DIVERSITY AND INCLUSION AT WORK

Facing up to the business case
The CIPD is the professional body for HR and people development. The not-for-profit organisation champions better work and working lives and has been setting the benchmark for excellence in people and organisation development for more than 100 years. It has 150,000 members across the world, provides thought leadership through independent research on the world of work, and offers professional training and accreditation for those working in HR and learning and development.
Diversity and inclusion at work: facing up to the business case
Technical report of rapid evidence assessment

September 2018

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1 Introduction

Despite equality legislation and a recognition by many organisations that diversity and inclusion is important, we know that inequality still exists in the workplace. For example, in the UK, gender pay gap reporting has shone a light on the structural barriers to progression in organisations for women, including a lack of senior role models and flexible working. We also know that racial background can affect both access to work and the opportunities received for progression (CIPD 2017a). Furthermore, research tells us that discrimination still very much exists, both in its blatant form and via unconscious bias, which impacts numerous minority groups (Jones et al 2017, Talaska et al 2008).

There are clear signs that many organisations are placing more importance on diversity and inclusion. However, the pace of progress towards realising equality of opportunity can feel painfully slow.

This report takes an evidence-based approach to guide organisations’ efforts and galvanise action to remove barriers to equality. We present a review of the best available evidence on what the outcomes of diversity and inclusion are for organisations and what factors and interventions impede or promote workforce diversity.

The case for diversity and inclusion

There is a compelling moral case for diversity and inclusion in the workplace and beyond. Work is central to our lives, and ensuring that everyone is treated equally and with dignity, with good access to work, resources and opportunities to progress and good pay is simply the right thing to do (Hocking 2017).

One could argue that this moral case should be sufficient, but invariably employers will need a financially driven business case for any processes or activities that require resources. Two points are particularly worth noting on this.

First, it is important to understand the relationship not only according to a narrow ‘bottom-line’ understanding of performance. Organisations may benefit from diversity and inclusion in a variety of aspects that can relate to performance, such as the retention of diverse talent, innovation, employee motivation and well-being. In a similar vein, it’s important to understand under what conditions diversity can lead to positive outcomes – something that requires us to take account of intermediary variables. In exploring the relationships between diversity and inclusion and performance, we must recognise the relevance of a broad range of outcome measures as well as other factors that help explain impact.

This report aims to uncover the evidence behind the business case argument, while highlighting that there is a need to challenge traditional notions of the ‘business case’ that focus narrowly on short-term financial gain, ignoring human outcomes such as well-being, and other business outcomes such as corporate reputation. Despite a common over-reliance of business leaders and default focus on the narrow business case, we argue that any business case for diversity should hold these outcomes in balance and recognise the benefits at not only an organisational level but also from an individual and societal perspective. The people profession must champion a progressive perspective on the creation of value that considers a broad range of stakeholders and challenges a narrow focus on maximising shareholder value (CIPD 2018).

The business case for diversity is built on the widely accepted belief that diversity and inclusion yields positive performance outcomes for organisations. However, the evidence presented to support this view is often based only on associations between organisations’ financial performance and measures of workforce diversity. As discussed below, such research does not show causal relationships, which are key to understanding the conditions through which diversity leads to positive outcomes. This report is an attempt to identify the most trustworthy scientific evidence by critically appraising the methodological appropriateness of each study reviewed.
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Research questions

Previous research has also highlighted that the link between diversity and performance is not conclusive – but this does not mean organisations should be deterred from pursuing diversity (Department for Business, Innovation and Skills 2013). While many organisations prioritise diversity and inclusion, action is often not guided by evidence. In this report, we update and build on this research to review scientific knowledge of what works in diversity interventions, under what conditions. We take an evidence-based approach to give reliable insight into what will make a positive difference and what factors obstruct workforce diversity and inclusion.

Our research aims to answer the following questions as a basis for this evidence-based action:

1. What are the outcomes of diversity and inclusion?
2. What factors keep inequality in place at work?
3. What supports greater inclusion and diversity in the workplace?

We explain the rationale behind each research question and discuss current thinking in these areas below.

Research question 1: What are the outcomes of diversity and inclusion?

Our first question concerns the outcomes of workforce diversity and inclusion. We investigate the relationships between diversity and a range of outcomes – both those related to performance and impacts on individuals – and whether these relationships are direct or indirect, being mediated by another factor. In other words, ‘correlation does not imply causation’.

As mentioned already, the current evidence base for diversity often uses correlational data to link diversity and performance. For example, the fact that better-performing businesses tend to be more diverse is often central to the business case (for example Hunt et al 2015). But the apparent link between diversity and performance may be explained by other factors. It could be that a common cause – such as a broadly progressive approach to people management – has a dual effect, independently leading to both greater workforce diversity and improved performance. Alternatively, it may be that the direction of causality is the reverse of what is supposed – that organisations are more likely to become diverse if they are better performing.

Research that demonstrates association is interesting but falls short of showing prediction or causation. We thus prioritise longitudinal research that controls for other factors to take account of potential confounders and spurious relationships, substantially reducing the risk of conjecture and strengthening our evidence base.

If there is a direct relationship between having a diverse pool of employees and positive organisational performance outcomes, previous research suggests it is inconsistent. In particular, a previous review conducted by the Department for Business, Innovation and Skills (2013) finds inconsistent evidence of the relationship between diversity and organisational and/or team performance. It concludes that some evidence exists to support the idea that businesses benefit from equality and diversity, but not across all types of business.

Despite a wish to prove diversity is positive for organisational outcomes, it is important for research integrity to examine the evidence for diversity outcomes in a neutral manner. We can then develop a better understanding of when diversity at work leads to positive outcomes and the conditions that foster diversity and inclusion (Eagly 2016).

In addition to diversity, we pay attention to workplace inclusion, a distinct concept. However, our evidence assessment highlights there is little controlled, systematic research in the scientific literature (for example, randomised controlled studies or meta-analyses) into how inclusion is supported at work and what outcomes this leads to.
Research question 2: What factors keep inequality in place at work?

Our second question concerns what factors keep inequalities in place in the workplace. These may be different from the factors that promote diversity and inclusion, so are important to consider in their own right.

Despite legislation such as the Equality Act in the UK, coupled with many organisations increasing their focus on diversity and inclusion, we know that inequality and discrimination still remains. In particular, it is evident that women and black, Asian and minority ethnic (BAME) groups are still underrepresented in senior management in the UK (Davies 2015, Alexander 2017, Parker 2016, McGregor-Smith 2017). These inequalities are not just a question of numbers; they can be felt acutely by workers themselves. For example, BAME employees are more likely than white British employees to say their career progression to date has failed to meet their expectations, and often believe a contributing factor to this is discrimination (CIPD 2017a).

Clearly, while discrimination is illegal, forms of bias still exist in the workplace, whether unconscious or not. To understand how to tackle these issues, we must understand what they are and why they exist.

Research question 3: What supports greater inclusion and diversity in the workplace?

Our third question focuses on what practical measures are most effective at increasing diversity and reducing inequality in the workplace. To focus the efforts of employers, we review the evidence on how effective different interventions are at addressing factors keeping inequality in place and advancing workplace diversity.

For example, many organisations undertake diversity training, but its effectiveness has been called into question (Behavioural Insights Team 2017). Equally, name-blind recruitment is also receiving a lot of attention as a potential way of taking a degree of bias out of the hiring process (CIPD 2015). While this may be a good first step in minimising bias from the hiring process, it is very unlikely alone to remove barriers to work for minority groups, or solve the issue of bias.

Structure of this report

This report summarises the methodology and results of a rapid evidence assessment (REA) on the questions outlined above, providing an overview of the best available evidence from the scientific literature relating to the outcomes of diversity and inclusion, the barriers keeping inequalities in place, and lastly, what supports greater inclusion and diversity.

Following this introduction, in section 2 we outline the REA method taken in this research. Following this, in section 3, we summarise the scope and results of the literature search. Section 4 provides details of the findings and critical appraisal of the scientific literature in this area. In section 5, we provide a synthesis of the key results and outline the quality of the evidence base in this area. In section 6, we discuss the limitations of our study and the scientific literature in this area more generally, and provide recommendations for where future research can be most impactful. Finally, we conclude with some discussion points for people professionals and organisations in light of our findings.

The implications for people professionals and policy-makers, alongside further discussion of how business leaders and people professionals can drive change in this area and key recommendations for action, can be found in the accompanying research report, Diversity and Inclusion at Work: Facing up to the business case, which can be found at cipd.co.uk/diversityinclusion.
Diversity and inclusion at work: facing up to the business case
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2 Method
The rapid evidence assessment method

A rapid evidence assessment (REA) is a truncated systematic review conducted to find the best available evidence on a given topic. It is particularly appropriate for exploring the existence and strength of causal relationships and potential moderators and mediators that help explain these relationships. As many assumptions and theories in management centre on causal relationships – ‘If we introduce initiative A, it will affect B (that is, cause, increase, decrease or prevent it)’ – this approach is very useful for summarising the body of knowledge.

To identify the best available evidence, we take a systematic approach to searching published scientific literature and critically appraise the methodological appropriateness and the quality of each scientific study included to determine its trustworthiness.

The findings of an REA can be considered a synthesis of the best available evidence on a topic, although it is not an exhaustive, comprehensive ‘systematic review’.

Search strategy

Three databases were searched to identify relevant studies: ABI/Inform, EBSCO and PsycINFO.

A basic filter was applied across all databases to return only scholarly and peer-reviewed journal articles published since 2000. We focused on studies published after 2000 for two reasons: first, initial searches revealed a vast literature that would be impractical to assess, and second, we are interested in the state of play in the modern organisation, following legislative changes and a focus on diversity in recent years.

Search terms specific to our research questions were then applied. For example, the terms ‘equality’, ‘diversity’ and ‘inclusion’ were used. Additional filters were used to refine the results by context and methodology. There were a total of 12 search queries, resulting in a total of 499 primary studies and 749 meta-analyses or systematic reviews being identified.

Selection process

After removing duplicate articles, a two-phase selection process was conducted to remove any studies that clearly weren’t relevant to our research question based on assessment of the article abstract. A second assessment of articles deemed relevant to our research questions was made using inclusion criteria outlined below.

Phase 1

After duplicate studies were removed, each abstract was screened for relevance to our research questions, and the study was excluded if it was out of the scope of this research or was not available in English. At this stage, if it was unclear whether to include or exclude the study based on the abstract alone, it was included for review of the full article. This phase left a total of 71 meta-analyses and 130 single controlled studies to be reviewed for relevance through review of the full article.

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1 In their truncated format, for example ‘divers*’, which returns search results such as diverse and diversity.
2 See section below for full list of search terms.
3 There were 195 duplicate meta-analyses and systematic reviews removed, and 124 duplicate single controlled studies removed.
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Phase 2

Next, studies were selected for inclusion by reviewing the full articles. Studies were assessed on the following inclusion criteria:

1. **What methodology was used in the study?** Only quantitative, empirical studies were included in this review, bar one study that discusses intersectionality in a qualitative manner, included to highlight that this is an area that requires further discussion and research.

2. **What was measured in the study?** Studies had to measure the variables of interest to our research question, namely: diversity and its outcomes (such as team performance, creativity and business performance), factors keeping inequality in place (such as discrimination, pay structures and recruitment bias), and the outcomes of diversity training or other interventions designed to support diversity (for example, knowledge outcomes of training and return-to-work rates for people with disabilities).

3. **What was the context of the study?** Studies were only included if they related to workplace settings. For example, research on the factors influencing inequality in healthcare were excluded.

