerns, a CV study delivered ‘classically’ also required a high financial budget (Adamovic, 2020), something not available at this time to this research project. Future research could address this by utilising the data already collected during recruitment processes to create a true field experiment.

### *Samples*

The sample sizes are small, and we acknowledge that this may reduce the impact of the research. However, the combined data sets provide an overall picture of whether the sector is a form of bias in selection and assessment. The effect sizes for the CV scores were large, indicating that 30 recruiters scoring five CVs were sufficient to understand this issue. This may seem incongruous compared to the extant literature for CV studies, where large samples are generally used, such as Snowman and Kacharska (2020), where 202 professionals rated CVs, or the 40 CVs and 72 raters used in Kessler, Low and Sullivan’s (2019) paper. However, in Snowman and Kacharska (2020), the sample were media professionals, rating ‘fake CVs’, those which had been constructed for the study rather than belonging to real people, which is the same in Kessler, Low and Sullivan’s (2019) work. Here, we have used real people as candidates and recruiters who have relatable experiences. The Sandstrom (2009) study, whilst using 326 CVs, did not have raters or recruiters scoring these; instead, they used citation analysis to understand the CV characteristics, making it easier to have such a large CV set than in this current research. This approach was not felt suitable for this work as understanding the recruiter was integral to the investigation. Having the opportunity to assess the implicit preferences of those in decision making roles and seeing that against decisions they had made (as scored CVs before taking the IAT) increases our understanding of those processes (Sandstrom, 2009).

We were below the IAT's recommended sample size, even for the improved scoring algorithm (Greenwald et al. 2003). As such, the data provides an exciting overview but will require further investigation in future research to determine whether similar results can be found in an expanded sample. Here though, these scores add to the information being examined in a way that allows us to create a richer picture than CV scores alone would. It is also an effective way to examine our recruiters' implicit bias following their scoring of our CVs to determine if these biases present themselves in a practical way in the process (i.e., in the CV scoring).

The recruiters and candidates were not evenly spread across sectors – this may reduce the impact of the research presented here. Equally, this research does not contain any qualitative assessment, and perhaps, contrary to what the researcher believed at the start of this process, recruiters' views and behaviours cannot be entirely distilled to numbers. As such, descriptions of real-life experiences, including the act of balancing role requirements with client desires (Fabel, Hopp & Speil, 2020), may have added integrity and context to our understanding (Kinder, Stenvall & Memon, 2019) of decisions made. Therefore, future research should include aspects of the qualitative approach to understanding hiring behaviour and the factors that impact recruitment decisions, primarily where no 'grading' system exists to provide objectivity. There may be subcultural differences, potentially influencing perceptions of person-organization fit, which affects hiring decisions (Snowman & Kacharska, 2020) that a qualitative approach may help uncover.

A positive feature of the current study was the use of a nonstudent population, chosen to increase ecological validity, specifically, to reflect the experience of candidates by using real CVs and recruiters by asking them to sift CVs, which is normal, context-specific behaviour, for these participants (Holleman et al., 2020). This does not mean that the sample was without limitation. The practicalities of organisational research meant that recruitment was more challenging than anticipated. Obtaining any nonstudent, high-cost population is complex, mainly as those are the very features that make them valuable to the research.

### *Agency Participants*

The number of recruiters in recruitment agencies who withdrew their intention to participate in the study once they had seen the information leaflet was high. The reason that many gave was that the practice of scoring CVs was not their standard practice. A lack of scoring systems was a surprising revelation to the researcher, as no participant in an in-house setting, either public or private, raised any concerns or had any questions about the scoring method applied. While this led to some initial delays in the research, a smaller sample of agency recruiters did volunteer to participate, some of whom did alert the researcher that they too did not commonly use a system to score CV. Future research in this area could focus on working with agency recruiters, as although there was resistance, their results were of interest, and this is a large industry with great reach.

This type of feedback provides insight into the recruitment practices in the field. Although scoring CVs is not the only method for shortlisting, it is a transparent process, especially when those scores designed to identify a match between a CV and a job description. Surprisingly, the CIPD's 'factsheets' (a resource for CIPD members on a range of topics) currently on their webpages, for recruitment do not give examples of shortlisting methods. In the CIPD research paper, A Head for Hiring (2015, p13), the body promotes the idea of "comparing CVs and application forms in groups. When possible, take out names and any identifiable information (including address) before scoring CVs or application forms." The CIPD guidance, which incorporates legislative requirements, requires a fair and transparent process for selection at all stages, and yet here are examples of practitioners in the industry unable to articulate how they ensure this. While the researcher is not comparing potential sector bias to other forms of discrimination, the inability to articulate a robust methodology for measuring the worth of candidates’ CVs is a concern within the recruitment industry. Perhaps this requires further inquiry.

### *Candidates and their CVs*

An advantage with this study was that CVs were anonymous, allowing our recruiters to focus on job relevant information: although employment history was removed, the Skills-based CV format meant that relevant information about achievements in roles was visible. The 'blind' CV is consistent with academic guidance (e.g., Behaghel, Crèpon & Le Barbanchon, 2015; Derous & Ryan, 2017) and professional advice practitioners (Simmons, 2016; CIPD, 2015).

Not all CV studies looking for bias have used actual job seekers/candidate's CVs. This is because, perhaps, as Dietz et al. (2000, p437; see also Cañibano & Bozeman, 2009), concludes, "obtaining CVs was sometimes more difficult than expected" although the effort of doing so made the tasks the participants completed more realistic, or indeed more aligned to their daily activities in recruitment.

In discussing 'best practice' in resume (CV) studies, Adamovic (2020) highlights that the areas normally examined or manipulated in the CVs and sector are not included, so this study adds a unique perspective to CV research. The Work Experience sections, Adamovic highlights, are normally only changed or adjusted to adjust for Age, Ethnicity (in terms of foreign versus domestic experience), breaks in employment (for unemployment, prison, or rehabilitation, for example), or Military Service all of which are sensitive details which could lead to discrimination. This supports our suggestion that work experience (employment history) is a source of biographical information.

An advantage of having active recruiters examine real CVs is that their positions as Project Managers exist in many organisations and would likely be in our recruiters' purview in their daily activities. It also meant that we were able to examine responses to CVs that recruiters may not have seen in our sample who do not always advertise the role on jobs boards or online forums, thereby providing them with an opportunity to examine the candidate against the role outline. The point here is that novel candidates were introduced to recruiters, who may have been in positions where known candidates were the majority of applicants to roles within the business (Adamovic, 2020). There is, of course, a possibility that the differences in results here could be due to group differences in the CVs as they were from ten different candidates. The CVs all matched at 75% to the project manager's role outline, but there may have been some quality differences. However, the IAT outcomes, an alternative source of information about these recruiters, show that some bias exists.

#### *Recruiters Reactions*

Caution does need to be taken in using the IAT and providing feedback on the results. Especially in what that feedback may mean to an individual, they are told that they have a 'strong' bias for one item over another; however, the feedback should be used as an educational device to get people thinking about implicit bias. The background material on the Inquisit web site, Millisecond, clarifies that people should not over-interpret their results. The content also clarifies that the measure is unconscious attitudes, which are the sum of associations and experiences encountered in an individual’s environment.

### Theoretical Implications

This study provides further evidence that gutfeel and informal assessment methods can be ineffective processes to assess candidates (Miles & Sadler-Smith, 2014; De Clercq, Fontaine & Anseel, 2008) as they are likely to include bias. The removal of Employment History from a CV indicates, the less biographical information there is about a candidate, the less impact there is from stereotyping. Here we have added to the literature for the ‘busting of myths’ regarding the public sector in particular (Baldwin, 1990) but also to that which indicates similarities between workers in private and public sectors (Becker & Connor, 2005; Van der Wal & Huberts, 2008; Jelovac, van der Wal & Jelovac, 2011).

This study has also provided an opportunity to see the Implicit Association Test (IAT) applied more practically, alongside a process where decision makers' implicit biases can have a substantial impact. There is a larger body of work where the IAT has been used to examine race, gender, or age biases. Those characteristics, protected in UK law and elsewhere, may well be much nobler pursuits, as the consequences of these are detrimental, particularly for individuals. Here, we hope that using it to examine sectors will again add to the literature on sector switching and the literature on stereotypes, values, and behaviours of each sector, because this can have negative impacts on businesses and individuals working within them. Future research in this area could examine the wider implications that continued use of informal methods, on their own, have for recruitment outcomes. In particular, this could examine movement across sectors, especially in light of the higher scores that sector switchers in this research attracted.

Another area for research is the greater use of data mining in psychological research; the ability to have multiple data sets examining an issue and use that to cross-reference and learn from the data (Grimm, Jacobucci & McArdle, 2017) could be extremely helpful. This could be especially useful for research in recruitment areas as this is an area already rich with data (from experience, applications, decisions and organisations) and has multifaceted societal impacts.

## Practitioner Implications

Several practitioner implications are arising from this study, some of which will require further investigation, but some can be enacted with little disruption to the practitioner.

### *Recruiters*

There is a need for greater use of standardised selection methods—processes that veer away from CVs or application forms, with prominent biographical information. There are already several guidelines, academic papers, and businesses that can supply more standardised methods to an organisation or embed a more standardised approach. This research adds to that which demonstrates that biographical information in the selection process leads to adverse outcomes (here, the lower CV scores). Moving towards more standardised or formal methods such as application forms (where standard questions can be asked), assessment centres, and psychometrics would benefit the recruitment process. These activities provide the organisation with the benefit of understanding the person's capability in the role, rather than focussing on an informal assessment of 'Fit' based on gutfeel.

Following this research, advice to recruiters would be to move towards assessments and processes which allow for predictive performance information to be generated objectively, as this would better support individuals in the process as much as the business using them. These more formal methods would allow for greater inclusion; removing biographical information before the shortlisting phase could see a more diverse talent pool be taken forward to assessments based on observable, measurable activities related to the role.

The lack of participation by agency recruiters was worrying, especially that they did not want to engage in scoring mechanisms for the CVs. This was a simple scoring system (just four possible scores) that would have forced them to examine the CV in conjunction with a role profile; a role profile or brief of the role is a piece of information they would have from a client organisation for a hiring project. This speaks to the grey literature indicating that recruiters may only spend approximately seven seconds reviewing a CV. This is not a practice that should be encouraged as it appears to add no value to the process, to the individual candidate or the organisation. Practitioners can influence this behaviour both directly (where there are in house recruitment services) and indirectly when they engage with agencies. Practitioners, particularly those in occupational psychology, can readily avail themselves of robust and effective recruitment methods and hold to account those they engage in recruitment activities. If this was done, there might well be an eradication (certainly a minimization) of this behaviour type.

### *Employers*

Whilst the results arising from this investigation indicate that the less-sensitive biographical information about Sector does not negatively impact individuals in recruitment decision making, more research is needed still to expand our understanding in this area. This is particularly applicable to the issue of which factors are important in the recruitment process; balancing organisational ‘requests’ (those coming from the to-be Line Manager about the type of person they want to manage) against role requirements (what tasks and objectives are required to be undertaken in the role: i.e., Fabel, Hopp & Speil, 2019).

There are several implications of making poor or wrong selection decisions. The first is the financial implications. First, the economy has already seen a rise in unemployment because of the COVID pandemic (from a low of 3.6% in January 2020 and a rise by September 2020 to 4.8%), and the total fallout is still unknown (as of March 2021). The costs of unemployment are high for any economy, and sector switching, private to public and the public to private sectors, could play an important role in the UK's recovery. Ignoring or overlooking good candidates who have the required skill and experience based on the sector could lead to greater unemployment. In addition to that, selecting the wrong candidate will likely have a direct cost to the organisation; Croner, in 2018, had estimated the costs of replacing a member of staff to be around £11,000 per person[38] , and in 2019, this estimated cost had risen to an average of £12,000 to replace salaried employees[39]. For Small and Medium Enterprises (SMEs) in the UK, a Parliament briefing paper from January 2021 (Ward) showed that the number of business with employees had fallen by around a third since 2000. An SME can employ up to 250 employees (by definition of being an SME), which, using the estimate of a third per annum in staff losses, would be up to 83 staff in that period. Assuming not all that third is replaced, but perhaps, 50 per cent of them, the cost to business could be approximately £498,000 in replacement costs. If even half of those replaced, or needing to be replaced, is because of poor selection decisions, this could directly cost a business around a quarter of a million pounds per annum. In an economy already under pressure from a global pandemic, it would be more prudent for employers to reconsider their selection methods than bear the brunt of these costs.

In addition to costs, this research has highlighted a bias exists in decision-makers (recruiters); in this case for the sector, but in other studies, this also exists for a range of protected characteristics such as age, race, and gender (Seinpreis, Anders & Ritzke, 1999; Bertrand & Mullainathan, 2004; Derous, Ryan & Nguyen, 2012; Gaddis, 2017; Derous & Decoster, 2017; Sekiguchi & Huber, 2011; Lee et al., 2015). Paluck and Green's (2009, p359) review has previously found that "prejudice reduction" could potentially be achieved through interventions focused on changing cognitions or cognitive abilities; that is, engaging in more complex thinking about the issues of bias,

[38] How Much Does Employee Turnover Cost Your Business? | Croner Group
[39] https://www.accountsandlegal.co.uk/small-business-advice/average-employee-cost-smes-12-000-to-replace

moving away from stereotypes and having exposure to counter-stereotypical exemplars (Fitzgerald et al., 2019). This type of intervention could be achieved through more formalised recruitment processes in which observers are suitably trained to look for actual behaviours.

The introduction of 'blind' shortlisting processes against role outlines may reduce the 'skimming' of applications and encourage more critical thinking. Although a range of businesses engage in a general education approach to 'antibias' (Paluck & Green, 2009), there appears to be little in the way of empirical support for this approach; however, Fitzgerald et al., (2019, p10) tempered this with guidance that "interventions will be more effective if they tackle more specific stereotypes". In the case of training interventions, employers could use their existing recruitment data to identify where any 'gaps' may be in their existing demographics (gender, age, sector, for example) and then target training for their recruiters to addressing these particular stereotypes.

There is seemingly still much reliance on informal measures, reliance on gutfeel; employers will need to think carefully about what the recruitment process 'says' to a potential employee (applicant) about the businesses ability to provide objective and fair processes (Miles & Sadler-Smith, 2014). This again may relate to agency recruiters' role in hiring decisions, working as they do, across sectors as a high number of employers engages them to support recruitment. Agencies have a unique opportunity to enable or limit sector switching, and how they deal with the practicalities of these decisions and advice to employers warrants further examination.

### *Candidates*

Within this research, the candidates were able to have their CVs reformatted to a standard skills-based CV. Normally this type of CV format is used by students or those with limited experience, and yet the candidates here all had a minimum of four years' experience. As such, some were surprised by the format. This format, however, allowed for the employment history to be moved to a lower section of the CV, with the range of skills and scope of experience to be higher up on the CV. The Employment History was then removed, and the scores for these CVs were higher; it may be beneficial for candidates generally to think about this format to promote their skills and experience first to potential employers. Whilst those potential employers may not engage in blind recruitment practices, this format may lead the CV reader to assess and understand that experience before considering employment history.

This research raises questions about the reliance on informal methods in the recruitment process. It would also benefit candidates to ask questions when applying for roles about what selection methods an organisation uses to familiarise themselves with this ahead of the process. In the case of informal methods such as unstructured interviews, it could be useful for candidates to familiarise themselves with the values of the organisation to which they are applying so that they may introduce how they fit with these in an interview scenario (An organisations values may be available on company websites for instance). Whilst this is not the advised recruitment method, its prevalence calls for candidates to make themselves aware of how organisations use them to be better prepared for engaging with them.

## Conclusion

Having a well-structured and scored selection process has already been assessed to reduce bias in the selection process. This study contributes to that body of work by adding Sector as a form of bias that can appear in the process, even across seemingly transferable roles such as project managers. Practitioners can use this information to safeguard those processes against bias by adding employment history to the list of biographical information that can provide cues to recruiters, leading to the discarding of capable candidates for reasons other than their skills to do the job. Further, we have been able to see that implicit biases that may exist do not necessarily have a relationship with the decisions made as we might think they would, in this case. That may be because we used a structured and scored process, guiding organisations to mitigate implicit bias by having more objective processes to follow. This would certainly see a move away from ‘gut instinct’ and perhaps, a move away from the public and private sector's stereotypical images as perpetuated in the grey literature.

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# Appendices

1. Informed Consent Form
2. Participant Information Sheet – Recruiting Managers.
3. Scoring Sheets (CV) – Recruiting Managers
4. Project Manager Role Profile (From Project Management Institute)
5. Skills-Based CV (Reed) – Example CV from Study (anonymised)
6. Job Matching Process: Candidate CV to Role Profile
7. IAT Screens – Participant View
8. IAT Script
9. Email Text – All Participants
10. Reference Group

## Appendix 1: Consent form

**Informed Consent for Opening the Market: Supporting Sector Switchers**

**Please tick the appropriate boxes** **Yes No**

1. **Taking part in the study**

I have read and understood the study information dated **[**DD/MM/YYYY**]**, or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction. o o

I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason. o o

I understand that taking part in the study involves **providing my CV to be reformatted and review by recruiting managers and answering a follow-up questionnaire.** o o

2. **Use of the information in the study**

I understand that information I provide will be used for **the purposes of a research thesis and therefore may be published in a journal. It may also be used (anonymously) for articles in trade publications and presentations made by the author.** o o

I understand that personal information collected about me that can identify me, such as my name or where I live, will not be shared beyond the study team. o o

I agree that my information can be quoted in research outputs. o o

3. **Future use and reuse of the information by others**

I give permission for the **CV and questionnaire answers** that I provide to be deposited anonymously in **online questionnaire, SPSS held by Kingston University Business School, and online by the author** so it can be used for future research and learning. o o

4. **Signatures**

| Name of participant [IN CAPITALS] | Signature | Date |
|---|---|---|
| | | |

For participants unable to sign their name, mark the box instead of signing

Where applicable:
I have accurately read out the information sheet to the potential participant and, to the best of my ability, ensured that the participant understands what they are freely consenting.

| ______________________________ | ______________________ | _________________ |
|---|---|---|
| Name of researcher [IN CAPITALS] | Signature | Date |

5. **Study contacts details for further information**

Liza Walter-Nelson, Liza@pharepractice.co.uk, 07801657388

## Appendix 2: Participant Information Sheet: Recruiters

### Participant Information Sheet: Recruitment Managers

**Invitation**
I would like to invite you to take part in a research study. Before you decide, you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Ask questions if anything you read is not clear or would like more information. Take time to decide whether or not to take part.

**Research Overview**
The aim of this work is to build on what we know about differences and similarities in workers across sectors and investigate whether there are better ways to prepare those making the switch. The goal is to be able to create better processes for supporting employees switching sectors.

