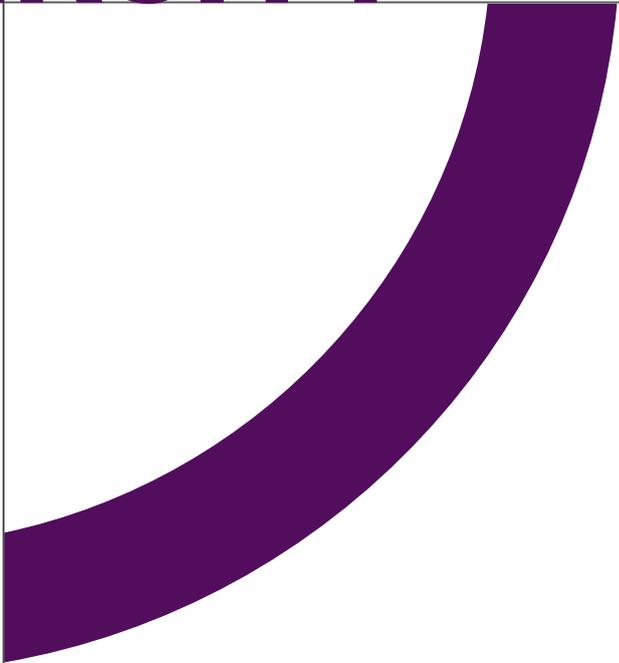


FLEXIBLE WORKING, TELEWORKING AND DIVERSITY

An evidence review



The CIPD is the professional body for HR and people development. The registered charity 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 more than 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.

Flexible working, teleworking and diversity: an evidence review

Scientific summary

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1 Background

This evidence review set out to understand what is known in the scientific literature about the effect of flexible work and teleworking on enhancing diversity and inclusion in the workplace. The review used the Critically Appraised Topic (CAT) method according to **CEBMA's guidelines**, and presents an overview of the best available evidence. A short evidence summary for practitioners is available at cipd.co.uk/evidence-flexible-work

2 Main questions: what will the review answer?

- 1 What are flexible working and teleworking?
- 2 How are flexible working and teleworking supposed to support diversity and inclusion?
- 3 What is the effect of flexible work and teleworking on diversity and inclusion?

3 Search process: how was the research evidence sought?

The following two databases were used to identify studies: ABI/INFORM Global from ProQuest and PsycINFO from Ovid. The following generic search filters are applied to all databases during the search:

- 1 Scholarly journals, peer-reviewed
- 2 Published in the period 1980 to 2017 for meta-analyses and the period 2000 to 2017 for primary studies.
- 3 Articles in English

A search was conducted using combinations of different search terms. We conducted 14 different search queries and screened the titles and abstracts of more than 60 studies. An overview of all search terms and queries is provided in Annex I.

4 Selection process: how were the studies selected?

Study selection has taken place in two phases. Firstly, the titles and abstracts of the studies identified were screened for their relevance to the review question. In case of doubt or lack of information, the study was included. Duplicate publications were removed. This first phase yielded 52 studies. Secondly, studies were selected based on the full text of the article according to the following inclusion criteria:

- 1 **Type of studies:** Focusing on quantitative, empirical studies.
- 2 **Measurement:** Only studies in which the impact on diversity and inclusion was measured.
- 3 **Context:** Only studies related to workplace settings.
- 4 **Level of trustworthiness:** Only studies that were graded level D or above (see below).

This second phase yielded seven secondary studies (meta-analyses) and 16 primary studies. An overview of the selection process is provided in Annex II.

5 Data extraction: what data were extracted?

Data extraction involved the collation of the results of the studies included. From each study, information relevant to the review question was extracted, such as year of publication, research design, sample size, population (for example, industry, type of employees), possible moderators or mediators, main findings, effect sizes, and limitations.

6 Critical appraisal: how was the quality of the studies included judged?

The classification system of Shadish et al (2002), and Petticrew and Roberts (2006) was used to determine the methodological appropriateness of the research design of the studies included on the basis of a systematic assessment.

To determine the magnitude of an effect, Cohen's rule of thumb (Cohen, 1988) was applied. According to Cohen (1988) a 'small' effect is an effect that is only visible through careful examination. A 'medium' effect, however, is one that is 'visible to the naked eye of the careful observer'. Finally, a 'large' effect is an effect that anyone can easily see because it is substantial.

7 Outcome of the critical appraisal

The overall quality of the studies included was moderate. Most of the meta-analyses were based on cross-sectional studies, and were therefore qualified as level C or lower. Of the 16 primary studies, only two qualified as level B.