Where there was uncertainty, a second researcher with no prior knowledge of the ratings or study provided their rating to decide inclusion or exclusion of the study for critical appraisal. As we identified a comprehensive literature base, we critically appraised all meta-analyses and systematic reviews in full, and did not review single studies unless they covered outcomes not represented in meta-analysis, so as not to report the findings of the same study twice. For example, single studies related to religious, LGBT or maternity discrimination and intersectionality were included. In addition, we identified single studies that employed a randomised experimental design that could support meta-analytic findings of non-randomised studies.

**Critical appraisal**

While no research findings are infallible, several indicators can be used to assess how valid and reliable, and therefore trustworthy, the evidence is. In other words, does the study measure what it sets out to measure, and would the same results occur if the same study was conducted again? These are all indicators of methodological quality in experimental and cross-sectional research.

In addition, the method of the study is important when we want to answer a cause and effect question (does A lead to B and, if so, under which conditions?). A study is appropriate for causal inference when the following conditions are met: co-variation, time-order relationship, and elimination of plausible alternatives (Shaughnessy and Zechmeister 1985).

A randomised, controlled trial examining the relationship between two factors is therefore the ’gold standard’ of single studies for causal research questions. Going one step further, a systemic review with a meta-analysis that brings together the results of multiple randomised controlled trials is an even more appropriate study design. However, this sort of evidence is not readily available on all topics, so further classification of the best available evidence is needed. For example, a meta-analysis of several studies gives less trustworthy evidence if the studies it included were of limited quality.

With this in mind, the studies yielded from phase 2 were critically appraised and rated for methodological appropriateness using Shadish et al (2002) and Petticrew and Roberts (2006) classifications (see Table 1). Qualitative or cross-sectional survey results can be useful and provide good evidence, and may even be more appropriate in certain contexts. For example, they provide exploratory evidence or highlight trends in organisations. This sort of data can also be used where other types of evidence are not available. However, the purpose of this research was to assess the best available evidence into the causal outcomes of diversity at work, the causal outcomes of diversity training interventions, and the causal factors keeping inequality in place (alongside any associated

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*It should be noted concessions were made by employing this sift criteria for speed and to minimise the risk of duplicating findings (for example, reporting results from a single study already reported in a meta-analysis including that single study).*
moderators/mediators). Because of this, only studies of Level C and above were included for question 1. However, some concessions were made for study quality for questions 2 and 3 as these questions both lack randomised controlled research in this area, and these questions require further exploration.

**Effect size**

As part of the critical appraisal process, the effect size for each relationship of interest was identified. The effect size simply refers to the magnitude of an effect, which is determined by Cohen’s rules of thumb (Cohen 1988). According to Cohen, a ‘small’ effect is an effect that is visible only through careful examination, so may not be practically relevant; a ‘medium’ effect is one that is ‘visible to the naked eye of the careful observer’; and a ‘large’ effect is one that anybody can easily see because it is substantial. For example, using the statistic of Cohen’s $d$ based on mean differences and standard deviations, $d=0.2$ is considered small effect, $d=0.5$ as medium effect and $d=0.8$ a large effect.

Understanding the effect size is important because in large samples of data, even a small effect that will have little impact in practice – and thus should not be considered very useful or relevant – can be statistically significant.

**Table 1: Classification of research methodology for cause and effect questions**

<table>
<thead>
<tr>
<th>Design</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systematic review or meta-analysis of randomised controlled studies</td>
<td>AA</td>
</tr>
<tr>
<td>Systematic review or meta-analysis of non-randomised controlled before–after studies or A randomised controlled study</td>
<td>A</td>
</tr>
<tr>
<td>Systematic review or meta-analysis of cross-sectional studies or Non-randomised controlled before–after study or Interrupted time series study</td>
<td>B</td>
</tr>
<tr>
<td>Controlled study without a pre-test or uncontrolled study with a pre-test</td>
<td>C</td>
</tr>
<tr>
<td>Cross-sectional study</td>
<td>D</td>
</tr>
<tr>
<td>Qualitative study</td>
<td>D minus</td>
</tr>
</tbody>
</table>

Adapted from Shadish et al (2002) and Petticrew and Roberts (2006)

**3 Scope of search and search results**

As shown in Table 2 and Figures 1 and 2, our search yielded a very large number of studies on workforce diversity and inclusion. Narrowing this down, we found 29 systematic reviews and/or meta-analyses on the subject. This can be considered a good evidence base, although as we note in the next section, the quality of these reviews can be questioned. We supplemented this evidence with reviews of 13 single studies on topics not covered by the meta-analyses, all but one of which had longitudinal and/or controlled research design.
### Table 2: Search terms and hits

<table>
<thead>
<tr>
<th>Search no.</th>
<th>Search term</th>
<th>EBSCO</th>
<th>ABI/Inform</th>
<th>PsycINFO</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>TI(discriminat* OR divers* OR equalit* OR exclusi* OR inclusi* OR inequalit* OR inequit*)</td>
<td>26,744</td>
<td>20,898</td>
<td>27,465</td>
</tr>
<tr>
<td>S2</td>
<td>AB(discriminat* OR divers* OR equalit* OR exclusi* OR inclusi* OR inequalit* OR inequit*)</td>
<td>119,310</td>
<td>92,261</td>
<td>179,001</td>
</tr>
<tr>
<td>S3</td>
<td>S1 OR S2</td>
<td>123,939</td>
<td>96,192</td>
<td>183,148</td>
</tr>
<tr>
<td>S4</td>
<td>TI(meta-analy*) OR AB(meta-analy*) OR TI('systematic review') OR AB('systematic review')</td>
<td>6,149</td>
<td>5,671</td>
<td>35,346</td>
</tr>
<tr>
<td>S5</td>
<td>TI(experiment* OR controlled OR longitudinal OR randomized OR quasi) OR AB(experiment* OR 'controlled stud*' OR 'controlled trial' OR 'control group' OR 'control variable' OR 'comparison group' OR 'comparative stud*' OR quasi OR longitudinal OR randomized OR randomly OR laboratory OR 'before and after stud*' OR 'pretest post*' OR 'time series' OR 'case control' OR 'case cohort' OR 'cohort stud*' OR 'prospective stud*')</td>
<td>212,491</td>
<td>128,429</td>
<td>333,465</td>
</tr>
<tr>
<td>S6</td>
<td>TI(organization* OR organisation* OR workplace OR workforce OR employ* OR team*) OR ab(organization* OR organisation* OR workplace OR workforce OR employ* OR team*)</td>
<td>72,311</td>
<td>272,467</td>
<td>47,937</td>
</tr>
<tr>
<td>S7</td>
<td>S3 AND S4</td>
<td>727</td>
<td>853</td>
<td>8,113</td>
</tr>
<tr>
<td>S8</td>
<td>S1 AND S4</td>
<td>61</td>
<td>64</td>
<td>215</td>
</tr>
<tr>
<td>S9</td>
<td>S7 AND S6</td>
<td>54</td>
<td>229</td>
<td>131</td>
</tr>
<tr>
<td>S10</td>
<td>S1 AND S5</td>
<td>2,114</td>
<td>1,593</td>
<td>4,010</td>
</tr>
<tr>
<td>S11</td>
<td>S10 AND S6</td>
<td>86</td>
<td>315</td>
<td>111</td>
</tr>
<tr>
<td>S12</td>
<td>S3 AND S5 AND S6</td>
<td>322</td>
<td>1,560</td>
<td>456</td>
</tr>
</tbody>
</table>
Figure 1: Meta-analyses and systematic reviews

 Dresden
 n=54

 Duplicates removed
 n=195

 Excluded
 n=148

 Excluded
 n=42

 Articles obtained from search

 Abstracts screened for relevance, duplicates removed

 Text screened for relevance, critical appraisal undertaken

 Total included meta-studies
 n=29

Figure 2: Longitudinal and controlled single studies

 Dresden
 n=86

 Duplicates removed
 n=124

 Excluded
 n=258

 Excluded
 n=117

 Articles obtained from search

 Abstracts screened for relevance

 Critical appraisal undertaken & full text screened for relevance

 Total included single studies
 n=13
4 Critical appraisal

This section outlines the results of the critical appraisal.

Articles were randomly assigned between three researchers. Where there was initial disagreement on ratings, agreement was reached through discussion.

While several meta-analytical studies were found, none of these meta-analyses consist solely of randomised controlled data. Largely they were meta-analyses from systematic reviews of cross-sectional or simple longitudinal studies. In addition, most studies did not provide enough information to ascertain the quality of studies presented in meta-analyses or included studies of multiple methods, meaning all meta-analyses were assumed to be of level B. In some cases, a study was also downgraded a level where the study has several weaknesses – for example, a meta-analysis of cross-sectional studies may be downgraded to a C level rating if the quality of studies is not assessed, contain small sample size or did not conduct a comprehensive search, amongst other limitations.

Table 3 summarise the findings of all studies identified in the literature that met the criteria for inclusion in the critical appraisal and synthesis portion of the REA, and after critical appraisal were assessed to be of the appropriate quality. Studies excluded as part of the critical appraisal (for example, if the critical appraisal revealed key issues with methodology or that the research was not directly relevant to our questions) are not included in the critical appraisal table.

Table 3 includes the main findings of each study, the effect sizes associated with these results, any key limitations, and a grading reflecting the trustworthiness of the findings (see method section for the breakdown of each grading).

Within Table 3, the abbreviation CI refers to confidence intervals, and S, M, and L refer to small, medium, and large effect sizes (ns refers to non-significant findings). Several meta-analyses in this search had multiple hypotheses, so Table 3 does not include an exhaustive list of effect sizes and findings. Where further effect sizes are available in the original source, this is indicated.

Each study is given a rating based on Table 1 (see page 7). In some cases, a study may also be downgraded a level where methodology is not clear or a study has several weaknesses – for example, a meta-analysis may be downgraded to a C level rating if the quality of studies is not assessed, amongst other limitations.

Our review finds that diversity is conceptualised in a number of ways in research (see section 5).
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Table 3: Critical appraisal findings

<table>
<thead>
<tr>
<th>Author &amp; year</th>
<th>Research design, population and sample size</th>
<th>Main findings</th>
<th>Effect size</th>
<th>Limitations</th>
<th>Level</th>
</tr>
</thead>
</table>
| Alhejji et al (2016) | Systematic literature review
Organisations of all sizes, types, sector and geographies that provide workforce diversity training for different workforce categories: 65% USA based, 73% public sector, 47% health/care sector | This systematic literature review analyses the literature on **diversity training outcomes** through three theoretical perspectives: the business case, learning and social justice perspectives.

**Overall they find that the literature is fragmented and published via a diverse range of outlets; research into diversity training outcomes is diverse in terms of culture, sector and organisations' training contexts and focus; primarily reflect the business case or learning perspectives and have significant methodological limitations.**

In terms of the three theoretical perspectives, the business case outcomes showed limited understanding of impact on individual, team or organisational performance. Social justice outcomes showed few insights into individual or team outcomes. However, they found a number of studies reporting participant diversity knowledge, skills and abilities are enhanced. | Not discussed or reported | Quality of included studies not assessed, although notes that the research base has methodological flaws | C |
| Bell et al (2011) | Meta-analysis of laboratory and field studies
92 journal articles published 1980–2009 | This study revisits the team demographic diversity–team performance relationship and focused on examining the relationship for specific demographic diversity variables (for example functional background, race) and conceptualisations of diversity (that is, separation, variety and disparity). It identified 16 hypotheses and 7 research questions.