**Why have you been asked?**
You have been asked to take part in this study as you are a recruitment manager or working professionally in a role where you regularly undertake recruitment activities. You will be one of 30 participants reviewing CVs of between 8 and16 candidates.

**Do I have to take part?**
It is up to you to decide if you want to take part. We will describe the study and go through the information sheet, which we will give to you. We will then ask you to sign a consent form to show you agreed to take part. You are free to withdraw at any time, without giving a reason.

**What will happen to me if I take part?**
You will be asked to review the candidates' CVs against a standard job description. You will then be asked to complete a follow-up questionnaire (web-based), which will take no longer than 25 minutes.

**What do I have to do?**
Use your professional expertise to 'score' CVs against a standard job description.
Provide demographic information about yourself and length of time/experience in recruitment.
Complete a web-based questionnaire.
There are no other commitments.

**What are the possible disadvantages and risks of taking part?**
Participating in the research is not anticipated to cause you any disadvantages or discomfort. The potential psychological harm or distress will be the same as any experienced in everyday life.

**What are the possible benefits of taking part?**

Whilst there is no immediate personal benefit, it is hoped that this work will have a beneficial impact on the future work search activities of those seeking to change sectors.

**What happens if the research study stops earlier than expected?**
Should the research stop earlier than planned and you are affected in any way, we will tell you and explain why.

**What if something goes wrong?**
If you wish to complain about any aspect of how you have been treated in this research, please contact Professor Jill Schofield, who is the Dean of the Faculty of Business and Social Sciences at Kingston University London. Professor Schofield's contact details are as follows: Dean's Office, Faculty of Business and Social Sciences, Kingston University London, Penrhyn Road, Kingston upon Thames KT1 2EE.
Email: j.schofield@kingston.ac.uk Tel: 020 8417 9000 ext. 65229.

**Will my taking part in this project be kept confidential?**
All the information that we collect about you during the course of the research will be kept strictly confidential. You will not be able to be identified or identifiable in any reports or publications. Your organisation will also not be identified or identifiable. Any data collected about you in the online questionnaire will be stored online in a form protected by passwords and other relevant security processes and technologies. Data collected may be shared in an anonymised form to allow reuse by the research team and other third parties. These anonymised data will not allow any individuals or their organisations to be identified or identifiable.

**Will I be recorded, and how will the recorded media be used?**
You will not be recorded in any way other than your input to the questionnaire without separate permission being gained from you.

**What type of information will be sought from me, and why is the collection of this information relevant for achieving the research projects objectives?**
Your personal data, such as age and gender, will be collected by the researcher, as well as details about how long you have professionally undertaken recruitment activities. The questionnaire will ask you about your opinions and current practices in relation to sector switching in the employment market.

**What will happen to the results of the research project?**
Results of the research will be published. You will not be identified in any report or publication. Your organisation will not be identified in any report or publication. If you wish to be given a copy of any reports resulting from the research, please ask the author.
**Who is organizing and funding the research?**
The project is being undertaken as part of a professional doctorate, self-funded by the author.
**Who has ethically reviewed the project?**
The research has received a favourable ethical opinion from the Research Ethics Committee of the Faculty of Business and Social Sciences at Kingston University London.

**Contacts for further information:**
Liza Walter-Nelson, via Faculty of Business and Social Sciences, Kingston University London, Penrhyn Road, Kingston upon Thames KT1
2EE. Email: Liza@pharepractice.co.uk, Tel: 07801657388
**Thank you for taking part in this research**

## Appendix 3: Scoring Sheet (recruiting managers)

**Scoring for Recruitment Managers:**

**Title: SCORING OF APPLICATIONS GUIDANCE**

**Introduction**

This document provides a brief overview of how to score applications received.

There is a 4 point scoring mechanism as detailed below. This scoring method enables managers to differentiate between candidates who have a strong application, candidates who meet the minimum criteria and those whose applications have not met the standard.

To be considered to meet the minimum criteria for the post, a candidate must score at least a '2', as well as meet the relevant experience and qualifications as detailed in the job description and person specification.

<table>
<tr><th>Suitability</th><th>Definition</th><th>Rating</th><th>Description</th></tr>
<tr><td rowspan="2">YES</td><td>Exceeds expectations and criteria for the role</td><td>3</td><td>Strong evidence provided. Has answered the question fully and outstanding amount of information provided<ul><li>Has given an excellent example from past experience which relates well to the role</li><li>Clear evidence and/or reasoning provided</li><li>Demonstrates an understanding of what is required</li></ul></td></tr>
<tr><td>Meets the minimum criteria for the role</td><td>2</td><td>Acceptable evidence provided. Sufficient information provided using positive indicators<ul><li>Has given examples, but content is limited</li><li>Information provided is positive</li><li>Information available from other competencies or areas of the application form</li></ul></td></tr>
<tr><td rowspan="2">NO</td><td rowspan="2">Fails to meet the minimum criteria for the role</td><td>1</td><td>Weak evidence provided. Insufficient information provided. Limited motivation, primarily supported by evidence of negative indicators<ul><li>Information is disjointed and does not make sense</li><li>Content of information is poor</li><li>Example given but no specific detail</li></ul></td></tr>
<tr><td>0</td><td>Little or no evidence provided. Has not answered the question or missed the point and answer does not match the question</td></tr>
</table>

| | | | |
|---|---|---|---|
| | | | • Limited relevant experience to the role and responsibilities<br>• Little or no effort made with CV<br>• Inadequate information provided |

When scoring the applications, managers should make factual comments regarding the CV.

For example, The application form is full of errors/the candidate does not have a relevant degree/candidates career history does not demonstrate an ability to stay in one post for long.

It's important to ensure that qualifications and experience are also taken into account when scoring the application. You do not want to interview a candidate who has not got the right experience but has answered the questions well.

Once you have completed the scoring for each candidate in your pack, please return the CV and Job Description along with a scoring sheet to Liza@pharepractice.co.uk.

**Scoring Sheet**

**Candidate Number:**

**Outcome**

| Suitability | Definition | Rating | Notes |
|---|---|---|---|
| **YES** | **Exceeds expectations and criteria for the role** | 3 | |
| | **Meets the minimum criteria for the role** | 2 | |
| **NO** | **Fails to meet the minimum** | 1 | |

| | | | |
|---|---|---|---|
| | **criteria for the role** | 0 | |

# ROLE PROFILE FOR PROJECT MANAGER (ADVANCED)

## Introduction

The refreshed APM Competence Framework comprises 27 competences covering project management, programme management, portfolio management and PMO.

As not all of the competences will be relevant to all professionals, a series of role profiles has been developed to help users to navigate the Framework and identify those competences most relevant to their current role. The role profiles aim to capture the 'typical' competences required and are not intended to be prescriptive.

The table on page 3 overleaf lists each of the competences within the Framework and indicates which are likely to be relevant to Project Managers at Advanced level. The table also provides a rating for each of the relevant competences indicating the level of knowledge and application expected within the role. The ratings scale comprises five levels from 'aware' to 'expert' and is provided on page 4 for your information. Guidance on the levels of complexity referred to in the ratings scale is available as a separate document: "APM Complexity Guidance".

## Overview of the role

This role profile applies to Project Managers operating at Advanced level. At this level, a Project Manager is able to manage a complex project.

## Typical responsibilities

A Project Manager at Advanced level is likely to be responsible for applying the following **independently**, in **complex situations** and may supervise others applying the competence:

- 1: Promoting the public wider good in all actions, acting in a morally, legally and socially appropriate manner in dealings with stakeholders and members of portfolio teams and organisation
- 2: Developing and managing teams
- 3: Identifying, addressing and resolving differences between individuals and/or interest groups
- 4: Empowering and inspiring others to deliver successful projects
- 5: Securing the provision of resources needed for projects from internal and/or external providers
- 6: Agreeing contracts for the provision of goods and/or services, monitoring compliance and managing variances
- 7: Preparing and maintaining definitions of the requirements of projects
- 8: Determining the best means of satisfying requirements within the context of project objectives and constraints i.e. developing solutions
- 9: Preparing and maintaining schedules of activities and events, taking account of dependencies and resource requirements
- 10: Developing, implementing and updating resource allocations plans (other than finance) needed for projects, taking account of availabilities and scheduling
- 11: Developing and agreeing budgets for projects and controlling forecast and actual costs against them

- 12: Identifying and monitoring project risks (threats and opportunities), planning and implementing responses to them and responding to other issues that affect projects
- 13: Developing, maintaining and applying quality management processes for project activities and outputs
- 14: Consolidating and documenting the fundamental components of projects (scope, schedule, resource requirements, budgets, risks, opportunities and issues, and quality requirements)
- 18: Establishing and maintaining governance arrangements for the delivery of projects, defining clear roles, responsibilities and accountabilities, that align with organisational practice
- 19: Managing stakeholders, taking account of their levels of influence and particular interests
- 22: Establishing, and implementing where necessary, protocols to change the scope of projects and updating configuration documents as required
- 24: Preparing, gaining approval of, refining and updating business cases that justify projects in terms of benefits, costs and risks
- 27: Identifying, defining, evaluating, planning, tracking and realising the business benefits of programmes (and/or the projects within them)

A Project Manager at Advanced level is likely to have a **working knowledge** of the following but is unlikely to have to apply them:

- 15: Managing the integration of project outputs into business-as-usual, addressing the readiness of users, compatibility of work systems and the realisation of benefits
- 16: Planning and controlling finances of programmes and or portfolios as a means of driving performance and as part of the organisation's overall financial management
- 17: Preparing and maintaining an overall schedule for resource use, which avoids bottlenecks and conflicting demands, and sequencing outcomes, to enable the efficient realisation of benefits
- 20: Identifying and/or developing frameworks and methodologies that ensure management of projects will be comprehensive and consistent across different initiatives ("framework" refers to the parameters, constraints or rules established to standardise delivery)
- 23: Gathering independent evidence that the information from projects is valid and that projects are likely to achieve their aims
- 25: Recommending how financial and other resources should be allocated amongst change initiatives to optimise the organisation's return on investment

## PROJECT MANAGER (ADVANCED)

| | | Application (including rating) | Knowledge (including rating) |
|---|---|---|---|
| 1 | Ethics, compliance and professionalism | 4 | 4 |
| 2 | Team management | 4 | 4 |
| 3 | Conflict management | 4 | 4 |
| 4 | Leadership | 4 | 4 |
| 5 | Procurement | 4 | 4 |
| 6 | Contract management | 4 | 4 |
| 7 | Requirements management | 4 | 4 |
| 8 | Solutions development | 4 | 4 |
| 9 | Schedule management | 4 | 4 |
| 10 | Resource management | 4 | 4 |
| 11 | Budgeting and cost control | 4 | 4 |
| 12 | Risk, opportunity and issue management | 4 | 4 |
| 13 | Quality management | 4 | 4 |
| 14 | Consolidated planning | 4 | 4 |
| 15 | Transition management | 1 | 2 |
| 16 | Financial management | 1 | 2 |
| 17 | Resource capacity planning | 1 | 2 |
| 18 | Governance arrangements | 4 | 4 |
| 19 | Stakeholder and communications management | 4 | 4 |
| 20 | Frameworks and methodologies | 1 | 2 |
| 21 | Reviews | 4 | 4 |
| 22 | Change control | 4 | 4 |
| 23 | Independent assurance | 1 | 2 |
| 24 | Business case | 4 | 4 |
| 25 | Asset allocation | 1 | 2 |
| 26 | Capability development | N/R | N/R |
| 27 | Benefits management | 3 | 3 |

## RATINGS SCALE

| LEVEL | APPLICATION | KNOWLEDGE |
|---|---|---|
| 1. AWARE | ■ As only awareness is required at this level, no application is expected | ■ Has an awareness of the knowledge needed for the competence. |
| 2. PRACTISED | ■ Applies the competence under supervision, primarily in non-complex situations. | ■ Has a working knowledge of, and can describe, the competence. |
| 3. COMPETENT | ■ Applies the competence independently, primarily in situations of limited complexity. | ■ Has a comprehensive knowledge of the competence in situations of limited complexity. |
| 4. PROFICIENT | ■ Applies the competence independently, primarily in complex situations<br>■ Supervises others applying the competence | ■ Has a detailed knowledge of the competence in complex situations and can critically evaluate and adapt as required. |
| 5. EXPERT | ■ Applies the competence independently, primarily in complex situations<br>■ Recognised as an expert by other senior professionals, who is called on by others for advice on the competence | ■ Has an in-depth knowledge of the competence in complex situations<br>■ Can critically evaluate, adapt or develop new theories and/or methods if required and educate others<br>. |

## Appendix 5: Skills-based CV (REED) – example CV from the study (anonymised)

**Candidate 1**

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**Profile**

A charismatic communicator, inspiring leader and intelligent individual with great experience in managerial roles. A dynamic team member or reliable, efficient lone worker comfortable in high-pressure environments. Expertise in Project Management, Staff Management, Performance Improvement, Crisis and Change Management, Customer Service, Training and all aspects of Communication.

**KEY ACHIEVEMENTS**

**Project Management**:

- Project Manager for the £10.4m Solent Achieving Value through Efficiency (SAVE) Project, studying the potential effect of energy efficiency measures to offset the requirement to reinforce electricity networks.
- Utilising Project management mythologies (i.e., Prince2 and Lean), secured TOTEX investment for key infrastructure projects ANM Centralisation and the South Coast Active Network (SWAN) totalling over £9m, delivery of these projects as well as a wider suite of projects, will deliver over £60m of projected business savings by 2030.
- Achieved successful closedown for two key future energy network projects (New Thames Valley Vision, NINES) and associated successful delivery rewards totalling £2m+; work on these projects included delivery of training, stakeholder management and presentation of project outcomes, as well as contribution to Learning Report and future recommendations.
- Managing a team of 16 Project Managers, Officers and Analysts responsible for project delivery and leading support provision from corporate, procurement and regulatory business units across a programme of 8 large scale projects
- Instigated and supported a complete review of work package deliverables and resource mapping within the £29.9m flagship project in the Utility sector. Applied robust risk mitigation to ensure ongoing successful delivery of the project within agreed parameters (including risk registers, actions and lessons logs).
- Produced and manage successful project change requests for equipment specifications and trial management phases, utilising industry Major Project Delivery management principles and regulatory governance structures.

- Production of Project Initiation Documents (PID), Checkpoint and Highlight reporting throughout project lifecycles.

**Resource Management**

- Managing 16 people in project roles, including delivery managers and designers, over eight large and 15 small scale projects. Including recruitment of project population, meeting challenging targets set for the time period and total population.
- £2.6m of ICT investment and associated resources to support the business in transition
- Negotiating and finalising contract terms for suppliers of projects of up to £29.9m, and Project partners, in collaboration with internal procurement division; providing expert advice and input to contract design and negotiation.
- Management of over 50 staff within Call Centre environment; including training, motivating and human resources issues. Ensuring KPI's are met, including for customer satisfaction.
- Manage contractual disputes and mitigation through to completion, securing alternative suppliers throughout the dispute process for contracts worth £2.1m.
- Operations Performance Manager across two geographic areas for primary and satellite sites. Responsible for the management of 15 Managers and up to 130 staff involved in multiple business functions within the regulated business, leading and driving process changes in safety, staff satisfaction, volunteering and smart metering. Sustainable management and reporting of the depot's £6m+pa finances, managing incidents and Audit reporting, including regulatory and company compliance.

**Stakeholder Management**

- Delivered two key policy changes and multiple additional business papers to improve service offerings to our customers and unlock further innovative solutions across the business.
- As a Board member for Future South, helped over 100 SMEs develop innovative new low carbon products and solution; Created over 200 new jobs with an average salary of £30,000, created an "Environmental Technology" Hub at the University of Portsmouth and was involved in the formation of the 'Hampshire Community Bank'.
- As a Trustee for The Environment Centre (tEC), provide advice and deliver outreach and training, carry out data analysis and mapping, and manage practical projects
- Produced submission entries directly leading to regulatory rewards of over £1.3m in 2013 & 2014 and two 'customer facing' annual reports of engagement activity by the business. Was the preferred representative of SEPD in MP liaison and Local Authority interactions.

**EMPLOYMENT HISTORY**

- **Scottish and Southern Energy –** November 20014 to Present **– Various**
    - **SSEN Flexible Solutions Manager: Mar 2017 – Present**
    - **SSEPD Innovation Programme Team Manager: Mar 2016 – Mar 2017**

- **SSEPD Project Manager: Feb 2014 – Feb 2017**
- **SSEPD Stakeholder Engagement Manager: Dec 2012 – Jan 2014**
- **Performance Manager SSEPD: Jul 2011 – Dec 2012**
- **Emergency Service Centre Manager: Nov 2004 – Jul 2011**

- **Future South (nee Future Solent) –** Jul 2014 to Present **– Board Member**
- **The Environment Centre (tEC) –** Sep 2016 to Present **– Trustee**

**EDUCATION**

- 2016 - Prince2 Practitioner – The Learning Centre
- 2010 – GNVQ Customer Services
- 2000 – A Level (English, Geography) – South Down's College

**TRAINING & CERTIFICATIONS**

- 2018: Six Sigma; SSEN Learning Team
- 2015: Stakeholder Engagement; SSEN & SMI
- Annual: Performance Management; SSEN Learning Team & 3rd Party Management consultant (retained)
- 2014 & 2018: 2nd Line Management; SSEN Learning Team
- Annual: Employee Relations; SSEN Learning Team and Vision
- Annual: Leadership; SSEN Learning Team
- Annual: Coaching and Mentoring; SSEN Learning Team
- 2014 & 2016: Investigation and Reporting; SSEN Human Resources & Learning Team

**ADDITIONAL TECHNICAL SKILLS**

Microsoft Office Suite, including Microsoft Project (2018). Electrical Authorisations Category 1-3.

## Appendix 6 Job Matching (Candidates)

The purpose of job matching is normally to ensure that jobs are graded (salary) at the correct level, in comparison to either a salary framework or against profiles of broadly similar jobs. This process can also be used in a merger and acquisition process, where there are broadly similar roles being combined, compared or reduced (i.e., in a redundancy situation).

The main steps in job matching, in general, are:

1. Understanding the job
2. Matching the job
3. Recording the decision and reasons
4. Checking results for consistency and fairness

It is also important to ensure that those involved in matching concentrate on job content and not on other points such as personal capability or the market rate of pay. So, members of matching panels should:

- Focus on the job itself, not on the characteristics or performance of the job-holder
- Assume always that individual jobs are carried out at the fully acceptable performance.
- Avoid any potentially discriminatory assumptions, such as about the types of jobs predominantly carried out by men or by women.

For this research, the first two steps of the job matching process were applied, although here, there is no issue of grading (salary). Adapted from NHS Employers and

*Understanding the job*

Job information should be available in the form of a job description in the standard format and a structure chart. Other relevant contextual data may come into discussion during the matching process from the Line Manager of the department or others and from the local HR adviser.