8 Main findings

Question 1: What is flexible work or teleworking?

Flexible work, also referred to as flexible working arrangements (FWAs), is often defined as "*working arrangements which allow employees to vary the amount, timing or location of their work*" (de Menezes and Kelliher, 2011). FWAs involve employees working remotely from the workplace (teleworking).

Question 2: How are FWAs supposed to support diversity and inclusion?

The notion that FWAs are effective for helping individuals manage work and family responsibilities is based on two social theories: resource theory (Fiedler and Garcia, 1987) and social exchange theory (Thibaut and Kelley, 1959). Resource theory suggests that work–family conflict occurs when the demands of one role (for example work) drain the resources needed to meet the demands of the other role (for example family life). Time, attention, and energy are finite resources for which both work and family compete. The assumption is that FWAs provide employees with discretion over when and/or where work is completed, thus enabling employees to determine the best way to allocate time, attention, and energy resources to one domain versus the other (Allen, 2013). As a result, FWAs may be beneficial to individuals with greater family responsibility, such as those who are married and/or who are parents (Shockley and Allen, 2007). Social exchange theory suggests that "people should help those who have helped them" and "people should not injure those who have helped them" (Gouldner, 1960). According to this theory, employees feel motivated to

reciprocate after receiving benefits such as FWAs, and thus feel encouraged to give back in terms of commitment or higher performance.

Question 3: What is the effect of flexible work arrangements (FWAs) on factors relevant to diversity and inclusion?

1 FWAs are a moderately effective tool to help employees manage work and family roles (level C).

All meta-analyses indicate that FWAs help employees who are coping with work and family roles. In addition, FWAs are associated with increased perceptions of autonomy, lower work-family conflict, increased job satisfaction and retention. The effect sizes found, however, are rather small, and several factors moderate and mediate the effect.

2 FWAs have a small positive effect on job satisfaction (level B).

Several meta-analyses demonstrate that FWAs have a small, positive effect on job satisfaction and employees' satisfaction with their work schedule (de Menezes and Kelliher, 2011; Gajendran and Harrison, 2007; Harker and MacDonnell, 2012). This effect, however, tends to decrease over time (Baltes et al, 1999). In addition, this effect is moderated by perceived autonomy and gender.

3 FWAs tend to have a small positive effect on employees' commitment (level B).

A large number of studies suggest that FWAs impact positively on organisational commitment. A similar number of studies, however, show no effect or no significant effect. In summary, the evidence is mixed but it appears to be more supportive of a (small) link between FWAs and commitment (de Menezes and Kelliher, 2011; Harker and MacDonnell, 2012).

4 The effect of FWAs on commitment is moderated by age (Level C).

A meta-analysis based on 22 studies suggests that commitment is more positive among younger employees when FWAs such as teleworking are an option, and implicate that offering FWAs may be a tool for attracting young talent (Harker and MacDonnell, 2012). This finding was confirmed by a recent longitudinal study (Rudolph and Baltes, 2017).

5 Women who perceive that their company offers FWAs report higher levels of job satisfaction, regardless of whether they use them (level C).

Several studies have found that women who perceived that their firm offered FWAs reported higher levels of job satisfaction, regardless of whether they actually used them. This suggests that the availability of FWAs alone may have a minimal impact on job attitudes, but that the perception of the organisation as being family-supportive may have a somewhat larger effect on job satisfaction and commitment. In addition, it was found that, in general, women (including female HR managers) tend to be more positive about the potential of FWAs (de Menezes and Kelliher, 2011).

6 FWAs have a small negative effect on work-family conflicts (level D).

A meta-analysis based on 58 studies suggests that, overall, FWAs have a positive effect on work-family conflicts. The effect sizes, however, were again small. In addition, this effect was moderated by the type of FWA: a stronger effect was found for flextime than for flexplace. Finally, FWAs seem to have no effect on family-work interferences, and no differences were found between women, men, or degree of family responsibility (Allen, 2013).

7 FWAs have only a small positive effect on the time mothers and fathers spend with their children (level C).

A longitudinal study from Australia suggests that FWAs are beneficial to parents, but it appears that this is related to their ability to distribute their time between work and family time, rather than giving them more time with children (Baxter, 2011)

8 FWAs are associated with lower postpartum mental health scores (Level C).

A longitudinal study found that FWAs are associated with lower mental health scores in women with a baby (Grice et al, 2011). In addition, it was found that women who felt it was relatively easy to take work home experienced worse mental health than women who found bringing work home difficult. Thus, FWAs may not increase the amount of time a mother is able to spend with her child, but instead may have unintended consequences (for example the mother may bring home so much work that she never experiences a break from work).