Results support several thematic conclusions:

1 **The strength and direction of the relationship between diversity and team performance was dependent on specific demographic variable.** | Multiple effect sizes reported, but for field studies only – further effect sizes available in original source
Team performance and functional background:
Efficiency=0.03
General performance=0.12 | The effect size estimates based on a small number of studies. Combined sample size and setting not easily identifiable. Quality of the studies not assessed. | C |
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<table>
<thead>
<tr>
<th>2 Diversity on several variables was primarily operationalised as an index inconsistent with the conceptualisation believed to have the strongest relationship with team performance.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 The team mean of organisational tenure had a stronger relationship with team performance compared with that of diversity operationalisations, suggesting that alternative team-level representations of the demographic variable may be more predictive of team performance for some variables.</td>
</tr>
</tbody>
</table>

| Creativity and innovation=0.18 |
| Team performance and educational background: |
| Efficiency=−0.02 |
| General performance=−0.03 |
| Creativity and innovation=−0.23 |

<table>
<thead>
<tr>
<th>Bezrukova et al (2016)</th>
<th>Meta-analysis</th>
<th>Adult trainees 260 independent samples</th>
<th>This comprehensive meta-analysis of diversity training outcomes explores the relationship between diversity training and cognitive, behavioural or attitude outcomes, alongside reaction to training.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, while diversity training was associated with positive emotional reactions of participants, this sort of attitude-related learning tends to be minimised after the training.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>However, training is more effective over time when it increases knowledge of different cultures as well as diversity awareness – in other words, addresses knowledge and skills.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall effect size Hedges g=0.38 (S)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small number of studies for certain variables (for example, training reactions)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Brohan et al (2012)</th>
<th>Systematic review</th>
<th>Adults with mental health problems and employing organisations of all sizes, types, sector Mixture of 48 quantitative and qualitative studies</th>
<th>This paper address four main questions and their superordinate and sub-themes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 employment-related disclosure beliefs and behaviours of people with a mental health problem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 factors associated with the disclosure of a mental health problem in the employment setting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Whether employers are less likely to hire applicants who disclose a mental health problem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not applicable, not a meta-analysis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range of study designs means causality cannot be confirmed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Study</th>
<th>Methodology</th>
<th>Sample Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversity and inclusion at work: facing up to the business case</td>
<td>Technical report of rapid evidence assessment qualitative studies, n=7,192 adults</td>
<td>4 factors influencing employers’ hiring beliefs and behaviours towards job applicants with a mental health problem. The study data provides limited information on the factors associated with disclosure of mental health issues in employment settings. No strong quantitative evidence was found to support the relationship between disclosure and additional variables. Overall the weight of evidence suggests that disclosure of a mental health issue places job applicants at a disadvantage in securing employment compared with applicants with physical or no disability. However, there are questions of validity of the evidence and insufficient evidence to make judgements regarding employer behaviour in recruitment.</td>
</tr>
<tr>
<td>Byron and Post (2016)</td>
<td>Meta-analysis</td>
<td>International sample 87 independent samples and combined sample size 26,710 firms in 20 countries This multi-country analysis focuses on the relationship between women's representation on boards of directors and firms’ corporate social performance (CSP). They conclude that firms with greater representation of women on their boards engage in more corporate social responsibility and enjoy more favourable social reputations. They find that women's representation on firms’ boards is positively correlated with corporate social performance. Their findings support the hypothesis that women’s board representation is positively related to CSR and social reputation (1, 2). The relationship between women’s representation on boards and corporate social performance is moderated by shareholder protection strength (3) and gender parity (4). Specifically, the relationship is more positive among studies conducted in countries with higher gender parity.</td>
</tr>
<tr>
<td>Clayton et al (2011)</td>
<td>Systematic review</td>
<td>Disabled and chronically ill working-age people This study aims to evaluate major governmental approaches aimed at helping chronically ill/disabled people to work/return to work (that is, anti-discrimination legislation; reasonable adjustments; employer subsidies; return-to-work planning). Effect size referred to but not specified</td>
</tr>
</tbody>
</table>

(1) $r=0.15$ (S); CI: 0.12, 0.18
(2) $r=0.15$ (S); CI: 0.09, 0.21
(3) $b=0.04$, $SE_b=0.01$, $z=3.09$, $p<0.01$
(4) $b=0.96$, $SE_b=0.48$, $z=2.00$, $p<0.05$

Quality of studies not assessed and insufficiently reliable data amongst the studies in sample and across many country-level measures C

Effect size referred to but not specified Studies did not consistently report effect sizes C
## Diversity and inclusion at work: facing up to the business case

### Technical report of rapid evidence assessment

<table>
<thead>
<tr>
<th>Study</th>
<th>Type of Study</th>
<th>Country</th>
<th>Sample Size</th>
<th>Main Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietz et al. (2015)</td>
<td>Experimental vignette laboratory study</td>
<td>Canada</td>
<td>n=165</td>
<td>The authors test social identity theory approaches’ ability to explain the skills paradox – in other words, where skilled migrants are more likely to be targets of employment discrimination than non-skilled migrants. Using an experimental scenario design where participants were presented with job applications for local and migrant job applicants, alongside hiring instructions from the fictional restaurant chain, they find support for their hypothesis that skilled migrants were less preferred than local, equally skilled workers. However, this was minimised if a diverse hiring policy was presented, or when it was emphasised that the clientele of the restaurant chain was diverse. This provides support for the positive benefits of diverse hiring policies, although this should be tested in field settings.</td>
</tr>
<tr>
<td>Dover et al. (2016)</td>
<td>Study 1: Experimental vignettes recruited via Amazon Mechanical Turk, adults n=322</td>
<td>Canada</td>
<td></td>
<td>The authors examine the relationship between pro-diversity messages and job applications, and intention to apply. In one study, in an experimental setting, non-white respondents reported more concern about organisational fairness when recruitment sites had no diversity messages than white participants.</td>
</tr>
</tbody>
</table>

They find the most promising types of intervention at employer practice change are:

1. **Financial incentives to support employers**
2. **Support employers to make reasonable adjustments** (access to work/financial support)
3. **Collaborative return-to-work planning** (with health/social service professionals).

They also identified lack of awareness amongst employers and employees, and that low take-up has resulted in low impact across the population.

Quality of studies not assessed

No effect size overall possible

Dietz et al. (2015) Experimental vignette laboratory study
Canadian undergraduate sample
n=165

Dover et al. (2016)
Study 1: Experimental vignettes recruited via Amazon Mechanical Turk, adults n=322
<table>
<thead>
<tr>
<th>Study</th>
<th>Methodology</th>
<th>Results</th>
<th>Study Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 2: laboratory experiments, undergraduate students n=132</td>
<td>In an experimental setting, white male participants had higher cardiovascular reaction to pro-diversity message job adverts (noted as threat by the authors) than non-white participants.</td>
<td>Not applicable — single study</td>
<td>B</td>
</tr>
<tr>
<td>Study 3: laboratory experiments, undergraduates n=87</td>
<td></td>
<td>Non-randomised approach as field study</td>
<td></td>
</tr>
<tr>
<td>Drydakis (2015) Field experiment UK undergraduate student jobseekers – undergraduate n=144</td>
<td>In this field experiment, CVs of student jobseekers with varying union membership were analysed for call-back rates. CVs mentioning lesbian or gay union membership at university were compared with similar CVs with non-LG union membership (for example, belonging to a non-related charity union). It was found that those with lesbian or gay student membership received fewer invitations to interview than non-LG CVs.</td>
<td>Not applicable – single study</td>
<td>D</td>
</tr>
<tr>
<td>Eppe et al (2014) Analysis of existing dataset 2010 Swiss Labour Force Survey Total sample size not supplied</td>
<td>This study uses data from the Swiss Labour Force Survey to examine men and women's experiences in the labour market (measuring probability of employment and working hours), and the relationship between parenthood and progression, focusing on the fact that women tend to be most negatively impacted by parenthood in terms of job progression and opportunity. They find that women with children are less likely to be in employment than men with children. Moderating factors were childcare availability, which minimised this effect, as did education level.</td>
<td>Not applicable – single study</td>
<td>D</td>
</tr>
<tr>
<td>Gaucher et al (2011) Study 1 and 2: field studies, US and Canadian job adverts (S1 n=493, S2 3,640 job adverts) Study 3 to 5:</td>
<td>The authors suggest that job adverts with gendered wording maintain and potentially increase skewed gender representation in typically gendered industries. Study 1 and study 2 find that male-dominated industry job adverts tend to include more 'male' words, but no increase was found for the presence of female words in female-dominated industries (essentially, female-dominated industries don't automatically include female-gendered wording).</td>
<td>Not applicable – single study</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Study 3 to 5 analyses perceptions of job adverts, rather than actual job applications</td>
<td>C</td>
</tr>
</tbody>
</table>
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Next, it was found that when masculine wording existed in a job, participants predicted that more men occupied that role, regardless of participant gender or whether the occupation itself was known to have a gender skew.

Women found female-gendered adverts more appealing than male wording, but this difference didn’t exist for men, potentially because male wording for females suggests a lack of ‘belongingness’ – but did not affect women’s perceptions of their skill for the job.

Gensby et al (2014)
Campbell systematic review
Workers with occupational or non-occupational illnesses or injuries
13 studies (2 non-randomised, 10 single group experimental before–after)

This study reviews the nature and effectiveness of workplace disability management programmes (WPDM) promoting return to work (RTW). There is insufficient evidence to draw conclusions on the effectiveness of employer-provided WPDM programmes promoting RTW. It was not possible to determine if specific programme components or specific sets of components are driving effectiveness.

The authors propose a taxonomy, classifying policies and practices around WPDM programmes. Policies and practices are classified around two dimensions: intervention level (that is, personal, organisational or system), and progression of RTW (that is, stages of disability and sustainability at work).

Haas (2010)
Systematic review, using a regression model to test conclusions, with qualitative narrative
Teams of four or more people, in organisational, sports teams and lab setting with students

This review focuses on demographic and job-related diversity characteristics. The key variables concern age, gender, education level, ethnicity, functional background, organisational tenure, team tenure. Overall, a mixed picture of results was found.

Measures of performance varied from innovation to pay, creativity and team performance rated by a supervisor.

The relationship between age diversity and team performance was mixed, with more insignificant relationships identified than significant. However, the author finds that age homogeneity
30 studies, representing 97 relationships, n=5,452

fosters team performance in some studies. The context of the task is likely to underpin this.

**Gender diversity** was not strongly associated with performance outcomes. There were more negative than positive significant correlations; however, insignificant correlations were higher than both. This finding carries for most other variables.

**Education-level diversity** also showed a mixed picture. On the one hand, some correlations suggest that education diversity has a negative relationship with team performance. However, the strongest correlations show a positive relationship between educational diversity and team performance.

**Ethnic diversity** was combined with nationality diversity in the meta-analysis as these are often mixed in research. Again, a mixed picture was found. Only two of the studies (of a possible 18) found a statistically significant negative correlation. As with age diversity, when team members must interact frequently, negative relationships are higher. Larger teams also have more negative outcomes (though arguably this may be attributed to lower effectiveness more generally in large teams).

**Organisation tenure diversity** was also inconclusive. Many insignificant relationships were found, four negative and one positive.

There was no significant relationship found between team tenure diversity and performance.

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**Homberg and Bui (2013)**

**Systematic review, and meta-regression**

Mixed population, majority US with some EU and Asia

Employee sample 53 studies

This paper investigates **top-management team diversity (TMT) and its relationship with corporate performance**, as a proxy for the effectiveness of TMT decision-making. They also examine if the literature is unduly affected by publication bias – that is, the tendency to publish statistically significant results. A comprehensive search was conducted across two databases and Google Scholar, along with a manual search.

Diversity characteristics include ‘observable’ attributes such as gender and ethnicity, and ‘underlying’ attributes such as educational background. The theoretical perspectives used were not supplied as not a meta-analysis.
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the information–decision-making perspective (that diversity means more diverse thoughts and ideas and therefore increasing quality of decisions) and the similarity–attraction perspective (that people prefer to work with and find it easier to interact with someone who is like themselves).