NB. For this research, the candidate CV was made available to the researcher.

*For each job, the matching panel should:*

- **Read the job description**, person specification and any other job information to select appropriate national profiles.
- **Identify possible profile matches** using the (computerised or paper-based) profile index and profile titles (there are unlikely to be more than three possible matches). Appropriate profiles will usually be from the same occupational grouping.
- **Compare the profile job statements** with the job description, person specification and any other available information for the job to be matched. The available information about the job duties must be consistent with the profile job statement and, in most cases, will be from the same occupational grouping*. If this is not the case, the match may need to be aborted; another profile sought, or, if no suitable profile is available, the job sent for local evaluation. If the job duties do broadly match, complete the job statement box on the (computerised or paper-based) matching form.
- **On a factor-by-factor basis**, complete the matching form boxes with information about the job to be matched from the job description or other sources, which may include verbal information from the job advisers/representatives. Refer to the profiles for the types of information required.
- **For each factor, compare the information** on the form with that in the selected profile and determine whether they match. The information does not have to be exactly the same as that from the profile but should be equivalent to it (for example, 'supervises trainees' is equivalent to 'supervises students').
- **It is important to consider all factors and not just prioritise a few.** All job information is relevant and must be considered to ensure robust outcomes that are justifiable and guard against panels shoe-horning jobs into profiles that may lead to an inappropriate band outcome.

**Record** the panel findings and decisions in the appropriate forms – either paper-based or computerised. These records should indicate where factors match or vary or if it was not possible to match the factor on the profile.

- **M=Match** – where the agreed factor level is found to be the same as the profile factor level or is within the profile factor range
- **V=Variation** – where the agreed factor level is found to be either one level higher or lower than the profile factor level or range.
- **NM= No match** - where the agreed factor level is found to be more than one level higher or lower than the profile factor level or range.

Matching record:

| Candidate | Matching Outcome | Comments |
|---|---|---|
| **1** | M | Management of projects, more detail required for CV – financial values |
| **2** | M | Project Manager, Jnr to Snr roles. Details required on staff numbers supervised |
| **3** | M | Project Manager. Details of scope to clarify (national or international?) |
| **4** | M | Management o projects – significant regional, details on staffing and financial |
| **5** | M | Project Manager, national. Confirm £ |
| **6** | M | Project Manager (snr) national projects, £ available, confirm staffing numbers |
| **7** | M | Project Manager, mid-level, confirm scope of £ |
| **8** | M | Project Manager. Few clarifications needed (acronyms), international experience |
| **9** | M | Project Manager, Snr, international experience |
| **10** | M | Management of projects, £ values included, some international experience (early career) |

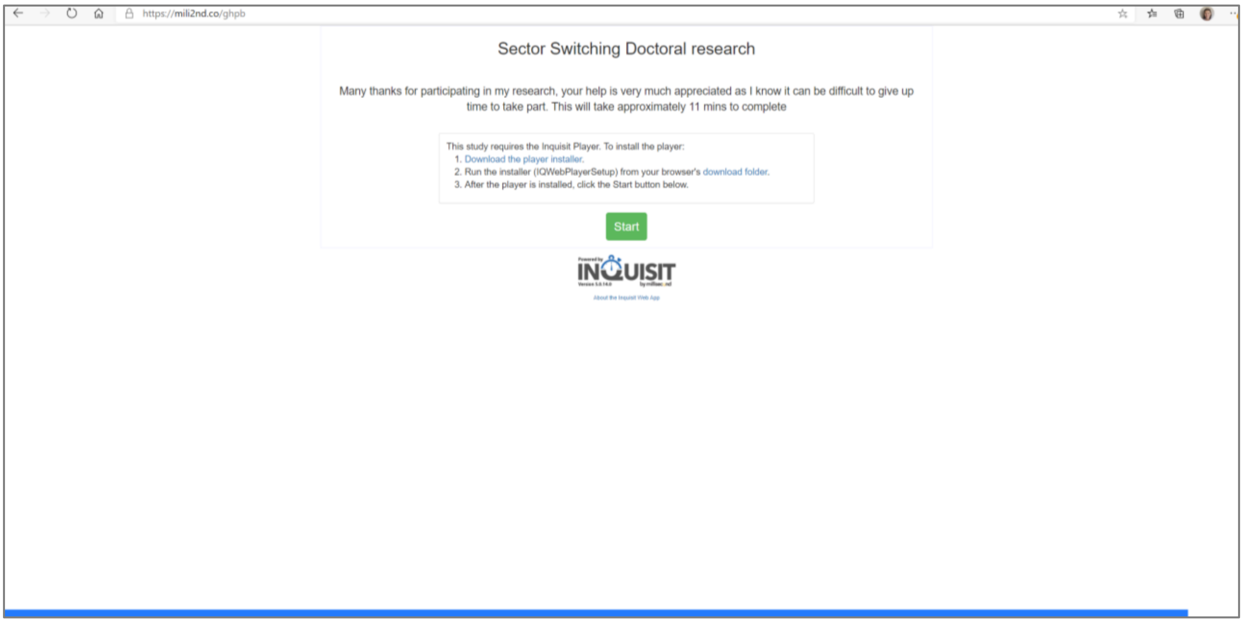
## Appendix 7: Inquisit (IAT) Screens

### *Context*

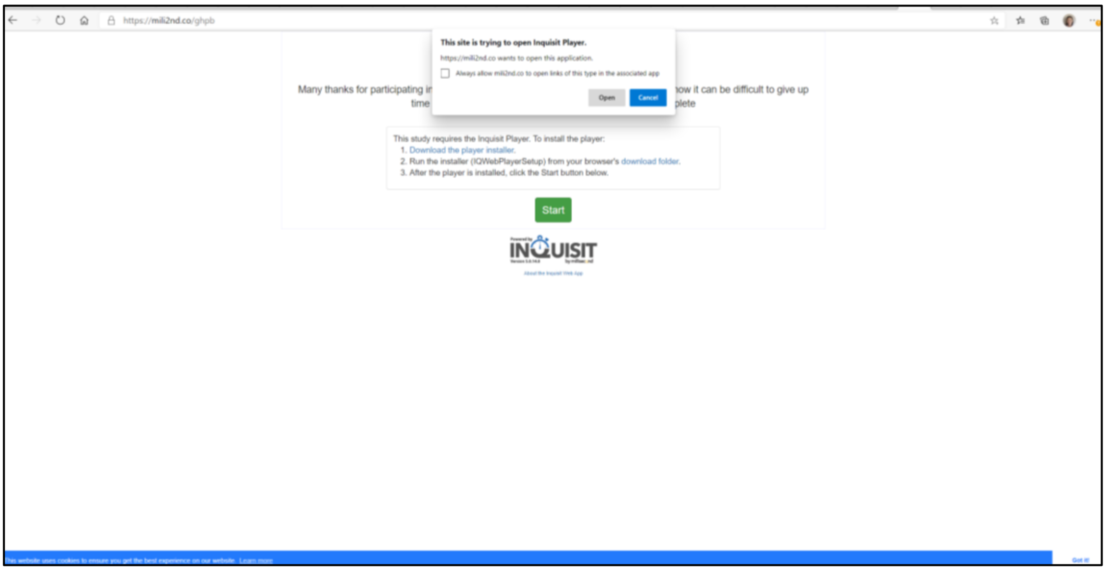
A 2-month license was purchased (for $395) plus an extension for a further two months ($295) by the lead researcher. This was for the Web-based Inquisit software access. There is an additional license available for 'Lab', but as the lead researcher was undertaking the research, this was not felt necessary, as it was a personal purchase and not an Institution license.

### *ScreenShots – Participant View*

1. Launch Screen (at Launch, Participants were asked to enter their name).

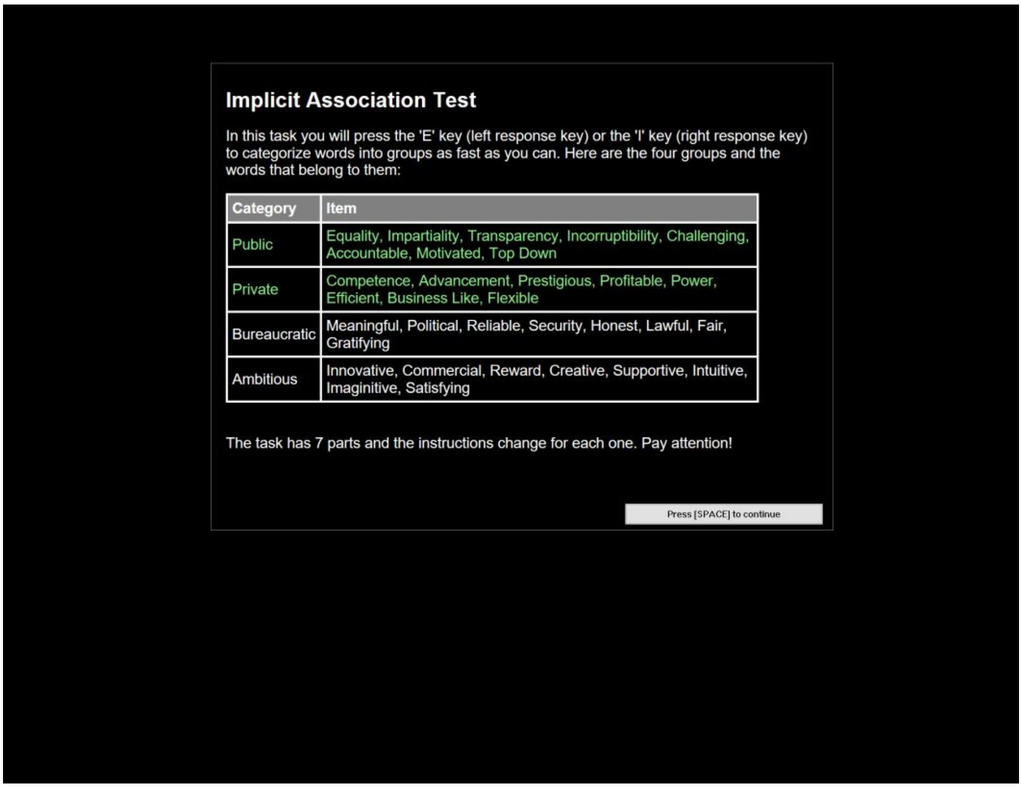



2. The participants could download the player from this screen to complete the test without needing to download the full software on their devices. A pop up appeared to show they were going to run the test. Participants selected Open to continue.

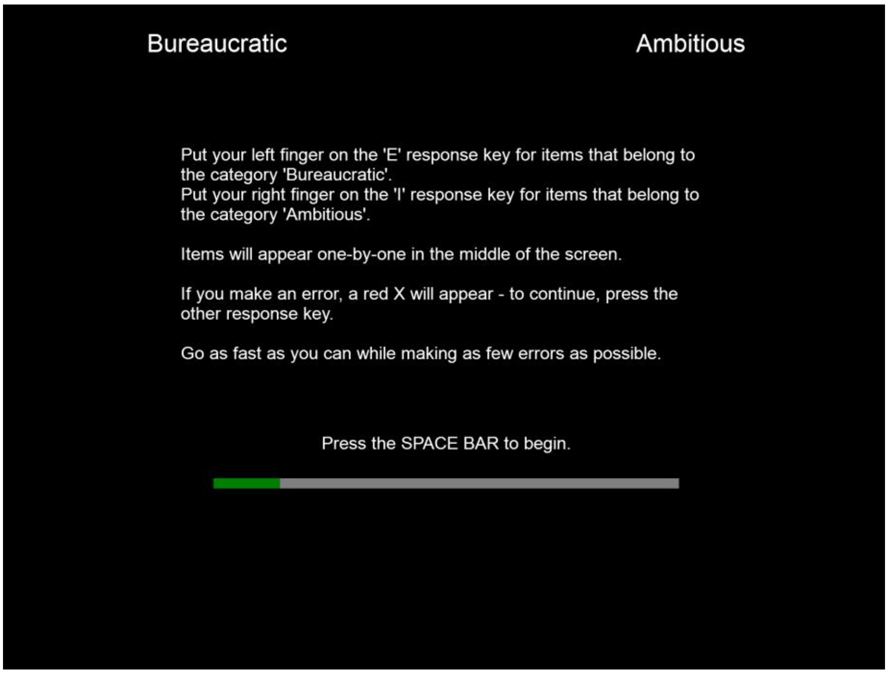



3. Instruction screen: Once it launches, the whole screen is taken over, forcing completion of the test, as there is no ‘exit’ function.

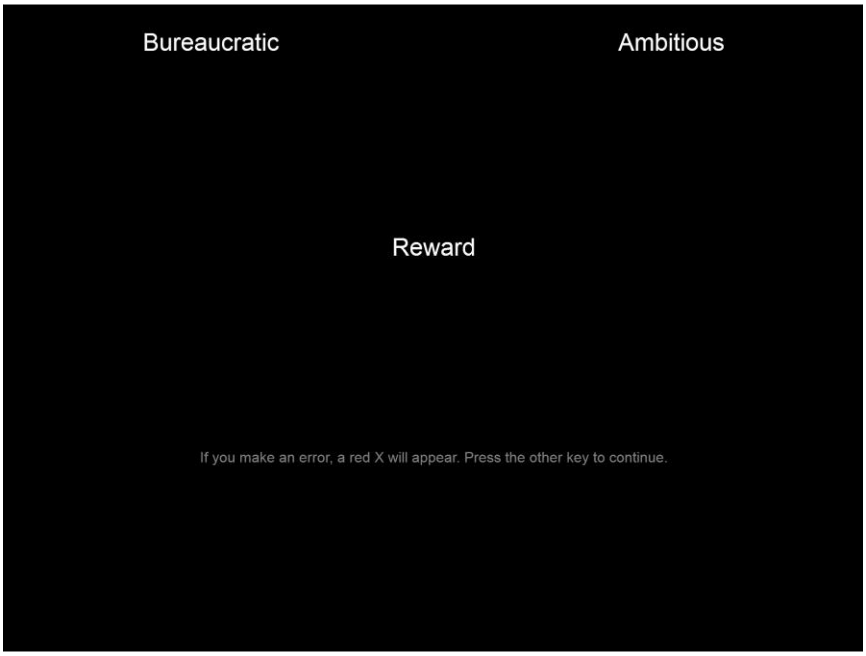
The participant can see the words as they will be administered in the test from this first screen.



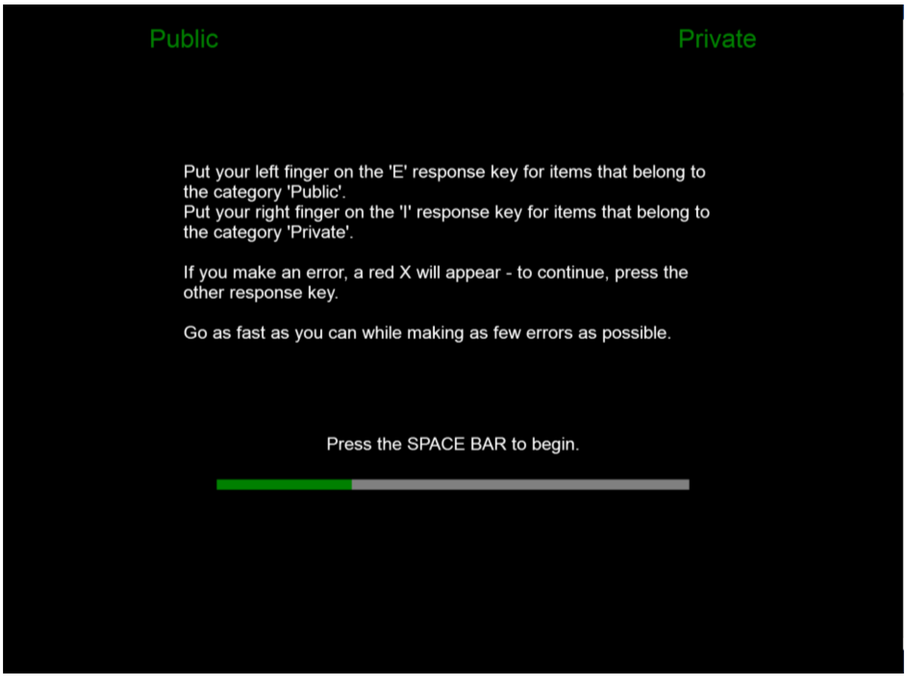

2. This is the first Target Category sorting training block.



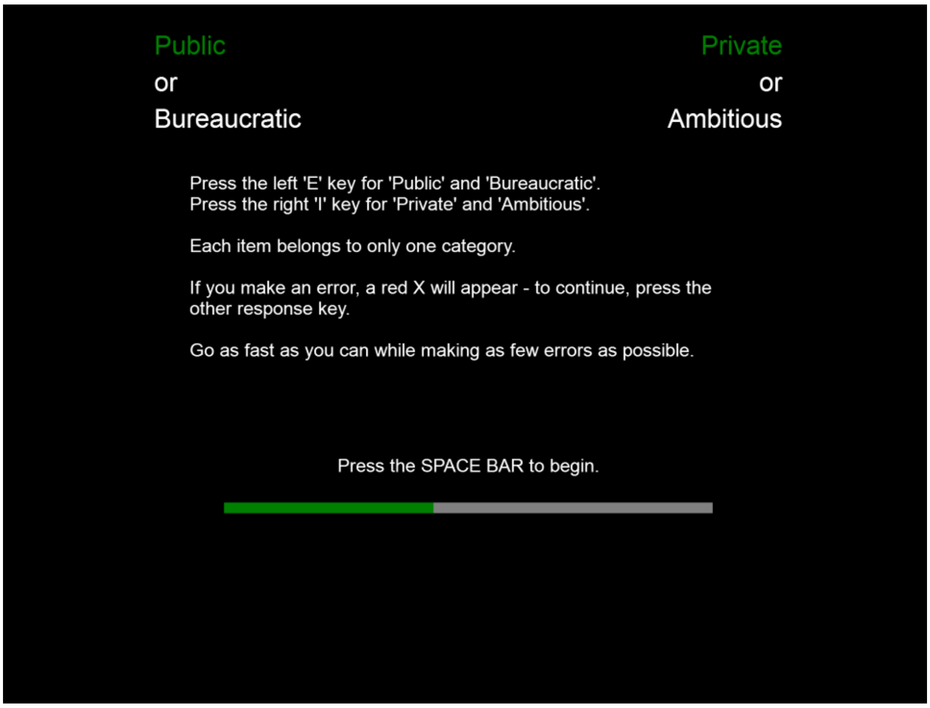

3. This is an example of the words to be sorted. There will be 20 words to sort in this block, there are eight items for each Target, so some words are repeated in this task.