9 The positive effect of FWAs on satisfaction, commitment, and work-to-family conflicts is mediated by perceived autonomy and control (level B).

Several meta-analyses found that the favourable effect of FWAs on employee satisfaction, organisational commitment, and work-to-family conflicts is mediated by employees' perceived autonomy and control. In other words, this favourable effect occurs only when the employee, not the employer, exercised control over variations in work scheduling (de Menezes and Kelliher, 2011; Gajendran and Harrison, 2007; Grönlund, 2007).

10 FWAs, especially teleworking, may have a negative impact on communication quality (level A).

Teleworking is highly dependent on computer-mediated communication technology (CMC). However, CMC is different from traditional face-to-face communication. Several studies indicate that CMC may hinder understanding and complicate knowledge transfer, especially when the information is ambiguous (Wong and Burton, 2000). In addition, CMC reduces non-verbal cues about interpersonal affections such as tone, warmth, and attentiveness, which can have a negative effect on message clarity and interpretation of feedback (Kankanhalli et al, 2006). These difficulties can potentially lead to ineffective communication, which may be detrimental to the performance of a team.

9 Conclusion

Flexible working arrangements and teleworking have small to moderate positive effects on diversity and (perception of) inclusion.

10 Limitations

This CAT aims to provide a balanced assessment of what is known in the scientific literature about the effects of flexible working arrangements and telework by using the systematic review method to search and critically appraise empirical studies. However, in order to be 'rapid', concessions were made in relation to the breadth and depth of the search process. As a consequence, some relevant studies may have been missed.

A second limitation concerns the critical appraisal of the studies included, which did not incorporate a comprehensive review of the psychometric properties of the tests, scales, and questionnaires used.