**Overall, they find an association between functional, educational and tenure diversity and TMT performance, with little association with gender.** Too few studies concerning ethnicity were found to draw conclusions. However, the authors suggest that there is little significant effect of diversity on team performance, after controlling for publication bias.

<table>
<thead>
<tr>
<th>Horwitz and Horwitz (2007)</th>
<th>Meta-analysis</th>
<th>Sample unclear</th>
<th>35 peer-reviewed articles, total N not supplied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This meta-analysis covers both deep-level diversity (tenure, education) and surface-level diversity (gender, ethnicity). In other words, observable and underlying attributes and their relationship with team performance (excluding top management teams). Overall, they find:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) A significant and positive relationship between task-related diversity and quantity, and (2) quality of performance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No significant relationship was found between bio-demographic diversity and quantity (3) or (4) quality of performance (although only three correlations were present on quantity as there were only three correlations available).</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderator tests show that team type (such as project teams vs overall team) had little relationship with diversity outcomes. Task complexity also showed no statistically significant differences. There was insufficient data to investigate the relationship of task interdependence and performance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In terms of methodological differences, self-report measures tended to inflate team outcomes, more so than supervisor ratings.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) Task-related diversity and quality of performance 0.12 (M)

(2) Task-related diversity and quantity of performance 0.08 (S)

(3) Bio-demographic diversity and quality of performance –0.02 (S)

(4) Bio-demographic diversity and quantity of team performance – 0.02 (S)

Majority of studies are observational, rather than randomised controlled pieces of research

Further effect sizes available in original source
The study also investigates the relationship between team diversity and social integration. Social integration is thought to be negatively related to team diversity; however, little evidence was found for this. However, who provided ratings (self or manager assessment) was found to moderate the relationship between team diversity and social integration; the negative relationship was stronger for manager-reported outcomes.

<table>
<thead>
<tr>
<th>Source</th>
<th>Methodology</th>
<th>Population</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnston and Lee (2012)</td>
<td>Analysis of existing dataset, Waves 2–8 of the Household, Income and Labour Dynamics in Australia (HILDA survey)</td>
<td>n=2,065 to 3,083 person-year observations</td>
<td>Using data from the Australian Household Data Survey, the authors find that women are less likely to be promoted than men, and receive less of a salary increase when they are promoted, but find little evidence that this can be accounted for by females valuing non-financial rewards over traditional career advancement.</td>
</tr>
<tr>
<td>Jones et al (2016)</td>
<td>Meta-analysis</td>
<td>Population not clear, 44 samples</td>
<td>This study investigates correlates of subtle and overt discrimination for different groups; for example, so-called 'everyday sexism' versus bullying or harassment. The authors suggest that discrimination still exists in organisations as initiatives fail to target these subtle forms of discrimination, and regardless of policies, overt discrimination still exists. Overall, they find that outcomes of overt and subtle discrimination are statistically significant (1), but slightly larger effect sizes were found for overt discrimination (2). Gender-based and race-based discrimination had similar correlates. They find that overall discrimination relates to organisational outcomes (such as job satisfaction, 3) as well as psychological and physical health outcomes (4, 5).</td>
</tr>
</tbody>
</table>

Not applicable – single study
Not an experimental study so causality findings should be taken as indicative, not conclusive
Focused only on management journals, meaning some relevant studies may have been missed, and quality of studies not assessed

Overall discrimination and individual work correlates: r=0.30 (M)
(1) Subtle discrimination: r=0.31 (M)
(2) Overt discrimination: r=0.28 (S)

NB no statistically significant differences between overt and subtle effect sizes
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They also found little evidence of publication bias, counter to other research cited in this REA, although this relates to performance effects rather than outcomes of discrimination.

(3) Overall discrimination and organisational correlates: \( r=0.24 \) (S)

(4) Overall discrimination and psychological health correlates: \( r=0.30 \) (M)

(5) Overall discrimination and physical health correlates: \( r=0.16 \) (S)

Further effect sizes available in original source

Jones et al (2017)

Meta-analysis

Mixed population of employees and students, majority US, other Westernised countries

43 samples

Jones et al examine the extent to which gender, age and ethnicity prejudice relates to different forms of discrimination, as measured by implicit association test.

They find that racism, sexism and ageism are differentially related to overall workplace discrimination. Racism and ageism were significantly related to workplace discrimination; however, the same relationship was not found for sexism. Racism had a significantly larger relationship with discrimination than ageism.

Racism and ageism were implicated in selection decisions, but not sexism. Only racism was significantly related to biased performance evaluations. Sexism was not related to opposition of diversity policies to benefit women, but was significant for ageism and racism.

Implicit and self-reported prejudice were similarly related to diversity policy opposition. Neither self-reported or IAT measured prejudice were associated with selection or performance decisions.

Sexism and discrimination: 0.04 (S CI include zero suggesting that not statistically significant)

Ageism and discrimination =0.26 (S, effect size is statistically different to racism effect size

Prejudice and discriminatory selection: 0.24 for racism, 0.02 for sexism, and 0.21 for ageism (S)

Methodology of studies not clear
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Post-hoc tests examining the difference between hostile or benevolent sexism found benevolent sexism was negatively associated with workplace discrimination, but hostile sexism was not related to overall discrimination. In other words, benevolent sexism actually was related to lower measures of discrimination (perhaps due to raters providing overly positive performance reviews).

Prejudice and performance evaluation criteria: 40 (M) for racism, 0.17 (S) for sexism, and 0.10 (S) for ageism.

Further effect sizes available in original source
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This study examines the contextual factors that influence the relationship between diversity characteristics and performance outcomes. For example, whether industry influences the relationship between gender diversity and performance. Key findings include:

1 **Overall small, but significant relationship between diversity and performance, without accounting for context, but context (such as industry and organisational settings) moderated this relationship.**

2 Any negative relationship between gender diversity and performance is weaker when the context is gender balanced, and is also moderated by team composition.

3 The same moderating effect was not found between ethnicity and performance.

4 The negative relationships between team age diversity and performance is lower in age-balanced settings – in other words, age composition moderates the negative relationship between team age diversity and performance.

5 Occupational differences do not influence the relationship between task-oriented diversity and team performance, and is not stronger in balanced contexts.

6 Relations-oriented diversity has a positive relationship with performance in service industries. In contrast, the opposite is found in manufacturing and high-technology contexts.

7 Task-oriented diversity has a more positive relationship in high-technology industries, but no significant relationship in manufacturing and service contexts.

(1) All diversity $r=-0.01$ CI 95 $-0.02$–$-0.00$ (very small)

(2) Majority male $r=-0.09$ CI $-0.12$–$-0.05$ (S)

Balanced setting $r=0.11$ CI $0.06$–$0.15$ (S/M)

(3) Majority white $r=-0.07$ CI $-0.10$–$-0.04$ (S)

Balanced setting $r=0.11$ CI $0.07$–$0.14$ (S/M)

(4) Majority young workers $r=-0.08$ CI $-0.10$–$-0.05$ (S)

(5) Balanced setting $r=-0.05$ CI $-0.10$–$-0.00$ (S)

(6) Relations-oriented diversity

High-technology $r=-0.18$ CI $-0.20$–$-0.15$ (M)

Service $r=0.07$ CI $0.05$–$0.09$ (S)

Manufacturing $r=-0.04$ CI $-0.07$–$-0.01$ (S)
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| Kalinoski et al (2013) | Meta-analysis | Mixed sample of employees and students, location not specified | 65 studies with 97 effect sizes, n=8,465 |

This study investigates the affective, cognitive and skill-based outcomes of diversity training programmes.
Affective outcomes include attitude, motivation and self-efficacy, cognitive outcomes include verbal knowledge and cognitive strategies, and skill-based outcomes focus on behaviour and behavioural intentions. Moderating factors in the meta-analysis include task interdependence, form of instruction, training duration and medium, and whether training was completed in one session or staggered across several, training motivation, focus of training, whether a needs assessment was conducted, the focus of the training and type of diversity, and study quality amongst others.

**Overall, diversity training had a positive association with all three outcomes, but with larger effect sizes for skill- and cognitive-based outcomes (than attitude outcomes).**
Training had a greater association with self-efficacy, than on trainee attitudes.

In addition, diversity training that included social interaction was related to better outcomes. Active and passive instructions were related to more positive outcomes than if instructions were simply passive, and the effect size was lower for computer-mediated training. Distributed training sessions also had larger

| Overall effect size was d=0.43, SD d was 0.33 (S/M) | Small number of studies for some variables | B |
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impacts than one-off sessions. Diversity education had a stronger effect than diversity training, Cognitive-based training had a larger effect with a more diverse trainee group (less than 40% Caucasian participants).

<table>
<thead>
<tr>
<th>Study</th>
<th>Methodology</th>
<th>Setting</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>King and Ahmad (2010)</td>
<td>Field study, with confederates acting as job applicants in a retail setting and observers coding behaviour</td>
<td>Retail store managers in USA n=86</td>
<td>This study investigates the effects of religious dress in recruitment – specifically for Muslim Americans. They hypothesise that Muslim job applicants will encounter more discrimination than non-religious applicants, especially if they confirm negative stereotypes. They found that overt discrimination (hostility and job call-backs) did not differ between groups. They found that subtle cues such as eye contact and interpersonal distance were different between groups – Muslim job applicants gained more negative reactions, but this was mitigated when the Muslim applicant said they would need one day off a week for volunteer work.</td>
</tr>
<tr>
<td>King and Franke (2017)</td>
<td>Experimental vignette 2 by 6 design</td>
<td>US undergraduate students n=217</td>
<td>This study concerns why religious discrimination exists at work, and hypothesises that expression of religion (such as religious clothing) can be perceived as inappropriate (in other words, religion doesn't have a place at work) and create negative reactions. This study focused on perceptions of Muslim and Christian co-workers. Religious expression at work was correlated with perceived inappropriateness, and this was also significantly and negatively correlated with ratings of working relationships.</td>
</tr>
<tr>
<td>Kvasny et al (2009)</td>
<td>Qualitative interview-based study</td>
<td>Black females in IT education (n=12) or IT jobs (n=123)</td>
<td>This study explores how intersectionality influences the experience of IT workers and learners in the US, with a specific focus on black females using qualitative methodology. The interviews explore the attitudinal and opportunity barriers, including class factors. Both covert and overt oppression is reported (from racism at college, to mistreatment by male supervisors), and factors such as differences in affluent and</td>
</tr>
</tbody>
</table>

Not applicable – single study
Generalisability outside of retail settings, not clear what impact subtle discrimination has
Not applicable – single study
Artificial setting, and limited generalisability
A qualitative study should be considered exploratory evidence
Not applicable – single study
### Diversity and inclusion at work: facing up to the business case

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<table>
<thead>
<tr>
<th>Authors</th>
<th>Methodology</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lane and Flowers (2015)</td>
<td>Systematic review of non-affluent educational experiences means opportunity is not equal. 26 studies</td>
<td>This study represents a narrative review of historical wage differences between males and females in the social work field in the USA (including academics and office staff). Overall, men tended to out-earn women, and women were over-represented in casework and under-represented in administration. Of 27 studies identified between 1960 and 2006, 21 found salary differences in favour of men. The underlying reasons behind this are organisational characteristics, type of position and individual differences. The quicker advancement of men, over-representation of men in leadership positions account for some of these findings. Other studies find that women with children tended to have more casework (therefore lower-paid) positions but this varied across studies. Type of institution and location was also implicated.</td>
</tr>
</tbody>
</table>
Study 2: US MBA students, n=345  
Study 3: Working adults, recruited from Amazon Mechanical Turk, n=204 | This study finds some evidence that diverse teams are evaluated differently from homogenous teams. Over two randomised laboratory studies, the authors found that racially diverse teams were perceived to have more conflict than homogenous teams. In addition, participants were less likely to give resources to diverse teams. This provides food for thought and a potential factor to consider when explaining the differences noted in previous sections of manager and self-ratings of performance in diverse teams. |
| McLaughlin et al (2004) | Experimental vignette study | This study investigates perceptions of employees with AIDS, cerebral palsy and stroke. More stigma (rated on a 16-item scale, with items covering areas such as putting co-workers |

<table>
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<tr>
<th>Authors</th>
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<th>Findings</th>
</tr>
</thead>
</table>
| Lane and Flowers (2015) | Systematic review of non-affluent educational experiences means opportunity is not equal. 26 studies | Not available, as not a meta-analysis  
Qualities of studies not assessed, causal impact not assessed |
Study 2: US MBA students, n=345  
Study 3: Working adults, recruited from Amazon Mechanical Turk, n=204 | Not applicable – single study  
Low ecological validity; Study 1 involved students evaluating potential conflict, and the teams evaluated in Study 3 were homogenous and differed on one variable (race), which limits ecological validity |
Student sample, so limited |
### Diversity and inclusion at work: facing up to the business case

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#### US undergraduate students
- **n=643**

Disability was associated with stigma, and stigma largely mediated the relationship between disability type and acceptance. Employee characteristics had direct effects on some aspects of acceptance. Exploratory factor analysis of stigma revealed six factors; however, only a ‘performance impact’ factor was consistently related to acceptance.