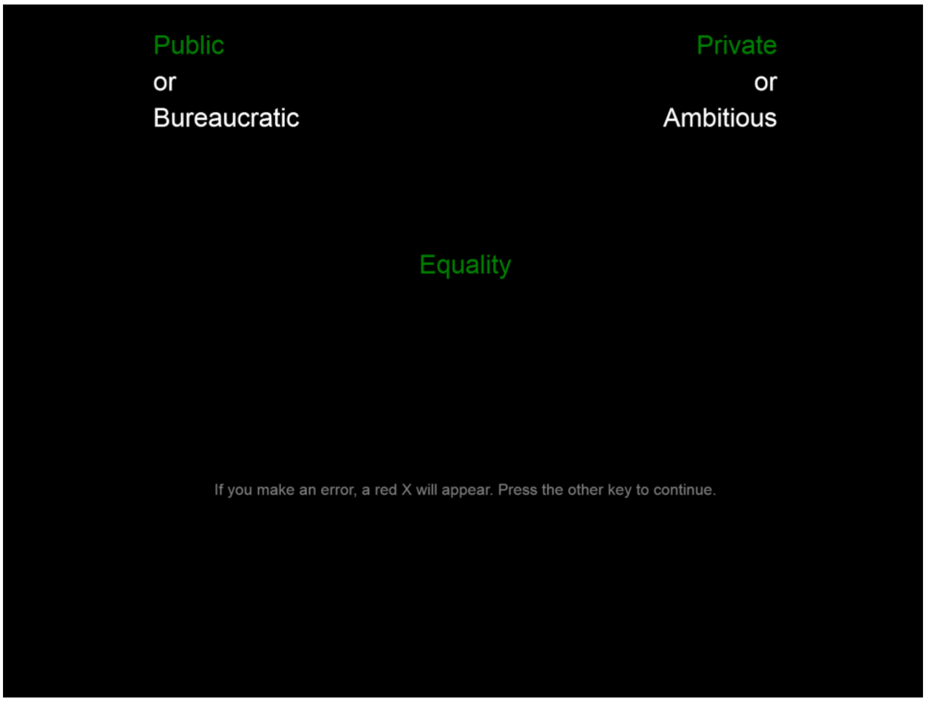

4. Once completion of the first training is complete, the second training block is completed – this is the Attribute Sorting task.



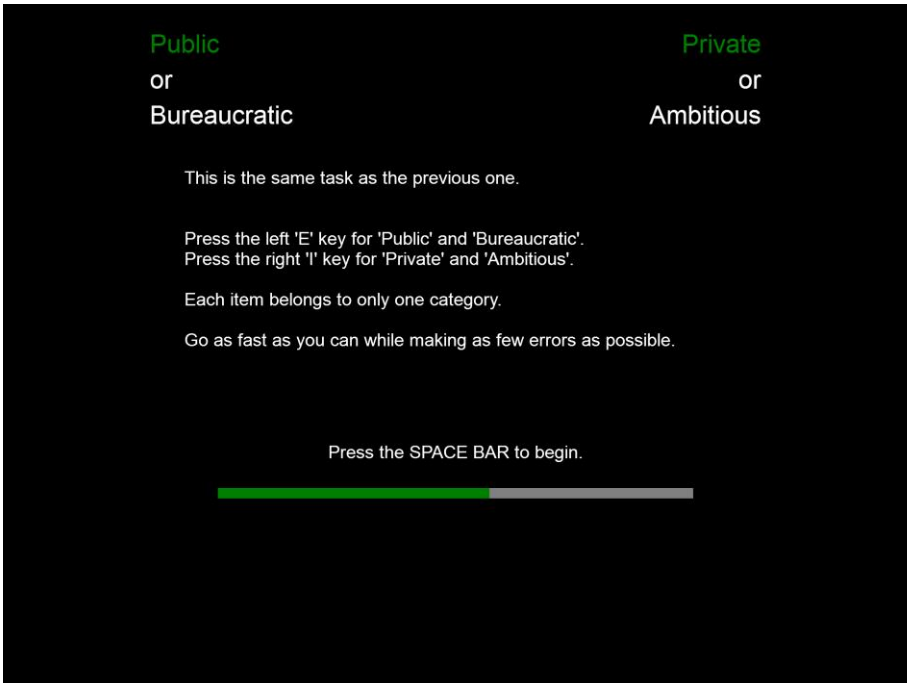

5. Test Block of hypothesis-consistent* pairings with 20 trials (half the participant starts with inconsistent pairings)



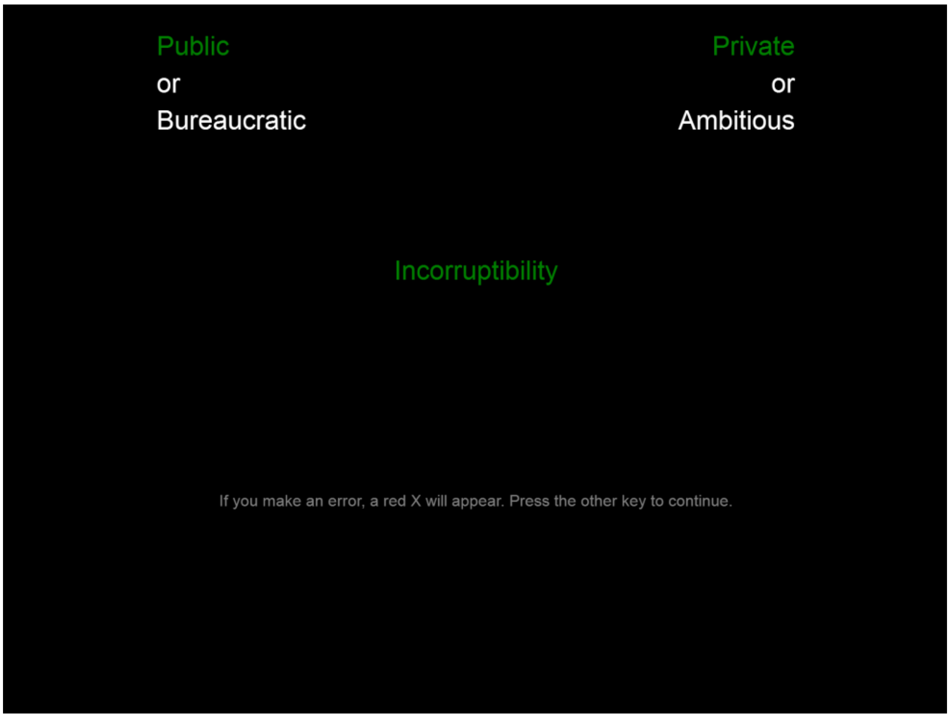

6. An example of the words This is an example of the words to be sorted. There will be 20 words to sort in this block, and there are eight items for each Target and Attribute (See the end of this document for the full list).



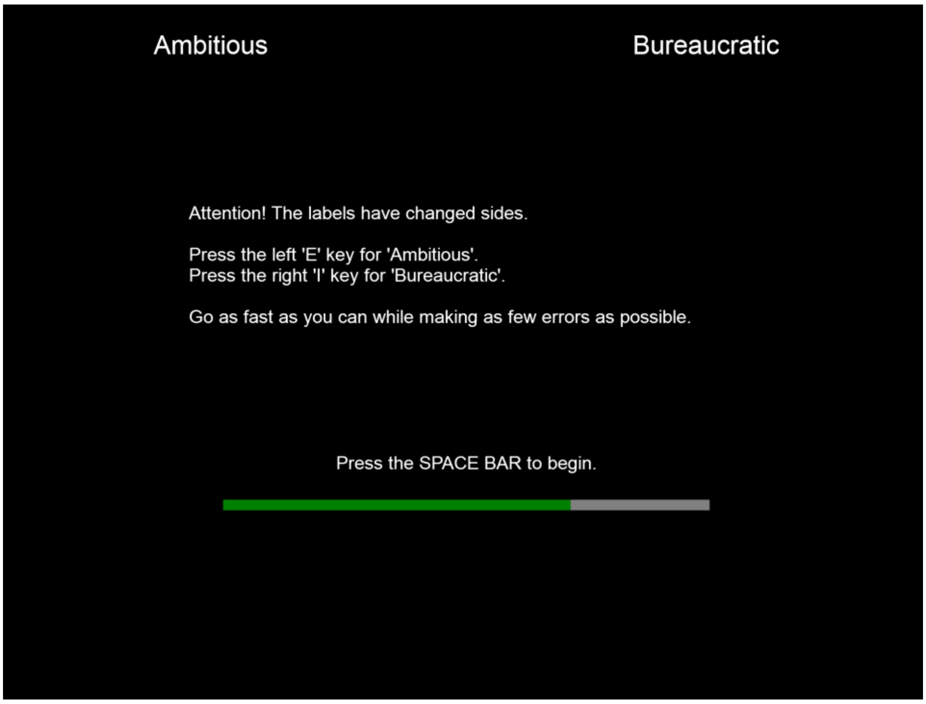

7. Instructions for the next block. Test Block of hypothesis-consistent pairings with 40 trials




9. Example of the word presented in this block

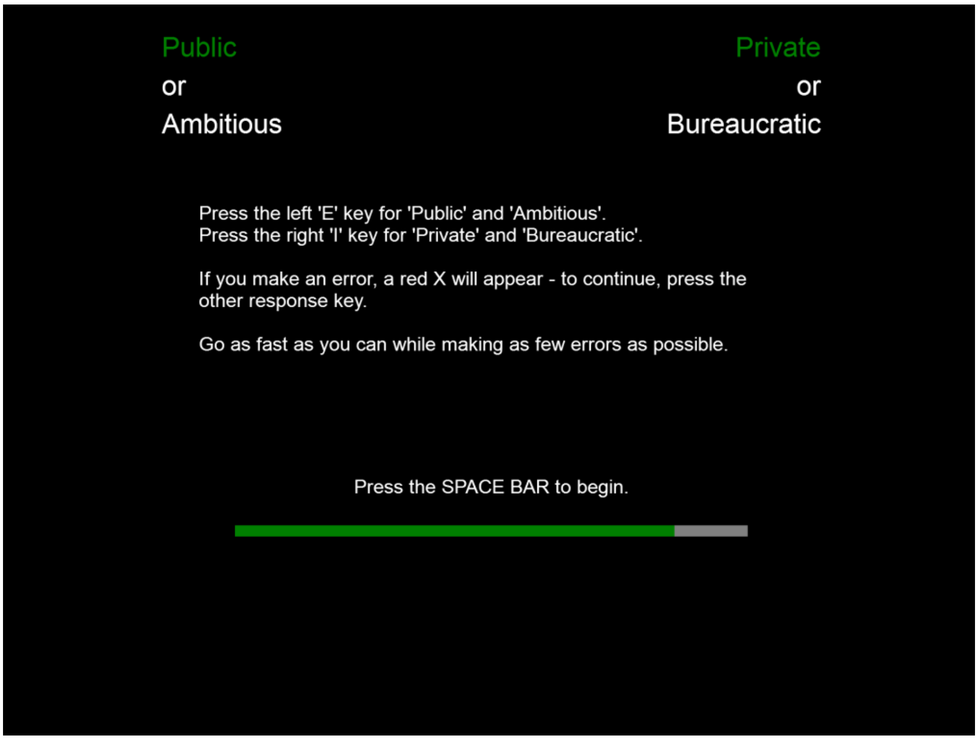



10. Instructions for Target Category sorting training with targets switching sides.

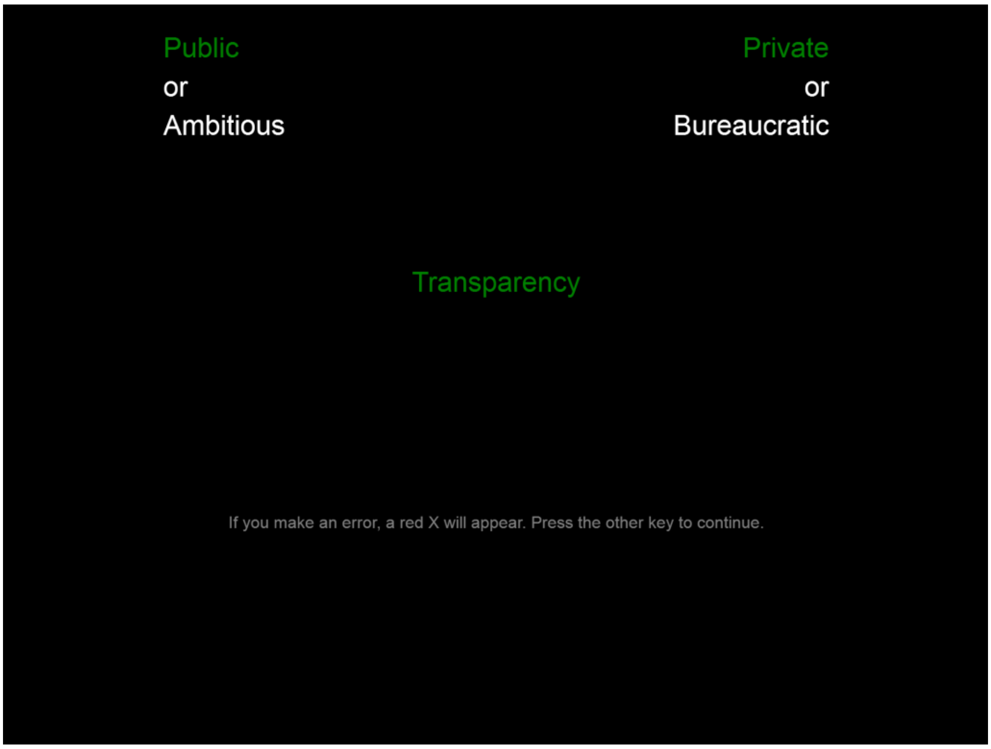



11. Example of how words appear in this block

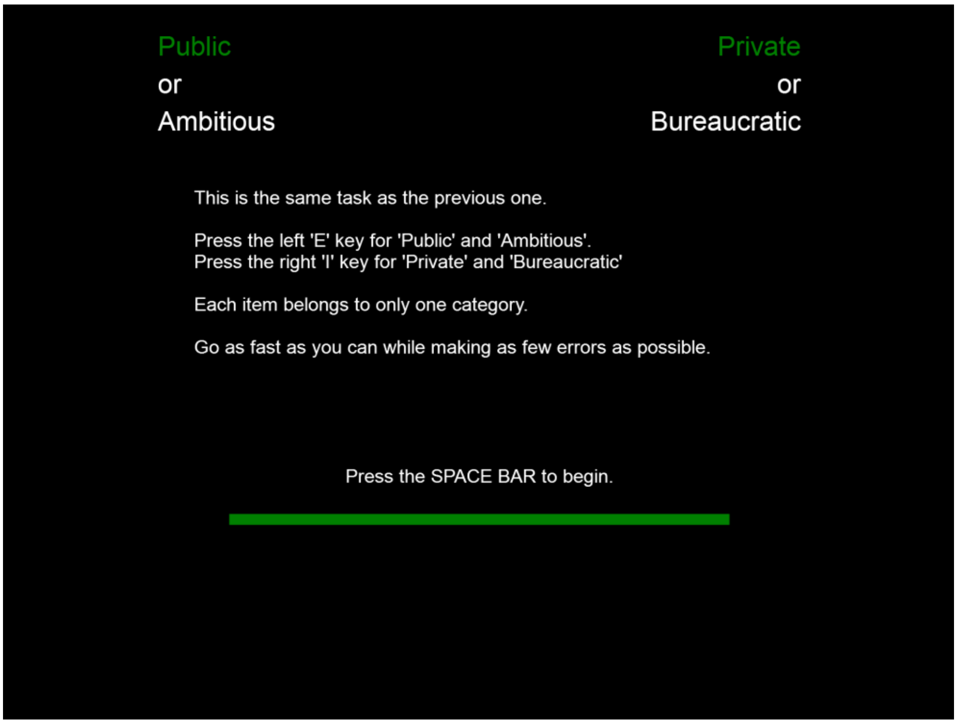

12. Test Block of hypothesis-inconsistent pairings with 20 trials



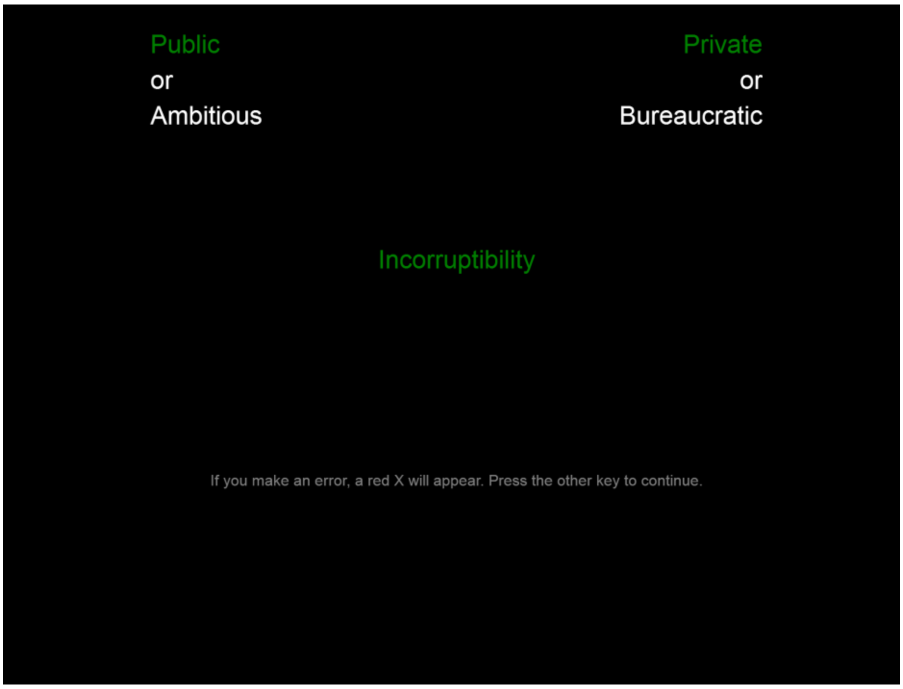

13. Example of how words appear in this block




14. Test Block of hypothesis-inconsistent pairings with 40 trials




15. Example of how words appear in this block




16. This is the final screen in the IAT. It provides the participant with their IAT Score (D) and a description of what this means about this test.

*Full set of words for Target and Attribute used in the sorting tasks:*

### Context

These words were in a spreadsheet linked to the IAT script in order for it to pull through. The script itself refers to 'GroupA' or 'TraitX', for example.  The words listed here were those taken from Walter-Nelson, Yarker & Lewis (*in preparation*).