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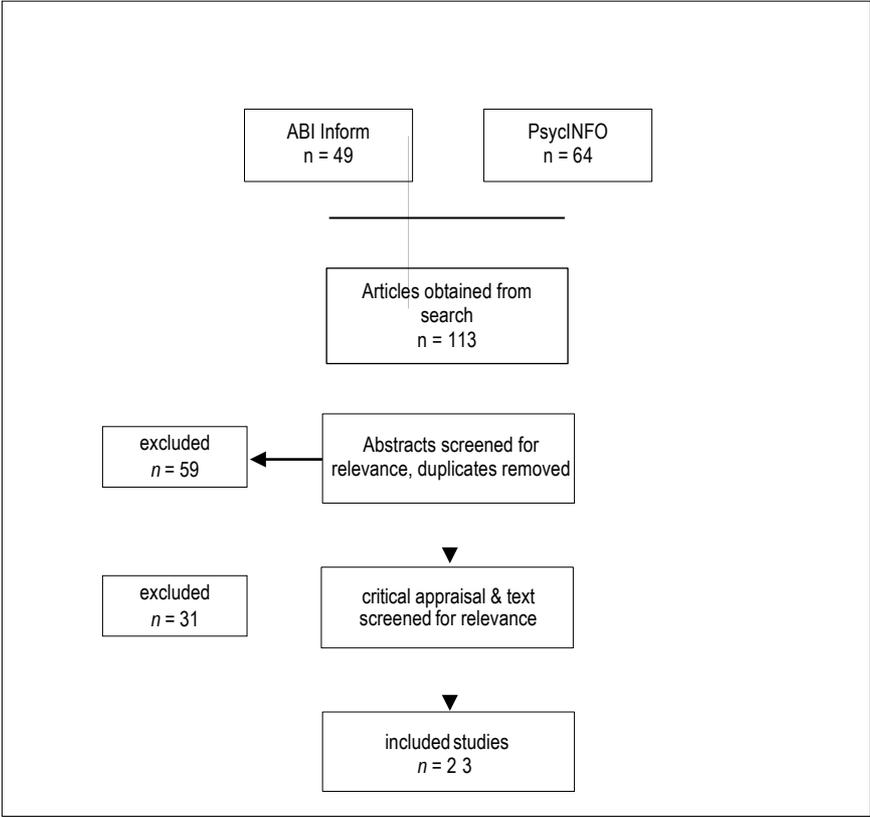
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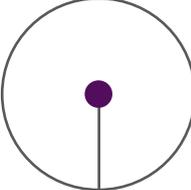
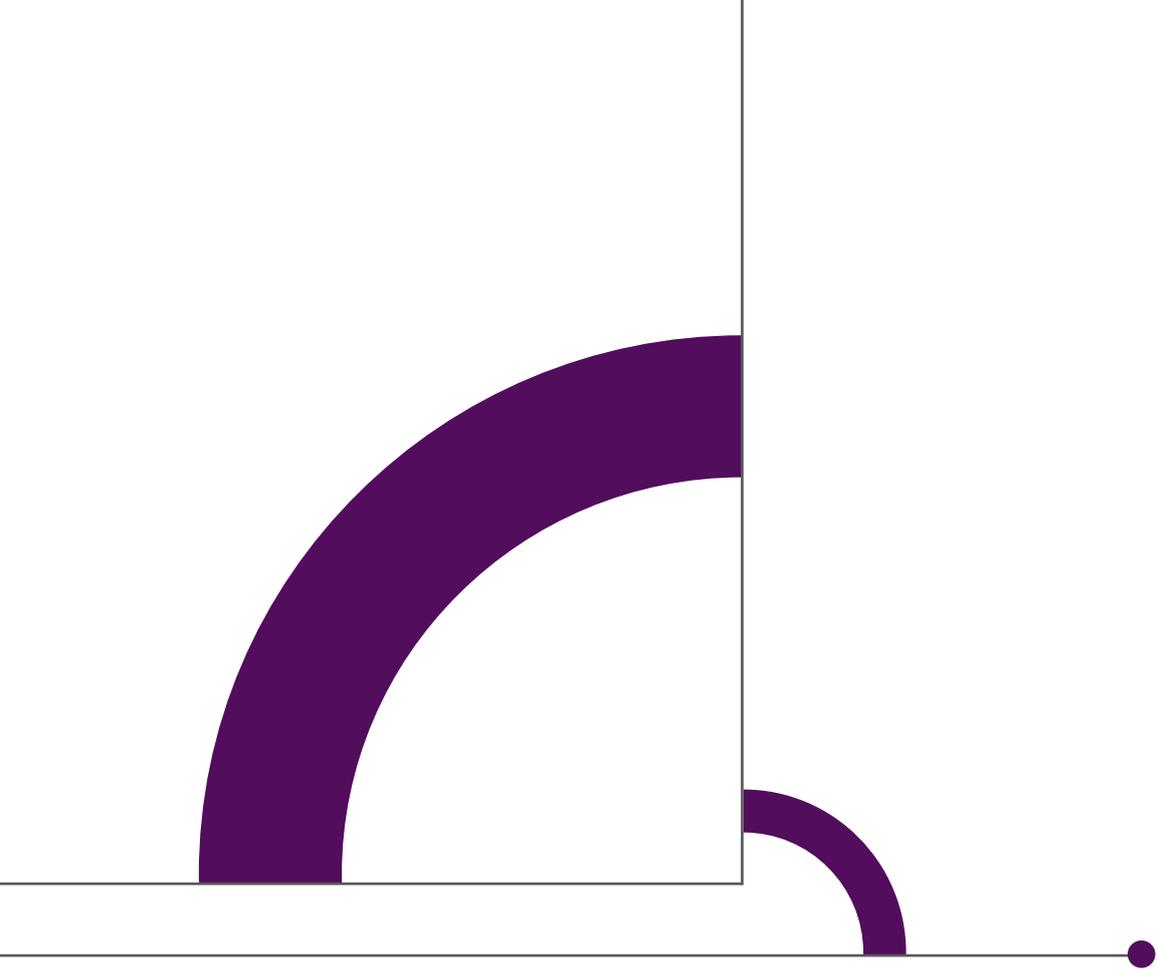
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Appendix 1: Search terms and hits

Search terms	ABI	PsycINFO
S1: TI(flexible AND work*)	339	107
S2: AB("flexible work*")	805	500
S3: S1 OR S2	950	531
S4: filter MAs and SRs	6,017	-
S5: S3 AND S4	4	3
S6: TI(telework*) OR TI(telecommut*) OR TI("work at home") OR TI("remote work*") OR TI("mobile work")	459	256
S7: AB(telework*) OR AB(telecommut*) OR AB("work at home") OR AB("remote work*") OR AB("mobile work")	807	322
S8: S6 OR S7	858	415
S9: S8 AND S4	4	4
S10: S9 OR S5	8 (5)	7 (3)
S11: TI(diversity) OR TI(gender) OR TI(age) OR (cultur*) OR TI(ethnic*) OR TI(race)	236,936	446,839
S12: S8 AND S11	21	-
S13: S3 AND S11	45	-
S14: S12 OR S13 > filter past 15 years	49	64
Total	113	

Appendix 2: Study selection





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