#### Experimental study
- **Miceli et al (2001)**
  - Undergraduate students at US university
  - **n=630**

This study examines how disability or pregnancy influences on human resource management decisions, such as performance ratings and selection decisions.

They find that the presence of physical disability and childcare requirements had an negative impact on hiring decision, despite any favourable performance ratings, and in addition, disabilities or pregnancy were related to lower human resource management ratings.

#### Meta-analysis
- **Mor Barak et al (2016)**
  - Adult workforce in human/social service settings such as child welfare, government and social work
  - **30 articles, n=496,740**

This study used a theory-based conceptual model to examine the relationship between two aspects of diversity characteristics (surface level/visible and deep level/invisible) and two work-related outcomes (beneficial and detrimental). It also examined the employee perceptions of organisational diversity efforts (diversity management and climate for inclusion).

Results were mixed for surface-level and beneficial outcomes – suggesting that some aspects of being part of a non-mainstream group (visible) were negatively related to beneficial outcomes, some were positive and others no significant result. Younger age was negatively associated with beneficial outcomes such as job satisfaction, intention to stay and commitment; being male in female-dominated employment field also negatively related to these beneficial outcomes. No statistically relevant association found for race, but being an immigrant or non-national was positively correlated.

For surface-level and detrimental outcomes, no statistically significant relationship between age, race and detrimental

<table>
<thead>
<tr>
<th>Study</th>
<th>Type</th>
<th>Setting</th>
<th>Sample</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miceli et al (2001)</td>
<td>Experimental study</td>
<td>Undergraduate students at US university</td>
<td><strong>n=630</strong></td>
<td>Disability or pregnancy had a negative impact on hiring decision, despite favourable performance ratings.</td>
</tr>
<tr>
<td>Mor Barak et al (2016)</td>
<td>Meta-analysis</td>
<td>Adult workforce in human/social service settings</td>
<td><strong>30 articles, n=496,740</strong></td>
<td>Results were mixed for surface-level and beneficial outcomes. Younger age and being male in female-dominated employment field were negatively related.</td>
</tr>
</tbody>
</table>

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**Generalisability**
- **Miceli et al (2001)**: Not applicable – single study
- **Mor Barak et al (2016)**: External validity was limited due to a small number of studies.
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Outcomes were found, and not enough studies on gender or immigration status.

For deep-level and beneficial outcomes, less education was positively correlated with job satisfaction and commitment. Less job tenure was negatively related. For deep-level and detrimental outcomes, less education was negatively correlated but less job tenure was positively associated with detrimental outcomes (2).

Lastly, findings consistently demonstrated that perceptions of organisation diversity efforts (diversity management and climate for inclusion) were positively correlated with beneficial work outcomes (3). Findings also indicated a negative correlation with detrimental outcomes.

The results of analysis of three potential moderators were inconclusive and did not identify any significant moderators of the relationship between diversity characteristics and work outcomes.

Further effect sizes available in original source

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Morgan et al (2013)  
Field experiment, confederates and observers of job applicants in a retail setting  
US retail managers  
161 stores were selected for the study (total N unclear)

This study investigates discrimination towards pregnant job applicants, with a focus on four negative stereotypes: incompetence, lack of commitment, inflexibility, and need for accommodation.

Observers rated overt and covert hostility. Overall, it was found that ‘pregnant’ women were treated with more hostility and were less likely to be offered an application form, but this was reduced in the presence of information about the pregnant job applicant’s commitment, flexibility and need for accommodation.

Not applicable — single study  
Generalisability beyond retail settings is limited, potentially small sample size

---

5 Public versus private or mixed organisations, USA versus other locations, child welfare versus other organisations.

6 Confederates in the study were not pregnant, and instead wore a pregnancy prosthesis.
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Study Type</th>
<th>Participants/Methods</th>
<th>Findings/Results</th>
<th>Limitations/Judgments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nevala et al</td>
<td>2015</td>
<td>Systematic review</td>
<td>People with disabilities, location unclear, Eight qualitative studies and three quantitative studies</td>
<td>This study provides a review of workplace accommodation (WA) effectiveness for those with disabilities. The outcomes of interest are employment, work ability and cost–benefit. Moderate evidence was found to support specific types of WA such as vocational counselling/guidance, education and self-advocacy, help of others, changes in work schedules, work organisation, and special transportation can promote employment among physically disabled people. There was low evidence that WA such as liaison, education, work aids, and work techniques co-ordinated by case managers results in an increase in return to work. They identify the following facilitators and barriers of employment: self-advocacy, support of the employer and community, amount of training and counselling, and flexibility of work schedules and work organisation.</td>
<td>None reported, Limited number of studies, Small sample size of included studies, Did not collect unpublished data</td>
</tr>
<tr>
<td>Pearson et al</td>
<td>2007</td>
<td>Systematic review</td>
<td>Nursing workforce in a healthcare environment, 19 studies (2 quantitative, 4 qualitative, 13 textual)</td>
<td>This study examines the underlying organisational structures and processes that enable workforce behaviours, management practices and policies within healthcare settings that result in a healthy working environment that is inclusive. Findings suggest that appropriate language and linguistic provision, staff training and education on diversity are key to culturally competent working and promoting the knowledge, skills and abilities healthcare practitioner must provide to enable quality care of those from different backgrounds. They find that healthcare organisations must work collaboratively, embed cultural competence into organisational process and guidelines, ensure training and education is available, providing culturally relevant information to patients, ensuring healthcare professionals have the right skills, and lastly, recruiting and retaining staff to ensure workforce diversity exists.</td>
<td>None reported, Statistical pooling not possible, Limited generalisability from healthcare setting</td>
</tr>
<tr>
<td>Phillips et al</td>
<td>2016</td>
<td>Systematic review</td>
<td></td>
<td>This study provides a systematic review of the use and associated effectiveness of disability diversity training, with the aim of improving employment outcomes for those with</td>
<td>Not reported, Relatively low quality of studies</td>
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<table>
<thead>
<tr>
<th>Study</th>
<th>Methodology</th>
<th>Participants</th>
<th>Design</th>
<th>Findings</th>
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<tbody>
<tr>
<td>Quillan et al (2017)</td>
<td>Meta-analysis US workforce</td>
<td>Employees with disabilities</td>
<td>28 field experiments (55,842 applications)</td>
<td>This study uses call-back rates from field experiments to track hiring discrimination against African-Americans and Latinos over time as a direct measure of discrimination. They find no change in recruitment discrimination against African-Americans since 1989, as measured as difference in call-back rates, finding that on average white applicants receive an average of 36% more call-backs than black applicants, although there is some evidence that recruitment discrimination against Latinos is declining. Quality of studies not assessed Not reported, but CI do not include zero</td>
</tr>
<tr>
<td>Ren et al (2008)</td>
<td>Meta-analysis</td>
<td>Employees with disabilities</td>
<td>23 lab and 8 field experimental studies</td>
<td>This study examines the effect of the presence of disability on human resource (HR) judgements (1). The key findings are: 1a) There is a positive relationship between disability and performance evaluations, however; 1b) There is a negative relationship between disability and performance expectations; 1c) There is a negative relationship between disability and hiring decisions. The relationships outlined above were moderated by other factors – namely that mental disability has a more negative impact on performance expectations and hiring than physical disabilities (2a). Males with disabilities received more negative hiring decisions than females with disabilities (2b). In addition, (1a) (d=0.25) CI 0.14 0.36 (S/M) (1b) (d=-0.14) CI -0.26 -0.03 (S) (1c) (d=-0.09) CI -0.14 -0.04 (S) (2a) Expectations (d=-0.33) compared with (d=-0.03) Hiring (-0.08) compared with (-0.08) (2b) (d=-0.19) compared with (-0.08)</td>
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field experiments yield more negative effects than laboratory experiments.

Type of disability, sex of the target and study settings did not strongly moderate the relationship (2).

For further effect sizes see original source.


This meta-analysis examines the relationship between gender and task performance. They find that:

1 Task performance (a), both objective (b) and subjective (c), is not negatively affected by gender diversity. However, gender diversity has a negative relationship with contextual performance (d).

2 Gender egalitarianism positively moderates the relationship between gender diversity and (a) task performance, (b) objective task performance and (c) subjective task performance – teams in gender egalitarian countries tend to outperform teams in low gender egalitarian countries.

3 Humane orientation did not moderate the relationship between gender diversity and (a) task performance, (b) objective task performance.

4 Institutional collectivism negatively moderates the relationship between gender diversity and (a) task performance, (b) objective performance and (c) subjective performance, such that teams in high institutional collectivism countries perform worse than teams in low institutional collectivism countries.

5 Teams in high in-group collectivism countries perform worse than teams in low in-group collectivism countries – so in-group collectivism negatively moderates the relationship between gender diversity and (a) task performance, (b) objective task performance and (c) subjective task performance, contrary to hypotheses that suggest this relationship is positive.