**Labels:**

| | |
|---|---|
| Group A label: Public | Trait X label: Bureaucratic |
| Group B label: Private | Trait Y label: Ambitious |

*Group A is paired with Trait X; Group B is paired with Trait Y*

**Items**:

| | |
|---|---|
| Group A, item 1: Equality | Trait X, Item 1: Meaningful |
| Group A, item 2: Impartiality | Trait X, Item 1: Political |
| Group A, item 3: Transparency | Trait X, Item 1: Reliable |
| Group A, item 4: Incorruptibility | Trait X, Item 1: Security |
| Group A, item 5: Challenging | Trait X, Item 1: Honest |
| Group A, item 6: Accountable | Trait X, Item 1: Lawful |
| Group A, item 7: Motivated | Trait X, Item 1: Fair |
| Group A, item 8: Top Down | Trait X, Item 1: Gratifying |

| | |
|---|---|
| Group B, item 1: Competence | Group B, item 4: Profitable |
| Group B, item 2: Advancement | Group B, item 5: Power |
| Group B, item 3: Prestigious | Group B, item 6: Efficient |

Group B, item 7: Business Like

Group B, item 8: Flexible

Trait Y, item 1: Innovative

Trait Y, item 2: Commercial

Trait Y, item 3: Reward

Trait Y, item 4: Creative

Trait Y, item 5: Supportive

Trait Y, item 6: Intuitive

Trait Y, item 7: Imaginative

Trait Y, item 8: Satisfying

## Appendix 8: IAT Script

usermanual>

Implicit Attitude Test (IAT) - Inquisit IAT template

SCRIPT INFO

Main Inquisit programming: Sean Draine (seandr@millisecond.com)
last updated: 02-12-2018 by K.Borchert (katjab@millisecond.com) for Millisecond Software LLC

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BACKGROUND INFO

The Implicit Association Task (Greenwald, McGhee, & Schwartz, 1998) is a widely-used cognitive-behavioural paradigm
that measures the strength of automatic (implicit) associations between concepts in people's minds relying on latency measures in a simple sorting task.

The strength of an association between concepts is measured by the standardized mean difference score of
the 'hypothesis-inconsistent' pairings and 'hypothesis-consistent' pairings (d-score) (Greenwald, Nosek, & Banaji, 2003).
In general, the higher the d-score, the stronger is the association between the 'hypothesis-consistent' pairings
(decided by researchers). Negative d-scores suggest a stronger association between the 'hypothesis-inconsistent' pairings.

Inquisit calculates d-scores using the improved scoring algorithm as described in Greenwald et al. (2003).

Error trials are handled by requiring respondents to correct their responses according to recommendation (p.214).

D-scores obtained with this script:
Positive d-scores: support a stronger association between 'Flowers-Good' and 'Insects-Bad' than for the opposite pairings
Negative d-scores: support a stronger association between 'Insects-Good' and 'Flowers-Bad' than for the opposite pairings

**References: general IAT**

Greenwald, A. G., McGhee, D. E., & Schwartz, J. K. L. (1998). Measuring individual differences in implicit cognition: The Implicit Association Test. Journal of Personality and Social Psychology, 74, 1464-1480.

Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and Using the Implicit Association Test: An Improved Scoring Algorithm. *Journal of Personality and Social Psychology*, 85, 197-216.

*Task*
Participants are asked to categorize attributes (e.g. "joyful"; "tragic") and target items (e.g "daisy" vs. "wasp")
into predetermined categories via keystroke presses. The basic task is to press a left key (E) if an item (e.g. "joyful")
belongs to the category presented on the left (e.g. "Good") and to press the right key (I) if the word (e.g. "tragic")
belongs to the category ("Bad") presented on the right.
For practice, participants sort items into the target categories "Flowers vs. Insects" and the attribute categories "Good vs. Bad".
For the test, participants are asked to sort categories into the paired/combined categories (e.g.

"Flower OR Good" on the left vs. "Insect OR Bad" on the right). Pairings are reversed for a second test
(e.g. "Insects OR Good" on the left vs. "Flowers OR Bad" on the right). Block order is counterbalanced by groupnumber.

DATA FILE INFORMATION:
The default data stored in the data files are:

(1) Raw data file: 'IAT_raw*.iqdat' (a separate file for each participant)

build: Inquisit build
computer.platform: the platform the script was run on
date, time, subject, group: date and time script was run with the current subject/groupnumber
Note: group1/group2 counterbalance the order in which the pairings are run
blockcode, blocknum: the name and number of the current block
trialcode, trialnum: the name and number of the currently recorded trial
(Note: not all trials that are run might record data; by default data is collected unless /recorddata = false is set for a particular trial/block)
response: the final trial response (scancodes of the keys pressed)
Note: script saves the final and -by design- correct response
correct: the accuracy of the initial response
0 = initial response was incorrect and needed to be corrected
1 = initial response is correct

latency: the latency of the final (correct) response in ms
stimulusnumber: the number of the current stimulus
stimulusitem: the currently presented item
expressions.da: d-score of the first short blocks
expressions.db: d-score of the second long blocks
expressions.d: overall d-score (non-weighted mean of the 2 d-scores)
/ percentcorrect: the overall percent correct score of initial responses of test trials of D-score qualifying latencies

(2) Summary data file: 'IAT_summary*.iqdat' (a separate file for each participant)

script.startdate: date script was run
script.starttime: time script was started
script.subjectid: subject id number
script.groupid: group id number
script.elapsedtime: time it took to run script (in ms)
computer.platform: the platform the script was run on
/completed: 0 = script was not completed (prematurely aborted); 1 = script was completed (all conditions run)
expressions.da: d-score of the first blocks
expressions.db: d-score of the second blocks
expressions.d: overall d-score
/ percentcorrect: the overall percent correct score of initial responses of test trials of D-score qualifying latencies

EXPERIMENTAL SET-UP

Hypothesis-consistent pairings vs. hypothesis-inconsistent pairings; tested within-subjects in a blocked format

=> order is counterbalanced by groupnumber assignment

odd groupnumbers run: consistent - inconconsistent pairings

even groupnumbers run: inconsistent - consistent pairings

Block Sequence:

1. Target Category sorting training
2. Attribute sorting training
3. 1. Test Block of hypothesis-consistent* pairings with 20 trials (half the participant start with inconsistent pairings)
4. 2. Test Block of hypothesis-consistent pairings with 40 trials
5. Target Category sorting training with targets switching sides
6. 1. Test Block of hypothesis-inconsistent pairings with 20 trials
7. 2. Test Block of hypothesis-inconsistent pairings with 40 trials

In all Test Blocks:

* attributes and targets alternate
* attributes as well as targets are randomly selected without replacement

Trial Sequence:

Target -> until correct response -> ISI: 250ms (default)-> Target....

STIMULI

Stimuli can be edited under section Editable Stimuli

INSTRUCTIONS

* start instruction page is provided as an html page. It automatically adapts to different images and category labels UNLESS
the number of attributes and/or targets have been changed. In this case, changes have to be
made to file "intro_iat.htm", so that the correct number of items are presented in the overview table.

Example: instead of 8 words for target A, only 5 should be presented:

in file "intro_iat.htm":
change:

```
<td><%item.targetA.item(1)%>, <%item.targetA.item(2)%>, <%item.targetA.item(3)%>, <%item.targetA.item(4)%>,
    <%item.targetA.item(5)%>, <%item.targetA.item(6)%>, <%item.targetA.item(7)%>, <%item.targetA.item(8)%>
</td>
```

To:

```
<td><%item.targetA.item(1)%>, <%item.targetA.item(2)%>, <%item.targetA.item(3)%>, <%item.targetA.item(4)%>,
    <%item.targetA.item(5)%>
</td>
```

* item.instructions under section 'Editable Instructions' contains the the trial instructions
The instructions adapt automatically if different attributes and targets are used.

EDITABLE CODE:
check below for (relatively) easily editable parameters, stimuli, instructions etc.
Keep in mind that you can use this script as a template and therefore always "mess" with the entire code to further customize your experiment.

The parameters you can change are:

/showsummaryfeedback: set parameter showsummaryfeedback = true to display summary feedback to participants at the end (default)
set parameter showsummaryfeedback = false if no summary feedback should be presented to participants

/ISI: interstimulus interval (in ms) (default: 250ms)

</usermanual>

******************************************************************
************************************
******************************************************************
************************************
EDITABLE PARAMETERS: change editable parameters here
******************************************************************
************************************
******************************************************************
************************************

<parameters>
/showsummaryfeedback = true
/ISI = 250
</parameters>

******************************************************************
************************************
******************************************************************
************************************
EDITABLE STIMULI: change editable stimuli here
******************************************************************
************************************
******************************************************************
************************************
This sample IAT can be easily adapted to different target categories and attributes. To change the categories, you need only change the stimulus items and labels immediately below this line.

```
**********************************************************************
<item attributeAlabel>
/1 = "Public"
</item>

<item attributeA>
/1 = "Equality"
/2 = "Impartiality"
/3 = "Transparency"
/4 = "Incorruptibility"
/5 = "Challenging"
/6 = "Accountable"
/7 = "Motivated"
/8 = "Top Down"
</item>

<item attributeBlabel>
/1 = "Private"
</item>

<item attributeB>
/1 = "Competence"
/2 = "Advancement"
/3 = "Prestigious"
/4 = "Profitable"
/5 = "Power"
/6 = "Efficient"
/7 = "Business Like"
/8 = "Flexible"
</item>

<item targetAlabel>
```

/1 = "Bureaucratic"

</item>

<item targetA>

/1 = "Meaningful"

/2 = "Political"

/3 = "Reliable"

/4 = "Security"

/5 = "Honest"

/6 = "Lawful"

/7 = "Fair"

/8 = "Gratifying"

</item>

<item targetBlabel>

/1 = "Ambitious"

</item>

<item targetB>

/1 = "Innovative"

/2 = "Commercial"

/3 = "Reward"

/4 = "Creative"

/5 = "Supportive"

/6 = "Intuitive"

/7 = "Imaginative"

/8 = "Satisfying"

</item>

*********************************************************************************************************

*********************************************************************************************************

```
	EDITABLE INSTRUCTIONS: change instructions here
********************************************************************
*************************************
********************************************************************
*************************************
<instruct>
/ fontstyle = ("Arial", 2.8%, false, false, false, false, 5, 1)
/ txcolor = (black)
/ screencolor = black
</instruct>


<htmlpage iatintro>
/ file = "intro_iat.htm"
</htmlpage>




<item instructions>
/ 1 = "Put your left finger on the 'E' response key for items that belong to the category
'<%expressions.leftTarget%>'.
Put your right finger on the 'I' response key for items that belong to the category
'<%expressions.rightTarget%>'.
~nItems will appear one-by-one in the middle of the screen.
~nIf you make an error, a red X will appear - to continue, press the other response key.
~nGo as fast as you can while making as few errors as possible."

/ 2 = "Put your left finger on the 'E' response key for items that belong to the category
'<%item.attributeAlabel.item(1)%>'.
Put your right finger on the 'I' response key for items that belong to the category
'<%item.attributeBlabel.item(1)%>'.
~nIf you make an error, a red X will appear - to continue, press the other response key.
~nGo as fast as you can while making as few errors as possible."
```

/ 3 = "Press the left 'E' key for '<%item.attributeAlabel.item(1)%>' and
'<%expressions.leftTarget%>'.
Press the right 'I' key for '<%item.attributeBlabel.item(1)%>' and
'<%expressions.rightTarget%>'.
~nEach item belongs to only one category.
~nIf you make an error, a red X will appear - to continue, press the other response key.
~nGo as fast as you can while making as few errors as possible."

/ 4 = "This is the same task as the previous one.
~n~nPress the left 'E' key for '<%item.attributeAlabel.item(1)%>' and
'<%expressions.leftTarget%>'.
Press the right 'I' key for '<%item.attributeBlabel.item(1)%>' and
'<%expressions.rightTarget%>'.
~nEach item belongs to only one category.
~nGo as fast as you can while making as few errors as possible."

/ 5 = "Attention! The labels have changed sides.
~nPress the left 'E' key for '<%expressions.rightTarget%>'.
Press the right 'I' key for '<%expressions.leftTarget%>'.
~nGo as fast as you can while making as few errors as possible."

/ 6 = "Press the left 'E' key for '<%item.attributeAlabel.item(1)%>' and
'<%expressions.rightTarget%>'.
Press the right 'I' key for '<%item.attributeBlabel.item(1)%>' and
'<%expressions.leftTarget%>'.
~nIf you make an error, a red X will appear - to continue, press the other response key.
~nGo as fast as you can while making as few errors as possible."

/ 7 = "This is the same task as the previous one.
~nPress the left 'E' key for '<%item.attributeAlabel.item(1)%>' and
'<%expressions.rightTarget%>'.

```
Press the right 'I' key for '<%item.attributeBlabel.item(1)%>' and
'<%expressions.leftTarget%>'
~nEach item belongs to only one category.
~nGo as fast as you can while making as few errors as possible."
</item>
```

Note: expressions used to assign the correct label to the left and right response keys

```
<expressions>
/leftTarget = if(mod(script.groupid, 2) != 0){
	item.targetAlabel.item(1);
} else {
	item.targetBlabel.item(1);
};
/rightTarget = if (mod(script.groupid, 2) != 0){
	item.targetBlabel.item(1);
} else {
	item.targetAlabel.item(1);
};
</expressions>

<text spacebar>
/ items = ("Press the SPACE BAR to begin.")
/ position = (50%, 90%)
/ valign = bottom
</text>

<text errorReminder>
/ items = ("If you make an error, a red X will appear. Press the other key to continue.")
/ position = (50%, 95%)
/ valign = bottom
/ fontstyle = ("Arial", 3%, false, false, false, false, 5, 1)
/ txcolor = gray
/ erase = false
```

```
</text>

**********************************************************************
Performance summary
**********************************************************************

<trial summary>
/ ontrialbegin = [
	values.magnitude = "little to no";
	if( abs(expressions.d) > 0.15 ) values.magnitude = "a slight";
	if( abs(expressions.d) > 0.35 ) values.magnitude = "a moderate";
	if( abs(expressions.d) >= 0.65 ) values.magnitude = "a strong";
	if (expressions.d >= 0.0) values.preferred = item.targetALabel.1;
	if (expressions.d < 0.0) values.preferred = item.targetBLabel.1;
	if (expressions.d < 0.0) values.notpreferred= item.targetALabel.1;
	if (expressions.d >= 0.0) values.notpreferred= item.targetBLabel.1;
]
/ stimulustimes = [0=summary]
/ validresponse = (" ")
/ recorddata = false
</trial>

<text summary>
/ items = ("Your IAT score (D) was <% expressions.d %>, which suggests <%
values.magnitude %> automatic preference for <% values.preferred %> compared to
<% values.notpreferred %>.~n~n~nPress the spacebar to complete this session.")
/ size = (60%, 60%)
/ hjustify = left
 </text>

**********************************************************************
*************************************
```

!!!REMAINING CODE:

Customize after careful consideration only!!!

*****************************************************************************************************

*****************************************************************************************************

*****************************************************************************************************

DEFAULTS

*****************************************************************************************************

*****************************************************************************************************

script requires Inquisit 5.0.7.0 or higher

```
<defaults>
/ fontstyle = ("Arial", 3.5%)
/ screencolor = black
/ txbgcolor = black
/ txcolor = white
/ minimumversion = "5.0.7.0"
/ canvasaspectratio = (4, 3)
</defaults>
```

*****************************************************************************************************

*****************************************************************************************************

DATA

*****************************************************************************************************

********************************************************************
*************************************

Note: data file explanations under User Manual Information at the top

**********************
raw data file
**********************
<data>
/ columns = (build, computer.platform, date, time, group, subject, blockcode, blocknum, trialcode, trialnum, response, correct, latency, stimulusnumber, stimulusitem, expressions.da, expressions.db, expressions.d, expressions.percentcorrect)
/ separatefiles = true
</data>

***************
summary data
***************

<summarydata>
/ columns = (script.startdate, script.starttime, script.subjectid, script.groupid, script.elapsedtime, computer.platform, values.completed, expressions.da, expressions.db, expressions.d, expressions.percentcorrect)
/ separatefiles = true
</summarydata>

********************************************************************
*************************************
********************************************************************
*************************************

VALUES: automatically updated

********************************************************************
*************************************
********************************************************************
*************************************

/completed: 0 = script was not completed; 1 = script was completed (all conditions run)

/ sum1a: tracks the sum of the latencies to correct responses (latencies <= 10000ms) for the first compatible block 1A
Note: by design, all final trial responses are correct (regardless of accuracy of initial response)
/ sum2a: tracks the sum of the latencies to correct responses (latencies <= 10000ms) for the first incompatible block 2A
Note: by design, all final trial responses are correct (regardless of accuracy of initial response)
/ sum1b: tracks the sum of the latencies to correct responses (latencies <= 10000ms) for the second compatible block 1B
Note: by design, all final trial responses are correct (regardless of accuracy of initial response)
/ sum2b: tracks the sum of the latencies to correct responses (latencies <= 10000ms) for the second incompatible block 2B
Note: by design, all final trial responses are correct (regardless of accuracy of initial response)
/ n1a: counts the number of trials in first compatible block 1A (except first one)
/ n2a: counts the number of trials in first incompatible block 2A (except first one)
/ n1b: counts the number of trials in second compatible block 1B
/ n2b: counts the number of trials in second incompatible block 2B

/ ss1a: tracks the sum of the squared latencies to correct responses (latencies <= 10000ms) in the first compatible block

/ ss2a tracks the sum of the squared latencies to correct responses (latencies <= 10000ms) in the first incompatible block

/ ss1b: tracks the sum of the squared latencies to correct responses (latencies <= 10000ms) in the second compatible block

/ ss2b: tracks the sum of the squared latencies to correct responses (latencies <= 10000ms) in the second incompatible block

/ n_correct: counts all initial correct responses of all trials that count towards D score

/ magnitude: stores the magnitude of the implicit preference: "little to no", "a slight", "a moderate", "a strong"

/ preferred: stores the preferred target category

/ notpreferred : stores the non preferred target category

<values>

/ completed = 0

/ sum1a = 0

/ sum2a = 0

/ sum1b = 0

/ sum2b = 0

/ n1a = 0

/ n2a = 0

/ n1b = 0

/ n2b = 0

/ ss1a = 0

/ ss2a = 0

/ ss1b = 0

/ ss2b = 0

/ n_correct = 0

/ magnitude = "unknown"

/ preferred = "unknown"

/ notpreferred = "unknown"

/progresswidth = 0

/instructionIndex = 0

</values>

*****************************************************************

***********************************

*****************************************************************

***********************************

EXPRESSIONS

*****************************************************************

***********************************

*****************************************************************

***********************************

* 1 is compatible, 2 is incompatible

* a is first block, b is second block

/ m1a: mean latencies of correct responses in first compatible block

/ m2a: mean latencies of correct responses in first incompatible block

/ m1b: mean latencies of correct responses in second compatible block

/ m2b: mean latencies of correct responses in second incompatible block

/ sd1a: standard deviation of latencies of correct responses in first compatible block

/ sd2a standard deviation of latencies of correct responses in first incompatible block

/ sd1b: standard deviation of latencies of correct responses in second compatible block