(1a) r =−0.01 CI95 −0.04 0.02 (ns)
(1b) r=−0.02 CI95 −0.05 0.02 (ns)
(1c) r=−0.01 CI95 −0.06 0.03 (ns)
(1d) r=−0.10 CI95 −0.18 −0.02 (S)

Further effect sizes available in original source

Quality of included studies not assessed C
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<table>
<thead>
<tr>
<th>Schneid et al (2016)</th>
<th>Meta-analysis</th>
<th>Work teams</th>
<th>71 samples from 68 studies (8,498 teams, 54,958 team members)</th>
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<tr>
<td></td>
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<td>The authors test the relationship between age diversity (AD) and various team outcomes, such as turnover, creativity and effectiveness.</td>
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<td>Other than a relationship between age diversity and turnover, no significant relationships were found (1). This was weakly (but significantly) moderated by task complexity, team size, and age cohort.</td>
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<td>Specifically, AD is positively related to turnover for complex tasks, and negatively related for simple tasks.</td>
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<td>In addition, the bigger the team, the lower the correlation between AD, effectiveness and financial performance.</td>
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<td></td>
<td>Younger teams show a lower correlation between age, innovation and creativity.</td>
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<td></td>
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<td>When it comes to financial performance, the larger the team, the lower the correlation between AD and effectiveness and financial outcomes — in other words, a large team may hamper the effect of age diversity on financial outcomes.</td>
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<td></td>
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<td></td>
<td>The authors examine the idea that cultural diversity can be beneficial and detrimental to teams, depending on the outcomes of team divergence and convergence.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>1 Higher cultural diversity was associated with higher creativity.</td>
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<td></td>
<td>2 Higher cultural diversity was associated with increased levels of task conflict.</td>
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<td>3 No significant relationship was found between higher cultural diversity and less effective communication.</td>
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<td></td>
<td>4 Higher cultural diversity was associated with higher satisfaction.</td>
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<td>5 Higher cultural diversity was associated with lower social integration.</td>
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</table>

|                          | (1) Turnover r=0.109 (S) innovation and creativity r=–0.051 (S) effectiveness r=0.027 (S) satisfaction r=0.144 (S) |
|                          | Quality of included studies not assessed |

Further effect sizes available in original source

|                          | (1) 0.16 CI 0.00 0.32 (S/M) |
|                          | (2) 0.10 CI 0.02 0.18 (S/M) |
|                          | (3) –0.03 CI –0.15 0.09 |
|                          | (4) 0.15 CI 0.05 .25 (S/M) |
|                          | (5) –0.07 CI –0.12 – 0.02 |

Quality of included studies not addressed

Large amount of hypotheses

Further effect sizes available in original source
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<table>
<thead>
<tr>
<th>Study</th>
<th>Methodology</th>
<th>Sample</th>
<th>Findings</th>
<th>Quality of Included Studies</th>
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<tbody>
<tr>
<td>Talaska et al (2008)</td>
<td>Meta-analysis</td>
<td>Various locations, predominantly USA; 57 studies</td>
<td>This study finds a moderate relationship between overall attitudes and discrimination. <strong>Findings suggest that discrimination is more closely related to emotional prejudice than stereotypes and beliefs – with emotional prejudice twice as closely related to racial discrimination.</strong> In addition, emotional prejudice relates to discrimination <strong>rated by self and others</strong>, but stereotypes and beliefs only tend to relate to self-reported discrimination.</td>
<td>Overall attitude/discrimination relationship $r=0.264$ CI $0.229 \ 0.298$ (M) Further effect sizes available in original source</td>
</tr>
<tr>
<td>Triana et al (2015)</td>
<td>Meta-analysis</td>
<td>Employees; 79 studies, $n=22,913$</td>
<td>The authors combine the interactional model of cultural diversity (IMCD) and relative deprivation theory to examine employee outcomes of perceived workplace racial discrimination. <strong>Perceived racial discrimination was negatively related to (1) job attitudes, (2) physical health, (3) psychological health, (4) organisational citizenship behaviour (OCB), and (5) perceived diversity climate, and positively related to (6) coping behaviour.</strong> The impact of perceived racial discrimination on job attitudes was stronger in studies published after the Civil Rights Act of 1991 was passed than before (7). Results provide some evidence that effect sizes were stronger the more women and minorities there were in the samples (8), indicating that these groups are more likely to perceive discrimination and/or respond more strongly to perceived discrimination.</td>
<td>(1) Job attitude $r=-0.32$ CI $-0.33 \ -0.30$ (S/M) (2) Physical health $r=-0.06$ CI $-0.08 \ -0.03$ (S) (3) Psychological health $r=-0.12$ CI $-0.12 \ -0.11$ (S/M) (4) OCB $r=-0.12$ CI $-0.19 \ -0.03$ (S/M) (5) Diversity climate $r=-0.27$ CI $-0.33 \ -0.20$ (S/M) (6) Coping behaviour $r=0.17$ CI $0.08 \ 0.25$ (S/M)</td>
</tr>
<tr>
<td>Reference</td>
<td>Type</td>
<td>Sample</td>
<td>Findings</td>
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<tr>
<td>Van Dijk et al (2012)</td>
<td>Meta-analysis</td>
<td>Work teams 146</td>
<td>This meta-analysis explores the relationship between diversity, performance and rater bias. They find that: 1 When team performance is rated subjectively, less positive relationships between demographic diversity and performance are found, more so than for job-related diversity – in other words, subjective ratings of teams result in a biased view when it comes to demographic diversity but not job-related diversity. When objective measures are used, this relationship is smaller, or does not exist. 2 When group performance is evaluated, biases favour job-related diversity and disfavour demographic diversity; this is exacerbated by a rater being outside the team, than in the team. 3 The positive relationship between job-related diversity and performance is stronger for complex tasks than for more simple tasks. However, this moderating relationship does not exist for demographic diversity and performance. 4 There is a more positive relationship between diversity and innovative performance than diversity and in-role performance. 5 Demographic diversity is less positively related to innovative performance than job-related diversity. Further effect sizes available in original source. Example effective sizes outlined below: (8) percentage of minorities (racial/ethnic and women) R²=0.15, R²=0.21 (M) Quality of included studies not assessed</td>
<td></td>
</tr>
<tr>
<td>Webber and Donahue (2001)</td>
<td>Meta-analysis</td>
<td>Work teams 24</td>
<td>Diversity attributes can be job-related (for example differences in functional, educational or industry background), or not job-related (for example differences in gender, ethnicity and race). The authors hypothesise that these types of attributes will relate differently to team cohesion and performance – and team type moderates this effect. (1) Combined diversity and cohesion ρ=0.04 CI 0.13 –0.05 (ns) Combined diversity and performance ρ=−0.01 CI 0.03 –0.05 Relatively old included articles Quality of included studies not addressed</td>
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</table>
They find that job-related diversity did not have a stronger positive relationship with performance than other diversity attributes such as age.

1 Job-related diversity did not have a stronger negative relationship with cohesion than non-job-related diversity attributes.

2 The diversity–performance relationship is more pronounced for lower-level teams than top management teams.

Webster et al. (2018) Systematic review and meta-analysis of LGBT employees in the US
27 quantitative studies, mainly cross-sectional

The relationships between three sets of workplace contextual supports and LGBT outcomes – (a) work attitudes, (b) psychological strain, (c) disclosure, and (d) perceived discrimination – are measured in this review.

1 Formal LGBT policies and practices were most weakly related to the four outcomes.

2 LGBT-supportive climate was most strongly related to both (c) disclosure and (d) discrimination and second most strongly related to (a) work attitudes and (b) strain.

3 Supportive workplace relationships were the strongest predictor of (a) work attitudes and (b) stress/well-being.

| (a) Policies $r=0.15$ (S); support climate $r=0.39$ (M); supportive relationships $r=0.43$ (M) | Most studies cross-sectional |
| (b) Policies $r=-0.06$ (S); support climate $r=-0.26$ (S); supportive relationships $r=-0.28$ (S) | Quality of included studies not assessed |
| (c) Policies $r=0.28$ (S); support climate $r=0.48$ (M); supportive relationships $r=0.30$ (M) | |
| d) Policies $r=-0.20$; (S) support climate $r=-0.64$ (L); Supportive relationships $r=-0.17$ (S) | |
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5 Findings and synthesis

This section will outline the key findings and quality of evidence for each research question. Further discussion and implications for practice and policy are outlined in more detail in the accompanying report, Diversity and Inclusion at Work: Facing up to the business case, which can be found at cipd.co.uk/diversityinclusion

1 What are the outcomes of diversity? (Level A–C)

Our evidence assessment identified a vast amount of literature on the outcomes of diversity on various aspects of organisational and team performance (from creativity to corporate social reputation) – but very little controlled research on individual outcomes such as job satisfaction and well-being. Most studies are meta-analyses of multiple research findings that are cross-sectional or longitudinal in nature, meaning the relationship between diversity and outcomes should be seen as an association, rather than a proven causal relationship.

In addition, our review finds that examining the link between diversity and performance is not a straightforward task. Studies differ by the type of diversity examined, with each occupying a diversity ‘niche’, typically one characteristic, and the type of outcome, which makes it difficult to draw conclusions between studies.

Box 1: How is diversity described in research?

Within the scientific literature, there are two overarching conceptualisations of diversity: ‘surface’ characteristics such as age, gender and ethnicity, and ‘deep-level’ characteristics such as education and job tenure, all of which encompass different experiences and beliefs (Horwitz and Horwitz 2007).

Deep-level diversity concerns facets of individual differences related to diversity at work such as occupational background, occupational tenure and values that may not be immediately obvious but impact on workplace outcomes. In diversity research taking place in a work context, this is sometimes referred to as job-related diversity.

Surface-level diversity relates to aspects of diversity such as gender and age that are outwardly visible and often relate to our innate characteristics – in other words, are observable. This is also referred to as biodiversity or demographic diversity.

How these ‘types’ of diversity affect team processes is the subject of debate; the hypotheses relating to this form the basis of much research (Stahl et al 2010):

- Do teams with differing values and occupational backgrounds (in other words, deep-level diversity) stand to benefit from fresh ideas and perspective or will these differences lead to conflict?
- Similarly, surface-level diversity attributes such as gender, age and ethnicity are thought to have the ability to have immediate and obvious impact on team dynamics because of individuals’ tendency to categorise others, and research investigates whether this impact is negative, positive or neutral.

Diversity is associated with corporate performance and social reputation (Level C)

Meta-analytic findings, bringing together results from multiple studies, find several positive organisational outcomes associated with diversity. One meta-analysis finds that women’s board representation is positively associated with corporate social responsibility (CSR) and social reputation. CSR was assessed in a variety of ways across studies, including measures of charitable giving, having a code of ethics and ratings of CSR based on audits. This relationship is enhanced by the extent of shareholder protection in the country (this relates to how easy it is to bring directors to account for misconduct) and gender parity in the country (Byron and Post 2016).

One systematic review identified positive associations between top management team diversity and corporate performance, by way of enhanced decision-making (Homberg and Bui 2013). They find that...
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functional, educational and tenure differences in top management teams are positively associated with corporate performance. It should be noted that this study can’t confirm cause and effect, rather an association between various facets of diversity and organisational outcomes, and the authors believe that publication bias accounts for this effect.

Diversity can be positive and negative for team performance (Level B–C)

Horwitz and Horwitz (2007) find a positive relationship between deep-level diversity characteristics (such as tenure) and team performance, but no relationship between demographic characteristics (such as age) and team performance. They find that self-reported measures of performance enhanced this relationship. Further research is needed to explain this finding, which was found in multiple studies in our review.

The authors argue that precision is needed to truly understand the effects of diversity on performance, as in research, types of performance and facets of diversity are often conflated. For example, literature linking diversity (both deep and surface level) to performance outcomes concerns problem-solving, creativity and decision-making, amongst others – so the association between the diversity characteristic and outcome will undoubtedly differ. They suggest they will be moderated by task complexity, type of team and team size, task interdependence and lastly the methodology used to test relationships.

Some research identifies potential negative associations between diversity and performance outcomes. Stahl et al (2010) find that cultural diversity is associated with higher creativity and satisfaction, but also higher task conflict and lower social integration – depending on the context. However, the larger the team, the less communication and satisfaction benefit from diversity. Interestingly, tenure was also negatively associated with communication, and positively with conflict.

Schneid et al (2016) also find that team size influences the relationship between diversity and team outcomes, with larger team size minimising the impact of age diversity on team effectiveness. They also find no significant relationships between age diversity and creativity.

Team tenure has been positively associated with efficiency, but not associated with innovation (although comparatively few studies examine innovation). In contrast, demographic variables such as gender and ethnicity variety (meaning the number of represented groups in the team) were negatively associated with team performance (Bell at al 2011).