/ sd2b: standard deviation of latencies of correct responses in second incompatible block
/ sda standarddeviation of latencies in first block
/ sdb standarddeviation of latencies in second block
/ da: D-score for first blocks
/ db: D-score for second blocks
/ d: overall D-score
/ percentcorrect: calculates the overall percent correct score of initial responses of test trials of D-score qualifying latencies
/progress: sets the length of the progress bar to %

```
<expressions>
/ m1a = values.sum1a / values.n1a
/ m2a = values.sum2a / values.n2a
/ m1b = values.sum1b / values.n1b
/ m2b = values.sum2b / values.n2b
/ sd1a = sqrt((values.ss1a - (values.n1a * (expressions.m1a * expressions.m1a))) / (values.n1a - 1))
/ sd2a = sqrt((values.ss2a - (values.n2a * (expressions.m2a * expressions.m2a))) / (values.n2a - 1))
/ sd1b = sqrt((values.ss1b - (values.n1b * (expressions.m1b * expressions.m1b))) / (values.n1b - 1))
/ sd2b = sqrt((values.ss2b - (values.n2b * (expressions.m2b * expressions.m2b))) / (values.n2b - 1))
/ sda = sqrt((((values.n1a - 1) * (expressions.sd1a * expressions.sd1a) + (values.n2a - 1) * (expressions.sd2a * expressions.sd2a)) + ((values.n1a + values.n2a) * ((expressions.m1a - expressions.m2a) * (expressions.m1a - expressions.m2a)) / 4) ) / (values.n1a + values.n2a - 1) )
/ sdb = sqrt((((values.n1b - 1) * (expressions.sd1b * expressions.sd1b) + (values.n2b - 1) * (expressions.sd2b * expressions.sd2b)) + ((values.n1b + values.n2b) * ((expressions.m1b - expressions.m2b) * (expressions.m1b - expressions.m2b)) / 4) ) / (values.n1b + values.n2b - 1) )
/ da = (m2a - m1a) / expressions.sda
```

```
/ db = (m2b - m1b) / expressions.sdb
/ d = (expressions.da + expressions.db) / 2
/ percentcorrect = (values.n_correct/ (values.n1a + values.n1b + values.n2a +
values.n2b)) * 100

/progress = 1% * values.progresswidth
</expressions>
*******************************************************************
*************************************
*******************************************************************
*************************************
	INSTRUCTIONS
*******************************************************************
*************************************
*******************************************************************
*************************************



<text instructions>
/ items = instructions
/ position = (10%, 25%)
/ halign = left
/ valign = top
/ hjustify = left
/ vjustify = center
/ size = (80%, 50%)
/ select = values.instructionIndex
</text>

<trial instructions>
/ ontrialbegin = [
	values.progresswidth += 10;
	values.instructionIndex += 1;
```

```
]
/ stimulustimes = [1=instructions, spacebar, progressbar, progressbar_fill]
/ correctresponse = (" ")
/ errormessage = false
/ recorddata = false
/ showmousecursor = true
</trial>

***********************************************************************
***************************************
***********************************************************************
***************************************
	STIMULI
***********************************************************************
***************************************
***********************************************************************
***************************************

<shape progressbar>
/shape = rectangle
/ size = (70%, 2%)
/ color = gray
/ position = (15%, 95%)
/ halign = left
/ valign = top
</shape>

<shape progressbar_fill>
/shape = rectangle
/ size = (expressions.progress, 2%)
/ color = green
/ position = (15%, 95%)
/ halign = left
```

```
/ valign = top
</shape>

<text attributeA>
/ items = attributeA
/ fontstyle = ("Arial", 5%)
/ txcolor = green
</text>

<text attributeB>
/ items = attributeB
/ fontstyle = ("Arial", 5%)
/ txcolor = green
</text>

<text targetB>
/ items = targetB
/ fontstyle = ("Arial", 5%)
</text>

<text targetA>
/ items = targetA
/ fontstyle = ("Arial", 5%)
</text>

<text error>
/ position = (50%, 75%)
/ items = ("X")
/ color = red
/ fontstyle = ("Arial", 10%, true)
</text>

<text attributeAleft>
```

```
/ items = attributeAlabel
/ valign = top
/ halign = left
/ position = (5%, 5%)
/ txcolor = green
/ fontstyle = ("Arial", 5%)
</text>

<text attributeBright>
/ items = attributeBlabel
/ valign = top
/ halign = right
/ position = (95%, 5%)
/ txcolor = green
/ fontstyle = ("Arial", 5%)
</text>

<text targetBleft>
/ items = targetBlabel
/ valign = top
/ halign = left
/ position = (5%, 5%)
/ fontstyle = ("Arial", 5%)
</text>

<text targetBright>
/ items = targetBlabel
/ valign = top
/ halign = right
/ position = (95%, 5%)
/ fontstyle = ("Arial", 5%)
</text>
```

```
<text targetBleftmixed>
/ items = targetBlabel
/ valign = top
/ halign = left
/ position = (5%, 19%)
/ fontstyle = ("Arial", 5%)
</text>

<text targetBrightmixed>
/ items = targetBlabel
/ valign = top
/ halign = right
/ position = (95%, 19%)
/ fontstyle = ("Arial", 5%)
</text>

<text targetAleft>
/ items = targetAlabel
/ valign = top
/ halign = left
/ position = (5%, 5%)
/ fontstyle = ("Arial", 5%)
</text>

<text targetAright>
/ items = targetAlabel
/ valign = top
/ halign = right
/ position = (95%, 5%)
/ fontstyle = ("Arial", 5%)
</text>

<text targetAleftmixed>
```

```
/ items = targetAlabel
/ valign = top
/ halign = left
/ position = (5%, 19%)
/ fontstyle = ("Arial", 5%)
</text>

<text targetArightmixed>
/ items = targetAlabel
/ valign = top
/ halign = right
/ position = (95%, 19%)
/ fontstyle = ("Arial", 5%)
</text>

<text orleft>
/ items = ("or")
/ valign = top
/ halign = left
/ position = (5%, 12%)
/ fontstyle = ("Arial", 5%)
</text>

<text orright>
/ items = ("or")
/ valign = top
/ halign = right
/ position = (95%, 12%)
/ fontstyle = ("Arial", 5%)
</text>

**********************************************************************
**************************************
```

```
******************************************************************************
***************************************
	TRIALS
******************************************************************************
***************************************
******************************************************************************
***************************************

<trial attributeA>
/ validresponse = ("E", "I")
/ correctresponse = ("E")
/ stimulusframes = [1 = attributeA, errorReminder]
/ posttrialpause = parameters.ISI
</trial>

<trial attributeB>
/ validresponse = ("E", "I")
/ correctresponse = ("I")
/ stimulusframes = [1 = attributeB, errorReminder]
/ posttrialpause = parameters.ISI
</trial>

<trial targetBleft>
/ validresponse = ("E", "I")
/ correctresponse = ("E")
/ stimulusframes = [1 = targetB, errorReminder]
/ posttrialpause = parameters.ISI
</trial>

<trial targetBright>
/ validresponse = ("E", "I")
/ correctresponse = ("I")
/ stimulusframes = [1 = targetB, errorReminder]
```

```
/ posttrialpause = parameters.ISI
</trial>

<trial targetAleft>
/ validresponse = ("E", "I")
/ correctresponse = ("E")
/ stimulusframes = [1 = targetA, errorReminder]
/ posttrialpause = parameters.ISI
</trial>

<trial targetAright>
/ validresponse = ("E", "I")
/ correctresponse = ("I")
/ stimulusframes = [1 = targetA, errorReminder]
/ posttrialpause = parameters.ISI
</trial>

*******************************************************************
*************************************
*******************************************************************
*************************************
	BLOCKS
*******************************************************************
*************************************
*******************************************************************
*************************************

<block attributepractice>
/ bgstim = (attributeAleft, attributeBright)
/ trials = [
		1=instructions;
		2-21 = random(attributeA, attributeB);
]
```

```
/ errormessage = true(error,200)
/ responsemode = correct
</block>

<block targetcompatiblepractice>
/ bgstim = (targetAleft, targetBright)
/ trials = [
			1=instructions;
			2-21 = random(targetAleft, targetBright);
]
/ errormessage = true(error,200)
/ responsemode = correct
</block>

<block targetincompatiblepractice>
/ bgstim = (targetAright, targetBleft)
/ trials = [
			1=instructions;
			2-21 = random(targetAright, targetBleft);
]
/ errormessage = true(error,200)
/ responsemode = correct
</block>

<block targetcompatiblepracticeswitch>
/ bgstim = (targetAleft, targetBright)
/ trials = [
	1=instructions;
	2-41 = random(targetAleft, targetBright);
]
/ errormessage = true(error,200)
/ responsemode = correct
</block>
```

```
<block targetincompatiblepracticeswitch>
/ bgstim = (targetAright, targetBleft)
/ trials = [
	1=instructions;
	2-41 = random(targetAright, targetBleft);
]
/ errormessage = true(error,200)
/ responsemode = correct
</block>

<block compatibletest1>
/ bgstim = (targetAleftmixed, orleft, attributeAleft, targetBrightmixed, orright, attributeBright)
/ trials = [1=instructions;
  3,5,7,9,11,13,15,17,19,21= random(targetAleft, targetBright);
  2,4,6,8,10,12,14,16,18,20 = random(attributeA, attributeB)]
/ errormessage = true(error,200)
/ responsemode = correct
/ ontrialend = [
	if(block.compatibletest1.latency  <= 10000 && block.compatibletest1.currenttrialnumber != 1 ) values.sum1a =  values.sum1a + block.compatibletest1.latency;
	if(block.compatibletest1.latency  <= 10000 && block.compatibletest1.currenttrialnumber != 1 ) values.n1a +=  1;
	if(block.compatibletest1.latency  <= 10000 && block.compatibletest1.currenttrialnumber != 1 ) values.ss1a =  values.ss1a + (block.compatibletest1.latency * block.compatibletest1.latency);
	if(block.compatibletest1.latency  <= 10000 && block.compatibletest1.currenttrialnumber != 1 ) values.n_correct += block.compatibletest1.correct;
]
</block>
```

```
<block compatibletest2>
/ bgstim = (targetAleftmixed, orleft, attributeAleft, targetBrightmixed, orright,
attributeBright)
/ trials = [
  2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32,34,36,38,40 = random(targetAleft,
targetBright);
  1,3,5,7,9,11,13,15,17,19,21,23,25,27,29,31,33,35,37,39 = random(attributeA,
attributeB)]
/ errormessage = true(error,200)
/ responsemode = correct
/ ontrialend = [
	if(block.compatibletest2.latency  <= 10000) values.sum1b =  values.sum1b +
block.compatibletest2.latency;
	if(block.compatibletest2.latency  <= 10000) values.n1b += 1;
	if(block.compatibletest2.latency  <= 10000) values.ss1b =  values.ss1b +
(block.compatibletest2.latency * block.compatibletest2.latency);
	if(block.compatibletest2.latency  <= 10000) values.n_correct +=
block.compatibletest2.correct;
]
</block>

<block incompatibletest1>
/ bgstim = (targetBleftmixed, orleft, attributeAleft, targetArightmixed, orright,
attributeBright)
/ trials = [1=instructions;
  3,5,7,9,11,13,15,17,19,21 = random(targetBleft, targetAright);
  2,4,6,8,10,12,14,16,18,20 = random(attributeA, attributeB)]
/ errormessage = true(error,200)
/ responsemode = correct
/ ontrialend = [
```

```
	if(block.incompatibletest1.latency  <= 10000 &&
block.incompatibletest1.currenttrialnumber != 1) values.sum2a =  values.sum2a +
block.incompatibletest1.latency;
	if(block.incompatibletest1.latency  <= 10000 &&
block.incompatibletest1.currenttrialnumber != 1 ) values.n2a +=  1;
	if(block.incompatibletest1.latency  <= 10000 &&
block.incompatibletest1.currenttrialnumber != 1 ) values.ss2a =  values.ss2a +
(block.incompatibletest1.latency * block.incompatibletest1.latency);
	if(block.incompatibletest1.latency  <= 10000 &&
block.incompatibletest1.currenttrialnumber != 1 ) values.n_correct +=
block.incompatibletest1.correct;
]
</block>

<block incompatibletest2>
/ bgstim = (targetBleftmixed, orleft, attributeAleft, targetArightmixed, orright,
attributeBright)
/ trials = [
  2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32,34,36,38,40 = random(targetBleft,
targetAright);
  1,3,5,7,9,11,13,15,17,19,21,23,25,27,29,31,33,35,37,39 = random(attributeA,
attributeB)]
/ errormessage = true(error,200)
/ responsemode = correct
/ ontrialend = [
	if(block.incompatibletest2.latency  <= 10000) values.sum2b =  values.sum2b +
block.incompatibletest2.latency;
	if(block.incompatibletest2.latency  <= 10000) values.n2b +=  1;
	if(block.incompatibletest2.latency  <= 10000) values.ss2b =  values.ss2b +
(block.incompatibletest2.latency * block.incompatibletest2.latency);
	if(block.incompatibletest2.latency  <= 10000) values.n_correct +=
block.incompatibletest2.correct;
]
```

```
</block>

<block compatibletestinstructions>
/ bgstim = (targetAleftmixed, orleft, attributeAleft, targetBrightmixed, orright,
attributeBright)
/ trials = [1=instructions]
/ recorddata = false
</block>

<block incompatibletestinstructions>
/ bgstim = (targetBleftmixed, orleft, attributeAleft, targetArightmixed, orright,
attributeBright)
/ trials = [1=instructions]
/ recorddata = false
</block>

<block summary>
/skip = [parameters.showsummaryfeedback == false]
/ trials = [1=summary]
/ recorddata = false
</block>

*******************************************************************************
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	EXPERIMENT
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Groupassignment is done by groupnumber
```

```
<expt>
/ preinstructions = (iatintro)
/subjects = (1 of 2)
/groupassignment = groupnumber
/ blocks = [
	1=targetcompatiblepractice;
	2=attributepractice;
	3=compatibletest1;
	4=compatibletestinstructions;
	5=compatibletest2;
	6=targetincompatiblepractice;
	7=incompatibletest1;
	8=incompatibletestinstructions;
	9=incompatibletest2;
	10=summary;
]
/onexptend = [values.completed = 1]
</expt>

<expt>
/ preinstructions = (iatintro)
/subjects = (2 of 2)
/groupassignment = groupnumber
/ blocks = [
	1=targetincompatiblepractice;
	2=attributepractice;
	3=incompatibletest1;
	4=incompatibletestinstructions;
	5=incompatibletest2;
	6=targetcompatiblepractice;
	7=compatibletest1;
	8=compatibletestinstructions;
	9=compatibletest2;
```

```
		10=summary;
]
/onexptend = [values.completed = 1]
</expt>

**********************************************************************
Test Monkey
**********************************************************************
<monkey>
/ latencydistribution = normal(500, 100)
/ percentcorrect = 90
</monkey>


**********************************************************************
**************************************

		End of File
**********************************************************************
**************************************
```

## Appendix 9: Reminder Text to Participants

### *Email to Recruiting managers (1st)*

**From:** LIza Walter-Nelson <liza@pharepractice.co.uk>

**Sent:** Thursday, June 6, 2019 7:09:31 AM

**To:** XXXXXX

**Subject:** Research project

XXXX,

Many thanks for volunteering to take part in my research. Attached is the project info and a consent form. Following which I will send you 5 CVs for scoring, there will then follow an online survey

Let me know if you have any questions.

Thanks again,
Liza

**Liza Walter-Nelson**

*Director, Chartered Psychologist*

FCIPD, AFBPsS

*Attachments – Informed consent form and Participant information sheet*

Email to remind recruiting managers.

**From:** LIza Walter-Nelson [mailto:liza@pharepractice.co.uk]

**Sent:** 20 June 2019 05:38

**To:** XXXXX

**Subject:** Research - CV scoring

**Importance:** High

Good morning, thank you again for taking part in my research, please could I ask you to send me the scored CVs by the end of the month?

Many thanks

Liza

Email to Candidates re changes to CV:

**From:** LIza Walter-Nelson <liza@pharepractice.co.uk>

**Sent:** Monday, April 29, 2019 11:50:10 AM

**To:** XXXXXX

**Subject:** Candidate 1 CV.docx

XXX,

I have reformatted your CV – can you have a look through and add any details you can into the highlighted areas please? (we are aiming to have some kind of quantitative information on every line)

Many thanks

Liza

## Appendix 10. Reference Group

### Overview

In preparation for beginning this programme (DOBPsych), the lead author discussed several ideas with colleagues, friends, connections made via networks and past employment. This group helped the author hone their ideas for the proposal document that formed part of the application process to join Kingston University's programme. The groups' input was then reused to help the author expand and refine search terms for the systematic literature review.

This group were effectively the ‘sounding board’ for the lead author, for developing the research ideas seen here, as a result of their unique experiences and skills.