When it comes to gender, Schneid et al (2015) conclude that both objective and subjective task performance are not negatively affected by gender diversity. However, gender diversity has a negative relationship with contextual performance (activities relating to co-operation and other discretionary behaviours).

Webber and Donahue (2001) suggest that different diversity attributes will relate differently to outcomes – for example, job-related diversity such as industry background versus gender, ethnicity and race. The authors find that job-related diversity did not have a stronger positive relationship with performance or cohesion than other diversity attributes such as age, but any relationship is more pronounced in lower level-teams and top management teams.

Mor Barak et al (2016) examine both surface-level and deep-level diversity characteristics, and find characteristics can be related to both positive and negative outcomes for individuals and organisations. They find no adverse outcomes of surface-level diversity characteristics such as age or race. However, results were more mixed when individuals are part of an ‘outgroup’ (part of a minority in that context – whether a team at work or the wider labour market), meaning those in the minority group may benefit least from diversity. The study finds that a positive perception of organisational diversity management initiatives and inclusion climate both positively correlate with good work outcomes.
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Work context is key (Level B)

Haas (2010) measured a variety of diversity characteristics and various organisational outcomes. This research also finds a mixed picture of results, further supporting the idea that the relationship between diversity and organisational outcomes is highly dependent on the organisational context and how diversity is operationalised. In addition, the research found that any negative outcomes related to diversity are stronger in larger teams.

Joshi et al (2009) conducted a meta-analysis examining the contextual factors that influence the relationship between diversity characteristics and performance outcomes. They find overall small, but significant relationships between diversity and performance (both positive and negative), without accounting for context – and find that when context is accounted for these relationships are magnified. For example, in service industries, a positive association was found between surface diversity such as age and gender, but in industries such as manufacturing a negative association was found. Furthermore, differences in occupation and industry can account for some of the inconsistencies found in previous studies. Specifically, they find that in industries that are typically male dominated, or contexts with predominantly white employees, gender and ethnic diversity may be associated with negative performance outcomes.

Summary

Overall, it is clear that identifying a causal link between diversity and performance is not a simple task. Some positive associations have been found between diversity representation and outcomes such as team performance, but the lack of randomised, controlled studies in this area means the relationships identified are correlational. There are several moderating factors to note, too, including team size and organisational context. For example, the type of industry, existing gender parity in the society the business operates in, type of task measured and who is rating performance. In addition, diverse teams have less positive performance outcomes when the team is large – but the same can likely be said for any team.

There are several meta-analyses and systematic reviews in this area; however, meta-analyses of randomised, controlled research were not identified. In addition, meta-analyses were not consistent in their findings, although there is some evidence that inconsistency in findings can be partly influenced by factors such as organisational context, who is rating performance and how performance is operationalised.

2 What factors keep inequality in place at work? (Level A–D)

Discrimination in today’s workplace (Level B–C)

Talaska et al (2008) find that there is a moderate relationship between attitudes and discrimination, with emotional prejudices being more closely linked to racial discrimination than stereotypes and beliefs. In addition, emotional prejudice relates to discrimination rated by self and others, but stereotypes and beliefs only tend to be related to self-reported discrimination.

Jones et al (2017) find that prejudices such as racism, sexism and ageism are differentially related to overall workplace discrimination. Racism and ageism were implicated in recruitment and selection decisions, but sexism was not. In addition, racism was significantly related to biased performance evaluations. In addition, some forms of prejudice (namely ageism and racism) were related to opposition of diversity policies. They found little evidence that sexism related to workplace outcomes. However, when benevolent and hostile sexism were considered separately, a different pattern of

7 Hostile sexism relates to outright, misogynistic negative evaluations and actions, whereas benevolent sexism refers to seemingly positive perceptions that nonetheless downplay their status – in a workplace context, this could be an overly positive performance evaluation of a female that does not aid their development (Glick and Fiske 1997).
results emerged. While hostile sexism was not related to overall discrimination, they found benevolent sexism was negatively associated with overall workplace discrimination.

Jones et al (2016) suggest that initiatives and legislation fail to target subtle forms of discrimination. However, these types of discrimination are equally as negative as overt discrimination (such as using derogatory language toward a minority group) for the individuals who experience them. They find that both overt and subtle forms of discrimination are negatively related to workplace outcomes for individuals, as well as physical and psychological outcomes (although the slightly larger effect sizes were found for overt discrimination).

Triana et al (2015) examine the outcomes of perceived racial discrimination, finding that discrimination is negatively associated with job attitudes, physical and psychological health, organisational citizenship behaviour and perception of diversity climate – and increases coping behaviour. This association was strongest for women and minority groups.

We included the following single study in our narrative report as, although it cannot define a causal relationship, Kvasny et al (2009) reference intersectionality and provide background exploration into how factors may serve to keep inequalities at work. This qualitative research focuses on the experiences of black women in the IT industry (or taking IT qualifications) in order to unpack how multiple identities influence experience at work. The research explores the attitudinal and opportunity barriers, including class factors. Both covert and overt oppression are reported (from racism at university, to mistreatment by male supervisors), and factors such as differences in educational experiences mean opportunity is not equal.

**Structural issues at work (Level C–D)**

Structural issues can also be a barrier to equality. Lane and Flowers (2015) find that of 27 studies identified between 1960 and 2006, 21 found wage salary in favour of men in social work. The underlying reasons identified were organisational characteristics, type of position and individual differences. For example, they found evidence for the quicker advancement of men, and over-representation of men in leadership positions. In terms of organisational context, differences between public and private sectors were noted in terms of pay, although these findings varied between studies. Other studies in their review found that women with children tended to have more casework positions that tend to be lower paid, but this varied across studies. This systematic review of data cannot unpick cause and effect relationship, but highlights that various structural issues in organisations exist that act as a barrier to equality of earnings and progression.

Other analysis of labour market movement for men and women highlights that structural barriers exist across contexts. Epple et al (2014) use data from the Swiss Labour Force Survey to examine men and women’s experiences in the labour market through the lens of probability of employment, working hours and parenthood. They hypothesise that women tend to be most negatively impacted by parenthood in terms of job progression and opportunity. They find support for this, finding that women with children are less likely to be in employment than men with children. Availability of childcare moderated this relationship.

As well as recruitment bias, barriers to progression can also hinder diversity at different levels of the organisation. Johnston and Lee (2012) analysed data from the Australian Household Data Survey and find gender differences in job mobility. They find that women are less likely to be promoted than men, and receive less of a salary increase when they are promoted. Some argue that some of this relationship can be accounted for by women’s preference for valuing non-financial rewards at work (such as flexible working), but little evidence of this preference was found in the analysis.

It should be noted that the two studies above are analysis of existing data sets and do not provide a causal explanation for the gender differences in job progression, but do suggest that further research needs to identify the specific mechanisms at play.

**Several points in the employee lifecycle are susceptible to bias (Level A–C)**

Many studies find evidence that those in minority groups are at a disadvantage when it comes to job applications. One study used call-back rates from field experiments to track hiring discrimination
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against African-Americans and Latinos over time. They find no change in recruitment discrimination against African-Americans since 1989, but some evidence that recruitment discrimination against Latinos is declining (Quillian et al 2017).

Worryingly, similar findings have been replicated across location and minority groups by several single studies. For example, Drydakis (2015) finds evidence that UK undergraduate jobseekers are disadvantaged if their CVs indicated lesbian or gay union membership; they received fewer invitations to interview, and slightly lower estimated entry-level salaries, and King and Ahmad (2010) find evidence of lower call-back rates for Muslim job applicants – perhaps due to perceived inappropriateness of religion in work settings (King and Franke 2017).

In an experimental study, Dietz et al (2015) use social identity theory to explain the skills paradox (where skilled migrants are more likely to be targets of employment discrimination that non-skilled migrants). They find support for their hypothesis that skilled migrants were less preferred for hire than local, equally skilled workers. However, this relationship was minimised if a diverse hiring policy was presented to participants, or when it was emphasised that the clientele of the restaurant chain was diverse. This provides support for the positive benefits of hiring policies that emphasise the importance of diversity and the benefits to a diverse client base (although this should be tested in field settings).

It’s not just call-back rates that organisations must pay attention to. One study in this REA finds that gendered wording in adverts may perpetuate stereotypes of certain industries. Gaucher et al (2011) conducted two field studies and find that male-dominated industry job adverts tend to include more ‘male’ words, but the same difference was not found in female-dominated industries. They then explored the effect of such wording on diversity perceptions in an experimental setting, and found that when masculine wording existed in a job, participants predicted more men in that role, regardless of their gender or whether the occupation was known to have a gender skew.

Recruitment websites may signal an organisation’s commitment to diversity. Dover et al (2016) examine the impact of pro-diversity messages on potential job applications. In an experimental setting, non-white respondents were more concerned about organisational fairness when recruitment sites had no diversity messages. On the other hand, they find that high-status groups (specifically, white men) may perceive pro-diversity company messages as threatening, measured by cardiovascular data.

Once individuals enter the next stage of the hiring process, we must still pay attention to the potential for bias. In an experimental study in a university setting, McLaughlin et al (2004) measured stigma towards different types of disabilities, and how stigma is associated with judgements of how effective a person will be at their job. They found that stigma mediates the relationship between disability and performance ratings, suggesting that organisational intervention to minimise stigma and challenge misconceptions of disabilities could be an effective way to begin to tackle inequality in this area.

Brohan et al (2012) study the effect that disclosure of a mental health issue has on employment outcomes using a mixture of qualitative and quantitative evidence. They identify that from an employer perspective, there is some evidence that potential candidates with mental health issues were perceived as less employable. From an employee perspective, several studies identified that candidates felt they would not be hired if they disclosed a mental health issue.

Perceptions of working mothers can hinder access to employment. For example, a field experiment (Morgan et al 2013) investigates discrimination towards pregnant job applicants, with a focus on four negative stereotypes: incompetence, lack of commitment, inflexibility, and need for adjustments to their working environment. Overall, it was found that pregnant women were treated with more hostility and were less likely to be offered an application form than non-pregnant women. The researchers also found the low call-back rate was reduced where the potential applicant’s commitment and flexibility was emphasised.

Structured interviews are often used to minimise bias, but Miceli et al (2001) call into question the positive impact of the structured interview in removing bias for disabled applicants and those with child caring responsibilities. They find that despite favourable ratings equivalent to non-disabled
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people in the hiring process, hiring intentions for people with disabilities were still lower than for people without disabilities, prompting the authors to ask how far structured interview results are related to actual hiring decisions.

Subtle and unconscious types of bias may inadvertently lead to discrimination in performance evaluations. Ren et al (2008) examine how disability can influence perceptions of performance, and find performance evaluations are actually higher for those with disability, despite lower performance expectations. Despite this, hiring intentions were still lower for those with disabilities, and this relationship was more pronounced for those with mental disabilities than physical ones. Further research should uncover whether organisational policies and hiring strategy can influence these outcomes. A policy might explicitly condemn discrimination, as does employment legislation (in the UK, the Equality Act references both indirect and direct discrimination), but more ‘subtle’ forms of discrimination continue.

Interestingly, as explained above, our review of the literature of diversity and performance highlight that performance ratings of diverse teams differ by rater and type of rating. For example, Van Dijk et al (2012) find that when team performance is rated subjectively, less positive relationships between demographic diversity and performance are found. In other words, subjective ratings of teams result in a biased view when it comes to demographic diversity but not job-related diversity. When objective measures are used, this relationship is smaller, or does not exist – so, negative relationships found may be due to rater bias rather than reflecting objective performance.

In addition, Lount et al (2015) find some evidence that diverse teams are evaluated differently from homogenous teams. Over two randomised laboratory studies, the authors found that racially diverse teams were perceived to have more conflict than homogenous teams. In addition, participants were less likely to give resources to diverse teams.

Summary

There are numerous barriers to equality at work, as demonstrated by numerous pieces of research – from longitudinal analysis to randomised controlled laboratory studies. In areas such as recruitment, there is clear and strong evidence that bias is at play and reduces access to jobs, evident in field studies and laboratory studies. When it comes to the overarching structural barriers that keep inequality in place, there is less randomised controlled research that identifies causal factors, rather analysis of longitudinal datasets that demonstrate trends.

There is less evidence available from randomised, controlled studies that can confirm a causal relationship between specific workplace policies or practices that keep inequalities in place. This is a complex area that will likely be influenced by a variety of factors such as bias and prejudice, alongside other barriers such as inflexibility by employers and lack of organisational support for diversity.

3 What supports greater inclusion and diversity in the workplace?

The evidence for diversity training (Level B–C)

Diversity training is a popular initiative undertaken by organisations. However, the effectiveness of this sort of training has been called into question.

Bezrukova et al (2016) conducted a meta-analysis of diversity training outcomes, exploring the relationship between diversity training and cognitive, behavioural or attitude outcomes, alongside reaction to training. Overall, while diversity training was associated with positive emotional reactions of participants, learning tends to be minimised after the training. However, training is more effective over time when it increases knowledge of different cultures as well as diversity awareness – in other words, addresses knowledge and skills.

The design of training moderates the relationship between diversity training and outcomes – for example, having multiple training methods had a positive association with trainee reactions. In addition, the effect of training is stronger when part of wider initiatives. Overall, while diversity training
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is often well received by participants and can have short-term results, the sustained impact of such training on behaviour and emotional prejudice over time is not clear.

Kalinoski et al (2013) investigate the cognitive and skill-based outcomes of diversity training. Overall, diversity training had a positive relationship with cognitive, skill-based and attitude outcomes, but with larger effect sizes for skill and cognitive-based outcomes than attitude outcomes. Social interaction, active instructions and distributed training all contributed to positive outcomes. In other words, well-designed training initiatives that aren’t a one-off exercise can enhance the knowledge and skills of participants when it comes to diversity, but attitudes are harder to change.

Alhejji et al (2016) explore the impact of diversity training from three perspectives: the business case, learning outcomes and social justice. While the relationship between training and outcomes such as business performance is not proven, diversity training is associated with some short-term enhancement of knowledge, skills and abilities. However, the authors also suggest standalone training is unlikely to lead to attitude change.

One systematic review finds limited evidence for the effectiveness of disability diversity training, but suggest those designing training must take into account participant needs and information (Phillips et al 2016).

Overall, the evidence for diversity training is mixed. While some short-term impacts might be felt, several meta-analysis fail to identify long-term attitude and behaviour change as a result of diversity training.

Evidence for workplace accommodation and reasonable adjustments (Level C–D)

Workplace accommodations and reasonable adjustments are key aspects of ensuring diverse groups are supported to remain in work. Gensby et al (2014) systematically review evidence on the nature and effectiveness of workplace disability management and return-to-work programmes. They conclude that there is not sufficient evidence to support or detract from the effectiveness of such programmes provided by employers to increase return to work. Specifically, the evidence does not allow us to conclude what components, or what combination of components, lead to effectiveness.

Other studies find moderate evidence for specific types of workplace accommodation, such as: vocational counselling and guidance, education and self-advocacy, help of others, changes in work schedules, work organisation, and special transportation. These types of accommodation can promote employment among physically disabled people, although they only identify a small amount of studies (Nevala et al 2015).

At a government level, Clayton et al (2011) evaluate major governmental approaches in OECD countries, aimed at helping chronically ill or people with disabilities into, or return to, work. In particular they examine anti-discrimination legislation, reasonable adjustments, employee subsidies and return-to-work planning, and find some support for the effectiveness of these initiatives.

Overall, there is moderate evidence that workplace accommodation and return-to-work programmes are associated with increased employment for those with disabilities, but what specific components lead to effectiveness is unclear, and the evidence is largely from systematic reviews on non-controlled studies, meaning the causal relationship between return-to-work programmes and access to work is not certain.

The importance of inclusion climate (Level B–C)

We identified two controlled studies that examine inclusion climates and organisational policies in detail, signalling further work must be done in this area.

Pearson et al (2007) find that healthcare organisations must undertake a number of initiatives, both targeted and holistic, to ensure workforce diversity exists, for the benefit of patients and employees. They highlight that: training and education should be available, staff must have the right skills, patients must be provided with culturally relevant information, and diverse staff must be recruited and retained to embed cultural competence into organisational processes.
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Webster et al (2018) examine the relationships between three sets of workplace contextual supports and LGBT outcomes: work attitudes, psychological strain, disclosure, and perceived discrimination. They find that formal LGBT policies and practices were most weakly related to the four outcomes, whereas an LGBT-supportive climate was most strongly related to both disclosure and discrimination, followed by work attitudes and strain. Supportive workplace relationships were the strongest predictor of work attitudes and stress or well-being.

Summary

Diversity training is far from a cure-all for organisational diversity and inclusion. There is a wide range of research in this area, from single studies to meta-analysis, and while it has some beneficial short-term impacts and may increase knowledge, there is little evidence that diversity training leads to long-term behaviour and attitude change.

This REA identified a number of systematic reviews of workplace accommodation research, with moderate evidence supporting them. However, we identified no controlled research in the databases searched that analyses the impact of other diversity initiatives, such as name-blind recruitment, flexible working arrangements or mentoring for minority groups.

Two studies in this review discussed the culture and climate needed for culturally competent practices and inclusion. These should be considered indicative in their findings, but show promising outcomes for individual well-being and highlight the holistic approach needed for diversity and inclusion to be realised in the workplace.

6 Limitations

The purpose of an REA is to identify the best available evidence in the scientific literature on what is known about a certain area or topic. The search informing this research returned 42 studies considered relevant and of appropriate quality to inform the research questions, with hundreds of further studies excluded, highlighting the large research base identified in this area.

However, an REA aims to be ‘rapid’, and as such will not be as exhaustive as a method such as systematic review. In particular, systematic reviews evaluate grey literature (such as conference proceedings) and approach researchers for unpublished data, which did not form part of this research. This means our appraisal of the literature may not take into account all the evidence, and while three databases were comprehensively searched, other databases may contain further information not represented here.

There is also a risk of publication bias (that significant results are more likely to be published than non-significant findings, meaning results in scientific research may be overinflated). Some research identified here discusses this issue head on, and controls for publication bias in their findings – some suggesting that publication bias inflates the outcomes of diversity, while others refute this.

What’s missing from the research base?

The literature in this area is of overall good quality, with many meta-analyses available that examine the relationship between diversity and organisational outcomes. However, randomised controlled trials are less frequently conducted, meaning identifying a causal relationship between diversity and performance (amongst other outcomes such as individual well-being) is not a simple task. The same can be said for the factors keeping inequalities in place, and the evidence for the initiatives that aim to remove these barriers.

Research examining the relationship between diversity characteristics such as ethnicity, age and race, and business outcomes is widely available. However, diversity outcomes for employees is less widely researched.

Systematic research into the effectiveness of specific initiatives (such as career mentoring or cultural change programmes) was not found in our search of the scientific literature, suggesting that randomised or controlled research into how to tackle inequality is lacking. Further research should uncover what works when it comes to these initiatives, so people professionals can select the most
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effective tools. In order to uncover the causal mechanisms that lead to the best outcomes, randomised studies and controlled studies would be a prudent area of focus for further research.

In addition, there is much research concerning gender, ethnicity and age diversity, while other important aspects such as LGBT, religious and maternity discrimination are less widely researched. In addition, research rarely takes into account that we all have multiple, related identities that span a range of groups. We recognise that researching intersectionality is a complex task, and that it is necessary to surface issues faced by particular minority groups. That being said, inclusion research should be more inclusive, and appreciate individuals’ multiple identities, both in research and practice.

This REA aimed to explore the effects of inclusive work environments, for employees and organisations. However, there is also scarce research on the outcomes of inclusion. Research tends to focus on diversity characteristics and performance outcomes, but little research exists that explores the outcomes for organisations of having an inclusive culture, where all individuals and groups are valued, treated equally and are included in decision-making. That being said, there is a growing recognition of the importance of inclusion as a way to reap the benefits of diversity; without an inclusive environment, diverse teams will not flourish (Nishii 2013).

7 Conclusion

This REA on diversity and inclusion at work aimed to uncover the outcomes of diversity and inclusion at work, what factors keep inequality in place, and how organisations can tackle these barriers.

The evidence for diversity and inclusion at work

Our results identify a wide evidence base that focuses on the outcomes of diversity at the organisation level, and much less on how diversity might benefit individuals. Similarly, research into the beneficial outcomes of inclusion is limited. This is not to say that these positive benefits do not exist for individuals, but simply that research focuses on the ‘business case’ argument for diversity representation. However, there is a growing recognition that inclusion is likely to underlie the success of diverse teams and be a key factor in ensuring equal opportunity for all (Nishii 2013).

Many factors keep inequality in place

It is clear prejudice and bias (whether unconscious or conscious, direct or indirect) still exists in the workplace, and this is associated with discrimination. In turn, this creates a negative work environment for individuals that can impact on well-being. Biases can also contribute to structural issues (such as failing to promote minority groups to leadership positions due to lack of support or equal progression opportunities), which in turn create inequalities.

We also need to pay attention to various points of the employment lifecycle. Barriers to work exist right at the beginning: access to jobs. Multiple pieces of evidence shine a light on bias in recruitment. Biases, and even stigma, may also influence an individual’s experience at work – from how their performance is evaluated to the opportunities they are offered for promotion.

Mixed support for diversity initiatives

Lastly, organisations need to understand how they can reduce inequality. There is plenty of evidence for and against diversity training, but less on other initiatives such as mentoring for minority groups or wider culture change programmes. Evidence suggests that diversity training can be effective in promoting knowledge and skills in the short term when certain conditions are met – for example, when training is distributed.

However, while training can have some impact, it is not enough to truly remove barriers to inclusion and diversity; one-off initiatives cannot address the underlying issues in an organisation. Workplace accommodation, truly flexible approaches to recruitment, working patterns and job design, coupled with a supportive work environment with an inclusive climate are key to unlocking the potential of diversity, for individuals and the wider business.
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Facing up to the business case

We need to challenge the traditional notion of the ‘business case’ for diversity that focuses only on business, rather than human, outcomes; there should not need to be a bottom-line business case in order to treat individuals with dignity and respect at work. Business leaders and people professionals have the opportunity to champion the case for diversity, moving from narrow outcomes such as financial returns, and highlight how diversity and inclusion can benefit employees and wider society.

We argue that any business case for diversity should hold these outcomes in balance and recognise the benefits at not only an organisational level but from an individual and societal perspective. We believe the people profession must champion a progressive perspective on the creation of value that considers a broad range of stakeholders and challenges a narrow focus on maximising only shareholder value (CIPD 2017b, 2018).

How can people professionals and business leaders drive change?

Research highlights that the organisational context is key for diverse groups to succeed, so diversity policies and research must go beyond representation of minority groups (although this is undoubtedly important and necessary) and focus on inclusion.

People professionals must ensure organisations’ practices are fair and encourage diverse voices to be heard and supported. However, people management practices must also recognise that being inclusive goes beyond policy and ensures that everyone is valued and supported as an individual. There are key points within the employee lifecycle where action can be taken to enable this, from recruitment to progression and examining (and potentially shifting) the overarching organisational culture.

This is an undoubtedly complex area to tackle in research and practice. Further discussion and recommendations from practice arising from this rapid evidence assessment can be found at: cipd.co.uk/diversityinclusion
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8 References


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