### Contributors:

- Oliver Anderson
- Rosalyn Jack
- Carol Carter
- Tamara York
- Dr Harriet Grinyer-Doswell
- Dr Simon Mac Rory
- Alfredo Thompson
- Jayne Halford

# Part 4. Professional Doctorate in Occupational and Business Psychology: Template for Reflective Review Document

## 1. Scoping out your Research Idea

| Stage | Questions | Reflections |
|---|---|---|
| 1.1 | What challenges did you face, and how did you overcome them? | It was getting started! Nothing seemed to come easily to me in this process, other than the initial thought that this was the next logical step in my professional development.<br><br>The first challenge was the initial thinking about an idea, a set of questions, identifying what my passion project was – I did not want to just do a professional doctorate for the sake of doing a professional doctorate - I wanted the outputs to be useful to other practitioners—especially those like me that cross both psychology and HR.<br><br>So, thinking about what the burning question that needed answering was, was a challenge. I felt that there are so many, especially when working across both disciplines: from the selection of talent to the 'safest' exits, the interpersonal relationships, and at the time of starting this, wellbeing (which has only increased in need of understanding and making a great offer of support to employees), were all issues that could be investigated further.<br><br>When we met Cohort 1, I had already started down my path, already decided on the area to research, but it was great to hear how they had dealt with this step, |

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| | | and from Alan, hearing the very practical advice of doing something you can live with for a couple of years. This helped my ability to see why it had to be fairly narrow (and not try to resolve all the world's problems in one study).<br><br>I narrowed it down by thinking about the types of issues I had faced as a practitioner, and what I felt had led to those issues.<br><br>Recruitment and selection are an area of concern because it impacts so much on the effective running and delivery of services in organisations, as well as having an impact on the morale of staff (i.e., as they have to pick up work when there are gaps in staffing). Trying to get recruitment “right first time” is difficult if you do not have the right level of talent in the candidate pool you were hoping for. In deciding where this research would go, I reflected on the times I had been alerted that perhaps my talent pool was reduced because of decisions that others had made for me (or before me), particularly when working through recruitment agencies. I began to wonder what led to those decision to ‘shorten’ the pool and whether this was self-selection or a form of bias. I knew that I wanted to try and create a practical look at how this selection bias happens (if it does) and whether it is based on real and tangible differences.<br><br>Many times during this process, I am not entirely sure I did overcome my challenges adequately enough; I have often gone back and forth on whether I narrowed this down sufficiently well or homed in on |

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| | | the issues I had identified as well as I could have. At this stage, the main source for support was gathering a reference group: a group of individuals who worked in Selection in HR and were either HR or Occupational Psychology practitioners. These became a sounding board for these early stages of the research. |
| 1.2 | Did your initial idea change during this stage? If so, how, and why? | My initial ideas flickered back and forth. Looking at quite broad concepts and then trying to narrow them down. The actual process of deciding which elements I wanted to look at was more involved than I had anticipated. Many niche parts could be covered; lots of elements could be broken down further and further. I had not anticipated how niche some of the extant research was in this area and found it interesting that I had overlooked a lot of this in my practice over the years. It is not because I was not an evidence-based practitioner, but because there is rarely only one element to be reviewed in practice.<br><br>I started thinking about whether I wanted to know about a range of variables or whether I wanted to go deeply into one or two and, in which case, what kind of study I wanted to do (qualitative or quantitative). I also needed to consider what impact that had on being able to 'use' the material once I had completed it.<br><br>In terms of the type of study, quantitative or qualitative, what weighed on my mind was how much weight would be given to practitioners' qualitative research. I considered a bias towards quantitative in HR circles, as the 'numbers' seem to be more important than the depth of the detail that can be |

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| | | achieved through qualitative research. This is not to say I would always rule out conducting quantitative research, but certainly, among my network, the preference is to see ‘what the numbers are saying’. So my initial ideas changed due to these considerations, which I thought I could achieve with the outcomes.  I think this is a reflection of practice in general; that it feels like small numbers can be ‘explained away’ and create enough doubt as to their relevance that actions are not taken even if there appears to be a problem – I often thought here about the conversations I have been involved in around Staff Engagement survey’s and whether ‘just 3%’ is enough of a problem to worry about (in many cases this was bullying and harassment).<br><br>I wanted to look at the issues under research practically. So I moved back and forth for a while between areas like behaviours and values and more concrete concepts like task and decision-making processes. It felt obvious to me, even before researching, that the issues of differences or similarities are complex and multifaceted and that trying to condense that into a manageable study programme would be difficult. |
| 1.3 | How did this process differ from your expectations? | I do not think that this process differed too much from my expectations. Partly because I was unsure what to expect, so I had no pre-set ideas about how difficult or not this phase would be.<br><br>I suppose I thought it would be easy to decide on an area and just get on with it. However, I ended up going round and round in my head a lot. It felt like the |

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| | | literature went off at various tangents, so I felt slightly overwhelmed by whether I could work out if what I had was a good idea! The issue for me was, "Was it too much of a pet project"? Or would it add value to practitioners and researchers on a wider scale? |
| 1.4 | What were your key learnings from this stage? | My key learning from this phase is to be open to new ideas emerging from the reading, from your thoughts even!<br><br>I spent the first few weeks trying to find work that fit my initial ideas, searching for things that looked at practical applications etc.<br><br>What I did was overlook other potential ideas and possibilities. It took me a few weeks, but I got there in the end and started reading much wider around the recruitment and selection issues, wider in the areas of values and around differences between sectors. |
| 1.5 | What would you do differently if you were to go through this process again? | If I were to go back or advise someone to join this programme, I would say more reading upfront. It would be better, and in may was easier, to better understand what the issues were, in general, to filter down to what you will take forward, without going around and around. This is especially true of academic research.<br><br>As a practitioner, I have spent a great deal of time accessing and having access to the grey literature and those pieces at practitioners. I realised that I had not spent nearly as much time looking at journals as I thought I had. When I had accessed them and read studies, I realised that I had been skipping over |

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| | | methodology sections and heading straight to results and discussions. This, I feel, really slowed me down initially as I had to read and re-read articles to feel that I understood them.<br><br>I needed to revisit all the learning I had taken from previous education processes to get back into the critical analysis of those sections I normally skipped.<br><br>The sessions I attended on these subjects (critical thinking, understanding articles, what statistics to look for / what they mean) on the contact days were really helpful, especially the ability to discuss this with the group. This has made me think differently about how and what I am reading and assessing what I am reading more critically. |

## 2. The Systematic Review: Developing a protocol

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| 2.1 | What challenges did you face, and how did you overcome them? | My most obvious challenge, to me at least, was having a lack of the right skills and experience in academia, or rather academic approaches. It felt like a very big change, having not been in formal education for several years.<br><br>There seem to be many terms and approaches that I am unaware of, and I needed a crash course in what these were. It highlighted how much I skip over when reading journal articles for work and how much I rely on my instincts to separate and distinguish between studies rather than dig beneath the facts.<br><br>Throughout this process, I also came to realise that I am quite good at procrastinating. Not just because of laziness or lack of motivation, but there were days and evenings when I felt real fear in putting words on paper.<br><br>I had not anticipated this reaction when returning to the academic setting. It is always a feeling of "so what? Who other than you are going to care about this stuff?" it was far more paralyzing than I had anticipated.<br><br>I spent time during this period talking to a range of people about my ideas. Some academic, some practitioners, some just interested parties (at least my husband said he was an interested party), who helped me feel a little more grounded and confident |

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| | | that the research area was worth attention. This type of social support and networking helped reduce my anxiety that I had something to research that could be useful.<br><br>It was very disconcerting to feel that way, especially as in my daily practice, my opinion had weight – whether in the organisation's strategy, with a team or in some cases, in law (i.e., Employment Tribunals). To suddenly feel so paralysed by the weight of expectation and fear of failure was new and horrifying. I am very pleased to have had such a good support network in my life. |
| 2.2 | How did this process differ from your expectations/plan? | I found it was much harder to narrow down and set criteria than I had expected in terms of how this process differed from my expectations or plan.<br><br>I had not anticipated that the existing literature would be so varied or that I would need to be specific in setting my inclusion/exclusion criteria.<br><br>It did worry me that I may have missed something or that something important and relevant could be missed, but I had to appreciate (and come to terms with) that given the time constraints, it would not be possible to create such a big catch-all piece of research.<br><br>I suppose on reflection; I had expected to sail through this to an extent. I had not anticipated that I would be getting in my way and of being afraid. This threw me off and led to time delays that I had not included in my estimations. |

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| 2.3 | What were your key learnings from this stage? | My key learnings from this stage were to get organised, read more around the general area first and think / research more about the common models and theories (if there are any).<br><br>I came in assuming I had knowledge of and had covered all the possible issues related to my research. However, the prevailing literature range in my area of interest was much broader than I had anticipated. I still assume that this is because selection (self and other) issues are multi-faceted and not normally condensed to one or two investigation areas. Practice, however, did tell me that there are one or two ‘crunch points’ in the recruitment and selection of individuals within organisations that are worth further exploration.<br><br>I also learned that I needed to explore a wider range of information ahead of getting started – this is something I will remember to put into practice in my future endeavours. |
| 2.4 | What would you do differently if you were to go about developing a protocol again? | If I were to do something differently, it would be to start with something more specific.<br>I started off believing that I could cover a broad range of issues in one programme of study. This, of course, was not possible. Therefore, I would work on being more specific before getting started next time; I set up a ‘reference group’ of people in the field of selection in practice or the academic way to funnel down my ideas. This helped me get focused, and I wish I had put this in place earlier when I saw the programme advertised initially. |

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| | | If I were to do something differently, I would also try and set a routine of time and days to deal with the process and treat it much more like an employment/job than study. My assumption that I would simply ‘fit it in’ in these early stages around existing commitments was a mistake that cost me time. |

## 3. The Systematic Review: Conducting searches

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| 3.1 | How did you decide on the keywords, databases, and inclusion/exclusion criteria to use? | In deciding on the keywords, databases, and inclusion/exclusion criteria to use, I worked with others in the doctorate group at one of our face to face sessions, having others bounce ideas around with and debate the relative importance of certain aspects of the study was very helpful. It allowed me to refine the criteria and relative importance of issues.<br><br>I also worked with the supervisors to ensure I had covered all the necessary issues, all the necessary terms. Being able to debate the importance of different terms and have their input was very important.<br><br>In addition to this, I spoke with people in the recruitment sector and occupational psychologists working in recruitment areas to discuss key terms, key concepts within sector switching and values-based comparisons. This meant I had some practical, practitioner inputs, which I felt was important as I wanted this research to be relevant to those in practice and easy for them to see the link between this research and their practice. |
| 3.2 | What challenges did you face, and how did you overcome them? | I faced several systems and process issues – for example, not having used ref works before, or iCat (t search databases) meant some early frustrations and some redoing of the work.<br><br>To deal with this and be productive at this stage, I utilised the support of my cohort. Through our WhatsApp group and email correspondence, I was able to get support and tips on how to use the applications. The supervisors were |

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| | | both very helpful, as were the staff in the library at Kingston University.<br><br>Once I had overcome my initial frustrations, I found this process quite fulfilling – and in some ways, I was astounded at the number of studies related to the subject. It raised many questions in my mind; as a practitioner, who was looking at this stuff in my networks? How many people in practice are accessing this kind of information as a matter of routine? Having access via the University made me realise how little research is accessible to practitioners not connected to a university. I am a journal subscriber, but again this showed me how having one journal is just scratching the surface. |
| 3.3 | How did this process differ from your expectations/plan? | This process took much longer than anticipated, and I had not been prepared enough for exclusion criteria. For example, I had not consolidated early enough my thoughts about country information and differences.<br><br>I had also not anticipated the number of studies from outside of the OECD countries, which were very different in their employment sectors. This was related again to my lack of exposure and access to a broad research base. |
| 3.4 | What were your key learnings from this stage? | I learnt that I had not thought about country-related data and the impacts of this on meaningful comparisons. It also impacted the size of the search results, which were much larger without this filter.<br><br>I also had, wrongly, assumed that most of the data I found would be 'local' given the amount that differences between sectors are discussed and how much rhetoric there is within the practitioner circles I move in. I was |

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| | | very surprised then to find that there was a large amount of work on this outside the OECD, where there are greater cultural differences than our own in the UK, and a relatively less based within the OECD countries, specifically the UK. |
| 3.5 | What would you do differently if you were to go about conducting systematic searches again? | If I were doing this again, I would do differently would include having a better plan for the filter criteria upfront (before searching). To do this, I would undertake a broader range of reading first around the differences between countries and their approach to the public and private sector, their labour intelligence etc. In order to be better informed.<br><br>I think this comes from the need to review the criteria throughout the process so that there was a manageable amount of studies, and it threw up things that I probably should have thought about or included, such as looking at OECD regions only – as these are the most comparable in terms of the sector (Private vs Public). |

## 4. The Systematic Review: Assimilation and Write Up

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| 4.1 | How did you decide on the way to cluster the data and tell the story? How did you choose the target journal? | I have not settled on a target journal – I have still not looked into this even at the end of this process. This is in part because there are as many journals as studies that were included in my SLR. The vast range of academic publications and industry publications interested in the subject of differences between the public and private sectors means that there are many routes I could follow.<br><br>The data I used did not require clustering – it was about trying to unpick the narrative from each study – what were the top items? What were the similarities, and how close were they or how far apart in terms of differences? |
| 4.2 | What challenges did you face, and how did you overcome them? | My greatest challenges were understanding how to target a journal – I want to be published, but I also want to ensure that the SLR is 'right'; that is, it has a story and that that story is useful. In a professional capacity, trying to find evidence that can be applied, and has considered the application, is much more important to me. That was the biggest challenge in writing this in producing something that could be useful to other professionals.<br><br>I also think that my fear about whether my voice is important enough here, or my ideas well executed enough, have a role in playing not exploring publication of the paper. Perhaps if I did undertake the process to publish and get accepted for publication, I would know that I have done enough, been enough, covered enough, and interested in others. |
| 4.3 | How did this process differ from | This process was generally more complicated than I thought it would be. It took a great deal more effort than I thought it would – I had been far too blasé about this |

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| | your expectations/plan? | process overall. Having spent many years writing Board papers, reviews, assessments and policies, I think I came into this believing I had understood the requirements. However, that was not the case.<br><br>The plan that I had became more of a guideline, and I wish I had been more focused and consistent in my approach to this. |
| 4.4 | What were your key learnings from this stage? | The ability to keep track of everything was one of the things that I learned in this process.<br><br>Using a spreadsheet, as well as old fashioned coloured highlighters, was a must. I learnt that I needed to have a two-phase method of written notes and typed data and analysis – being able to double-check everything, to go back and forth with it all laid out in front of me was immensely helpful.<br><br>I also feel that I developed skills in my critical analysis of data and writing in a more academic style. This was a difficult process, though, and it took a long time for both myself and my supervisors – I have not asked the direct question, but I imagine it was frustrating for them. |
| 4.5 | What would you do differently if you were to go about writing up again? | If I were to do something differently, it would be to get more of a handle on creating a narrative – a story within the writing.<br><br>I might approach the write up differently - I wanted it to be useful, and I found myself in a situation where it felt like I was neither writing for academic nor practitioner audiences. I think I got a little lost and would, next time, give myself more time to write, then review, then rewrite. I spoke to a friend who writes fiction for |

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| | | pleasure; he said the trick was to write everything as he thinks about it, then go back and edit; otherwise, the story risks getting lost.<br><br>I am not sure whether that helps in academic writing, but I think that could be a useful tactic in terms of how I might approach turning this into a presentation or more editorial piece. |

## 5. Research Study: Design

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| 5.1 | How did you come to a decision on the study/studies you were going to undertake? | The SLR revealed that there was still a mixed picture about whether there were differences between public and private sector workers. As such, I felt that it was important to look at that within a qualitative process as experience tells me that numbers have a greater impact on practitioners.<br><br>Including a 'real life' (simulated) process (application/shortlisting) meant that I could see in action where bias might exist and prevent sector switching.<br><br>I also felt that my area of focus would resonate with practitioners, and ultimately I have undertaken this programme as a way to bridge the psychology and HR fields I work in: having a piece that may be useful to others in the field was one of the drivers for undertaking this programme. |
| 5.2 | Why did you decide to use the particular methodology/analytical process? | As a practitioner, I feel that quantitative data has the most sway in my experience, the client, the team and the organisations.<br><br>As a result, I felt that it would be better to undertake something quantitative rather than qualitative. Interestingly, I prefer to work with qualitative information, as I believe that this provides a richness of the human experience that quantitative does not always bring. However, I have seen too many colleagues pull apart good |

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| | | advice and guidance on the basis that it is "only a handful of people".<br><br>By undertaking quantitative research, the colleagues and practitioners I hope to influence will accept the results (whatever they may be); and find them useful. |
| 5.3 | What challenges did you face in the design process, and how did you overcome them? | I found there to be several practical challenges, including accessing the software for the Implicit Association Test. This began with contact with Harvard, who provided me with a quote of £5000 to access their software. I found from within the programme group that there were other IAT software providers, which resulted in my finding Millisecond. Whilst this cost me more money to access, it was a much more manageable sum than the Harvard quote at around £600 for access for three months. As a self-funded participant in this programme, I could not afford to incur too many additional costs in the research undertaking.<br><br>Concerning other materials and details from studies that I needed to access, perseverance was key. I had to work my way through the main researchers' associates to access the material I needed. It took a while and many contacts, but eventually, I have gained access to the items I need to support my research. |
| 5.4 | How did this process differ from your expectations/plan? | This differed again from my initial expectations, as it took much longer than I had anticipated accessing the material and the tools that I needed. |

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| | | There were more blocks to this than I imagined there would be. I had assumed that people would be open to helping and sharing their work in the interests of expanding research or at least parts of it.<br><br>I think this is because I would personally be flattered if someone else was interested in my work and wanted to use it somehow or even replicate it – I had assumed that everyone in the world of academia would feel the same way. |
| 5.5 | What were your key learnings from this stage? | My key learning is that I needed to start earlier – a theme of my reflections, it seems.<br><br>This is a very demanding piece of work, and being in full-time employment at the same time created many challenges, including the sheer level of energy needed to undertake the work either very early in the morning before going starting my job or in the evening after a full day at work and family meal/bedtimes etc.<br><br>I had assumed researchers would be more open, more amenable to sharing information, so I did not get started early enough to consider that it would take such a lot of time to track down those willing to help. This will stay with me and certainly encourage me to be open with the work I undertake and be open with my time for helping others. |

# 6. Research Study: Gathering data

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| 6.1 | How did you go about gathering data and accessing participants? Why did you choose this route? | To gather data and access participants, I originally spoke with old colleagues, people in my networks, and recruitment agencies that I have worked with or know about. Early in the process, I spoke with many people about their input to the project and seemingly had a ready supply of participants.<br><br>This quickly disappeared and resulted in my turning to LinkedIn to recruit both candidates and recruiters. I also tapped into the networks of other people – my husband, for example, proved to be an absolute diamond in helping me recruit recruitment participants as he works in a very large organisation in the UK. I very much mined his contacts of managers who all regularly recruit to their units and undertake recruitment activity in a regional recruitment forum and assessment centre for manager-level staff.<br><br>I had wanted this research to be grounded in real-world experience and views, and so using those who regularly participate in recruitment activities and make decisions for their area of work, I felt, was absolutely necessary. I would have liked to have had more recruitment professionals (than the 30 in this study); however, to do that, I feel I would have had to compromise the integrity of the 'real-world', semi-field study approach and move to a student base for participation. That I feel would have lessened any impact the study may prove to have. The gathering of participants was arduous; it |

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| | | was worth the effort to have real decision-makers on board. |
| 6.2 | What challenges did you face when gathering data/accessing participants, and how did you overcome them? | There were several challenges in generating participants past the initial interest phase – not everyone that showed an interest engaged in the whole process – this surprised me as there had been seemingly genuine interest on the part of several people and companies. This was especially true of recruitment agencies who had previously said they would be very interested and have people who could participate. In the end, I have had very little engagement and participation in the research from this area.<br><br>The most surprising element of this was that from the agencies, the reason they gave as to not participating was that they 'do not score CVs'; that is not how recruitment is done, seemingly. This was worrying as even when I explained that I need to generate data so need some form of scores and that it may not be entirely like they normally do, many of them reiterated that they do not normally do CV scoring to filter candidates. They could not describe how they do it without scoring against a criterion driven by a job description. Although one recruiter at an agency did reveal to me over coffee that it was more to do with the 'feeling' that they got from the client about what they were looking for, not the job description provided.<br><br>This kind of practice is perhaps what drives the lower transfer rates between sectors, especially at |

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| | | senior levels, as the ‘test ‘of whether you could do the job may not be based on your skills and abilities. |
| 6.3 | How did this process differ from your expectations/plan? | I had assumed that the tools I needed would be much easier to access, that I would somehow be able to get support quickly to access them.<br><br>I have made many assumptions about this process and the programme that worried me as I continued to work through the stages. At times I felt much more overwhelmed than I have ever done before – I have not felt this level of anxiety in any other role I have taken on to date.<br><br>Being a distance course, I very much felt the distance to my fellow students and the supervisors. Although we had a WhatsApp group and could call each other, I wished that there had been more frequent physical contact points as it felt difficult to reach out at times. |
| 6.4 | What were your key learnings from this stage? | I learnt that I had not been prepared enough in any of the stages of this work; I had come into this assuming it would be straightforward, that everyone would be helpful, and everything I needed easily accessible.<br><br>That felt very far from the truth. I have enjoyed the process immensely, but it has been extremely hard to stay on top of things, stay motivated and get the work completed around a demanding full-time job and family commitments.<br><br>I know there are more days I could have dedicated to it, more weekends I could have spent going |

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| | | through this, especially in the data-gathering stage – I had taken too long getting back to participants emails, took too long to fix issues on the IAT script so it could be used etc. and to get the data collected within my original timescales.<br><br>I believe that this could have been easier. Had I focused on recruiting participants from one organization or from inside my employer. Instead, I recruited participants from all kinds of areas, using LinkedIn and my CIPD network. As a result, all my contact has been online (emails etc.).<br><br>Not having the time or space to meet with people physically, to get their input, I think, hampered the process. People need some physical encouragement, someone being there to provide support and prompts to get the data returned, to complete this effectively and timely. |
| 6.5 | What would you do differently if you were going to begin this stage again, and why? | If I were to do things differently, I would not research at a distance from participants. It was difficult. I might also select a research subject where I can use participants close to me or who can be corralled into one institution to undertake the research – the process of chasing participants from afar to undertake the IAT especially was very challenging.<br><br>I think my learning here is the need to provide some onsite support and work with people physically to have effective (timely) participation. Next time if working with participants outside my employer, I would take the time to go to them to administer the |

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| | | data collection. Having to chase via email and where we cannot eyeball each other, I think, was of detriment. I understand why in CV studies, the numbers sent out are the 1000's; there is a good chance that this will not get reviewed and returned. I also think that I should have approached this as two separate studies – one on the CV scoring and then a separate study using the IAT. I worry that the need to undertake both severely limited my sample size and, perhaps, their willingness to participate. |

## 7. Research Study: Analysing data

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| 7.1 | How did you go about analysing your data? Why did you choose this route? | I started with a vague idea of what I needed to do; the session we had at the university was a useful reminder about the level of analysis needed and the main processes for this. However,r it did not finish with my having an analytical strategy worked through.<br><br>I wrote an analytical strategy that I thought would work – I had not done this before, and this is not something that I have had any input from the University on. I have started with the basic descriptive statistics, and then, following online advice and information about the tests used from the original papers, I have expanded into statistical analysis.<br><br>I wanted to use the two data sets in combination as I wanted to know whether the blind scoring (no emp history) would be similar to the recruiter's potential biases towards sectors.<br><br>This is the area that I have lacked in skills the most throughout this programme. I would move a lot earlier to speaking with others at the university and getting a third supervisor if I had my time again. |
| 7.2 | What challenges did you face when analysing your data, and how did you overcome them? | The biggest challenge I faced is that I had not a clue where to start with this. Moreover, because I had been doing this sequentially, by the time I came to analyse the data and needed some support with it, I had missed my chance to have some additional support via the Uni (a third supervisor) – Jo and |

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| | | Rachel have been helpful to an extent, but not in the way that perhaps I have needed: I feel that I have needed greater debate and challenge about what the analysis should look like. I needed someone who worked with quantitative data regularly.<br><br>I overcome some of these challenges by reading more widely on statistics (using the book, Naked statistics helped, as did Psychometrics at Work and Psychology Statistics for Dummies). I have watched youtube videos and been through at least a dozen help articles on Millisecond. I am not sure whether this holds up to the level of statistical analysis worthy of a Prof doc -  I, of course, am hopeful that it does - but I feel that this area lets me down. |
| 7.3 | How did this process differ from your expectations/plan? | As will all parts of this process, I challenged myself intellectually and therefore knew these aspects would not be easy. I was not, however, prepared for how difficult I would find it. I have questioned again and again during this programme what on earth I am doing and why I am doing it and worry that it is just vanity as I am unsure that my end product is going to add anything meaningful to the literature. In which case, why do it?<br><br>However, pushing through this will have helped me grow, and in reality, it was exactly as expected - very difficult. |
| 7.4 | What were your key learnings from this stage? | My key learning is that I have a massive gap in my knowledge around data analysis – I have the capacity, I believe, to learn this, but it felt like a real uphill struggle. I think that I wanted to be sure |

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| | | about this, as in, start from the fact that I have data and work out what tests I needed for myself, be led by the statistics to an extent.<br><br>Instead, I needed to focus on what other studies, using the same tools as I, had done in their write-up and presentation. Once I realised that this was 'allowed' (to lean on other studies as guides), things started to move more. I feel that I may have put that hill in my way – getting in my way seems to be a theme from this whole process for me. |
| 7.5 | What would you do differently if you were going to begin this stage again, and why? | If I were doing this again, I would undertake this process sequentially as I have done (i.e., started writing the introduction, then moved on to other chapters in order) this time. This has created what feels like a chasm in both my knowledge and the support available. As such, I would tackle this in the order in which I lack the most knowledge (in this case, statistics). |

## 8. Research Study: Writing up

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| 8.1 | What challenges did you face when gathering writing up your study, and how did you overcome them? | I had not given enough thought to the challenges ahead of time, but the most challenging thing for my writing up was moving it away from a stream of consciousness and into a narrative that the reader could follow.<br><br>This 'funnelling' for the reader was seemingly a bigger issue than I gave credit to – perhaps it was because I have spent several years writing Board papers that I assumed my writing skills were well [enough] honed enough to get the reader to the point. However, the approach in academic writing is so different from that in a corporate role. To that end, I had to rethink this entirely. To overcome this, I had to read and re-read journal articles to try and take on or emulate the tone of these; I did the same with the thesis from cohort one. I think having spent a long career writing to a corporate or organizational tone has meant that the skills to write in this academic way were worn away. I have also taken on board the feedback from my supervisors, which has been useful in learning these skills and have sought out others to read the document to feedback to me on tone, flow and phrasing (as opposed to the actual content) to help me see this from a reader viewpoint. |
| 8.2 | How did this process differ from your expectations/plan? | Writing up is an area again where I expected that this would be tough, in general. However, I had hoped that it might be made easier by my experience of writing many strategies, reports, and policies – all very formal documents. |

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| | | As that did not appear to help me here, I struggled to stay on top of the write-up and stay motivated. In any of the writing up, I have struggled to find my voice or believe that my voice is worth listening too which has lent itself to a sort of paralysis and procrastination in some respects in terms of simply getting it done.<br><br>There were things too that I could never have expected to take place or plan for during my time on this programme. In the midst of all of this, I had some professional struggles – I have now changed jobs four times in the period it has taken to complete this programme.<br><br>The first role I had was as an independent consultant, which I did for a few years before starting the programme, and one I thought would have for a while; however, I missed being part of a team and so found a new role at an FE college. That job proved to be one of the most trying of my professional career to date; it was fraught with bullying issues and culminated in a lengthy HR process working with the chairman to remove senior staff members, which was very involved and emotionally tiring process.<br><br>Following the conclusion of that process, I moved on as that was the right thing to do for myself and the organisation, so I moved back to a role in the NH (where I had started my career) – that was in January 2020, and then COVID-19 hit the UK in Feb/March 2020. This again proved to be a very |

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| | | involved and tiring (physically and emotionally) time in my career for different reasons. I stayed in the NHS post for seven months in total, working on the response to COVID, overseeing the temporary recruitment of an additional 400 staff to work in various positions to be able to cove for staff absences as well as bolster additional beds and services for patients on both hot (COVID patients) and cold (non-covid patients) wards. Included in this was arranging for staff to help at Nightingale hospitals in the South East (London) and national programmes of work with NHS England. The work both at the college and most recently in the NHS has been a big distraction from completing the professional doctorate, and I was very grateful to be given the additional six months to finish.<br><br>One of the things I found is that the time goes so quickly once I started writing, and so at weekends and in the evenings, it felt like I had just gotten started when it was time to stop (for either bed or family and work commitments). At the beginning of the programme, I anticipated that a day a week would be sufficient (in hours) for completing this in the timescales, but with the professional ups and downs and my struggle to commit an opinion to paper, it has taken a lot more time per week than that. |
| 8.3 | What were your key learnings from this stage? | There are many things that I have learnt at this stage. Most importantly, I think I have learnt about my level of resilience. Although not obvious from the need for an extension to deal with work issues, the strength to keep going and attempt to see this |

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| | | through to a conclusion, I think, has been a real plus and somewhat of a surprise – although not apparently to my husband who feels that I have a stubborn streak in me that would keep me going.<br><br>Concerning the process itself, again, I feel that taking it in chronological order somewhat hampered my efforts and motivation, and I think that this is not a necessity – the paper could have been written in any order, as long as the final editing tied it all back to a single narrative. The ability to funnel the reader through that narrative is a real skill and not necessarily one that I possessed or learnt with ease.<br><br>I can see that the process of writing up could be cathartic for some people; I think something is freeing in getting your thoughts down on paper in this way of formulating a position. However, I found it tricky to move my writing away from being a stream of consciousness. I would like to have in some way practised that skill before the final write up.<br><br>Towards the end of this stage, I looked up those who had already completed my cohort and the previous cohort to see how they had approached the main research's writing up and what they found to be the main challenges. Doing this has been immensely helpful for my thought processes.<br><br>Once more, my lack of willingness, or ability (I cannot decide), to reach out to others has been a |

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| | | dampener to my experience on this programme. I realise now, looking back, that I had reached out more. |
| 8.4 | What would you do differently if you were going to begin this stage again, and why? | If I were to do something different, it would be to research more and practice more the academic approaches used in this programme, including writing up the thesis / professional doctorate.<br><br>I had not reviewed academic papers in a detailed way for a long time – I had needed to so that I could think about / understand the author's intention and how they guided me to their point. I would have spent more time doing this in the lead up to the programme start, and I would certainly, If I had my time again, spend more time asking questions of those in previous cohorts or other prof doc programmes about their experiences – perhaps I would even have read their reflective journals before starting.<br><br>I would encourage anyone taking up this kind of programme to get to know their fellow students, make time to talk to them, and discuss the programme and the sticking points. It feels really difficult to do that sometimes because you imagine that they too are dealing with a high workload, family commitments etc., on top of the programme, so you do not want to disturb them. However, because this is such a chunky part of the overall process, it is important to have more discussion and deliberation outside of your head. |

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| | | I would also encourage others to find people to read the work repeatedly to get feedback about flow and the narrative, not the content per se, but to help formulate a good story. And a good document. |

## 9. Overall Doctoral Process

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| 9.1 | Reflecting on your doctorate, how do you feel you have developed (e.g., technical expertise, theoretical knowledge)? | I wish I were confident that I had developed lots of new skills and abilities during this process, but I am unclear what I have developed fully. To name those new skills – I am aware that is about my insecurities, and should I be talking to someone else, I would undoubtedly be able to highlight how they had developed during the programme.<br><br>I think I hoped to become some great academic thinker during this process. However, I simply do not know if what I have produced is good enough to count for something in the field. I had hoped it would feel like it is making some contribution, but it does not. I have wrestled far too much with whether this was right, whether I could do this, for it to yet feel like a success. This is evident in how long it had taken to get to the point that the SLR even felt like it was working.<br><br>I know at a practical level that my skills in reading and understanding research have improved and that this is helpful in the context of my practice and my job. This has helped me think about the where and why of using research to drive interventions. The skills to synthesise data to establish a clearer understanding of the field/aspect you are looking at have been valuable in my work setting.<br><br>I am less confident about my theoretical skills – everyone I spoke to about my ideas pre-course |

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| | | thought it sounded great. I am not sure I have capitalised on these ideas to create a great theoretical piece – I tend to keep bringing this back to the practical problems we face. In this research, I have constantly thought about which other avenues need exploring and how I could do this. I very much want to interview recruiters to understand what they do, especially agency, and the impact for those they are working with as a result of their 'processes' or lack thereof. |
| 9.2 | Can you see any changes in your practices and/or professional plan because of undertaking this doctorate and associated learnings? | I do firmly believe that this programme, this research, has changed my practice. I am much more critical of the underlying source material of 'interventions' and where they say they are effective – I am checking for studies, research, etc. I have also found that I am more alive to what the data says and how big the effect sizes are for something. I believe that it has enhanced my practice for the better.<br><br>In terms of my professional plan, I had hoped that this would lead me to conduct more research within work to bring this type of professional research into my current environment. I am still hopeful for this, though I suspect this programme's outcome alone will not make that a reality; I will have to make different choices moving forward for myself and my career. |
| 9.3 | What has been the most useful element of the process for you? | I have found in this process that the most useful element was connecting with other psychologists. I had not had the opportunity to do this extensively in my recent roles, although this has changed recently. As I do not have regular discussions with |

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| | | other psychologists as much as I would like, I have found that this process has given me a way to connect with others, share ideas, formulate, evolve, and grow how I think about subjects affecting the workplace.<br><br>I also think that the intellectual challenge has been good for approaching tasks within the workplace, really thinking about whether I attack things chronologically or the difficult bits first! In some cases, with my HR hat, there will be a need for chronological order, but in others, in determining the strategy, for example, I will start to think about inclusion (my 'participants') way upfront and not put off the exercise of asking for and analysing their feedback. |
| 9.4 | What has been the most rewarding element of the process for you? | I have found that the face-to-face sessions, making friends within the group, and the support I have had from them have been personally rewarding.<br><br>On a professional level, I felt that the process has made me more aware of my strengths and weaknesses and even my own biases, which I have found rewarding. This process has been fascinating, intriguing to see how other people think, process information, and articulate their opinions, theories, and ideas. This has been enormously rewarding for me as I have struggled to understand what value my ideas and work might have and why people would be interested. Seeing others manage this process, be so clear and determined has encouraged me and inspired me. |

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| 9.5 | | One of the rewarding elements of this process has been the ability to make a contribution to theory and advance the body of knowledge in this field. That contribution I feel I have made is in bringing together normally distinct methods (CV study and Implicit Association Test) in order to provide a more practice-based view on decision making. The theory in bias in selection is advanced by our understanding that employment history acts as a form of biographical information, as those CVs with no employment history scored higher than those CVs without it. In previous studies, the removal of certain information from CVs has focused on personal information such as age and gender, but here we can see that there is more to be "guessed" about an applicant from additional fields such as the employment history.<br>I also feel that this body of works contributes to our ability to see the IAT used in more practical ways; many studies using this approach focus on issues of attitude and identifying attitudes held, with little reference to the impact of those attitudes. Here the research was interested in understanding the impact for decision making and as a clarification (to the CV scoring) to underlying bias seen elsewhere in the process. This will aide the efforts to create more targeted interventions for unconscious bias (supporting the need for focused stereotypes to be addressed in training) and to create better 'blind' recruitment and selection processes. |
| 9.5 | What has been the most challenging | Participants were the most challenging aspect. The gathering of them and getting them to complete all |

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| | element of the process for you? | parts of the process. I truly never understood how difficult this would be, but I certainly understand why so much of the research I have seen in the field is done via questionnaires. To get participants to undertake a few elements, at a distance, was more complicated and more time-consuming in chasing and answering questions for them - in some cases, the ‘Recruiter’ participants would send back marked CVs one at a time.<br><br>Personally, dealing with a very difficult work environment impacted my ability to undertake this whole process, creating a challenge in carving out sufficient blocks of time for writing. This is related to the employed work that I have undertaken during the programme. At least 2 of the posts I have held have been particularly challenging and have been such a drain on my time and energy - I am sure that this is no different to many people undertaking a part-time distance learning programme, as by implication of it being part-time they have other commitments. As a personal reflection, I am not sure that there would have ever been a ‘right time’ to do this type of programme with work and family commitments, so doing it now means I have had to make time, try and deal with the challenges as they came and thought of alternative solutions where needed. |
| 9.6 | What has been the most frustrating element of the process for you? | The most frustrating element has been not having more face to face time with the supervisors – I feel like there are points when this would have made the process easier, been more supportive. Being distant has often made it hard to get help and to |

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| | | stay on track. I have played a massive part in this, setting up phone calls and then missing them because a meeting got in the way, an emergency happened at work, etc. I became too lax about keeping on top of contact and feel that I have missed out as a result.<br><br>There was a frustrating moment at the beginning of this programme where I was unsure whether I could even undertake it – the price of the programme as advertised was within my grasp, and I was happy to proceed: I have self-funded this programme. However, shortly after the university took the first payment, I was notified that the price was wrong and it was, in fact, double the advertised price. At the time, I was working freelance, have two children and a home to support, and as such, I seriously thought I might need to pull out. I decided not to let this be the defining issue, after much discussion and budgeting with my Husband, as this is something I have wanted to pursue a while, but it left a real stain on the programme for me. |
| 9.7 | What would you tell someone beginning this process? What are the key things they should know/avoid/prepare for? | If I were talking to someone coming into this process, I would advise them to prepare sooner, spend more time planning and thinking about how much access to participants you need, as it would be much easier if you were face to face with them or they were immediately available to you/you could control their participation more (i.e., because you are in the same organisation, because they are already part of a programme you are working with them on for example). |

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| | | I would also advise others to identify their weak areas as soon as possible and arrange support for those early on, even if they are not at that stage in the programme yet.<br><br>I would also advise them to stay in closer contact than I have with the supervisors – there is real potential to go down many rabbit holes when researching, and while it is intriguing to try and follow those, it detracts from what you are doing and the time you have to spend on your research – you need to be able to narrow down. The distance I felt was particularly evident toward the end of the programme as I began to create a single document. It was difficult to make sense of the advice, especially via comments and track changes in the word document. Looking back, I would have benefited from an initial discussion about this document's expectations (clarifying what I was supposed to be conveying) and how I might best bring in my voice to this. Reading Thesis Documents from the current and previous cohort helped to a degree, though I am not convinced I have found my voice as much as I would have hoped in this.<br><br>I am glad that I attended a virtual workshop for Thesis writing and Submission, as this showed me that the issue of voice, of expressing one's opinions, was not confined to myself. Again, I should have engaged with that much earlier as it was only a month or so ahead of my submission |

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| | | deadline that I attended this. It was a very helpful session and certainly highlighted things I had not yet considered – such as having permission for screenshots for the IAT in the document. It was a good mix of practical and strategic guidance and another opportunity to connect with others experiencing similar processes to yourself. I would recommend others joining this or similar programmes to make themselves aware of these types of supportive sessions. |