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Evidence-based practice for effective decision- making

Effective HR decision-making is based on considering the best available evidence combined with critical thinking.

Introduction

Evidence-based practice is about making better decisions, informing action that has the desired impact. An evidence-based approach to decision-making is based on a combination of using critical thinking and the best available evidence. It makes decision makers less reliant on anecdotes, received wisdom and personal experience – sources that are not trustworthy on their own. It's important that people professionals to adopt this approach because of the huge impact management decisions have on the working lives and wellbeing of people in all sorts of organisations worldwide.

This factsheet outlines the four sources of evidence considered key to effective evidence-based practice, before highlighting the importance of combining these to ensuring actions have the greatest chance of success. It outlines and refutes a number of misconceptions about evidence-based practice, before looking at literature which demonstrates the effectiveness of evidence-based practice. Finally, the factsheet explains the practical implications of applying evidence-based practice to real-life organisational scenarios.

See the [full A-Z list of all CIPD factsheets](#).

What is evidence-based practice?

At the heart of evidence-based practice is the idea that good decision-making is achieved

through critical thinking and drawing on the best available evidence. Evidence-based practice leads to decisions and actions that are more likely to have the desired effect and are less reliant on anecdotes, received wisdom and personal experience – sources that are not trustworthy on their own. Evidence-based HR practice draws together published research and [people analytics](#) with professional expertise and stakeholder opinions.

Why is evidence-based practice important?

In their report [Evidence-based management: the basic principles](#), Barends, Rousseau and Briner of the Center for Evidence-Based Management (CEBMA) outline the challenge of biased and unreliable management decisions. They show that it's common in decision-making for popular ideas of management, and personal experience which is highly susceptible to errors and bias, to be prioritised ahead of sound, critically-appraised evidence. They argue that individuals at all levels of employment have a moral obligation to use the best available evidence when making important decisions.

Assessing the [reliability and validity of evidence](#) becomes more important as the mass of opinion and claims continue to grow. As discussed in our reports [Cognition, decision and expertise](#) and [Our minds at work: the behavioural science of HR](#), because people have limited cognitive resource and time, our minds use mental shortcuts or 'heuristics' to make decisions easier: our brains are less able to multi-task than we expect. This opens us to various types of bias. For example, the 'availability heuristic' means we judge the likelihood of an event based on how readily a memory of that event comes to mind. More specifically, ['confirmation bias'](#) can lead recruiters to form an early opinion of a candidate, based on a personal characteristic that won't affect their performance, and then look for examples that align with this positive or negative impression.

Received wisdom and the notion of 'best practice' also creates bias. One organisation may look to another as an example of sound practice and decision-making, without critically evaluating the effectiveness of their actions. And while scientific literature on key issues in the field is vital, there's a gap between this and the perceptions of practitioners, who are often unaware of the depth of research available.

Even when looking at research, we can be naturally biased. In our [In search of the best available evidence](#) report, we note the tendency to 'cherry-pick' research that backs up a perspective or opinion and ignores research that does not, even if it gives stronger evidence on cause-and-effect relationships. This bad habit is hard to avoid – it's even common among academic researchers. So we need approaches that help us determine **which** research evidence we should trust.

Our 'insight' article [When the going gets tough, the tough get evidence](#) explains the importance of taking an evidence-based approach to decision making in light of the

COVID-19 pandemic. It emphasises and discusses how decision makers can and should become savvy consumers of research.

The four sources of evidence

Barends, Rousseau and Briner define evidence as information, facts or data supporting (or contradicting) a claim, hypothesis or assumption.

The issues above demonstrate the limitations of basing decisions on personal experience alone. It's important to consider other factors that will most benefit an organisation and its employees. Decision-makers should find out what is known by analysing four key sources.

- **Scientific literature** on management has become more readily available in recent years, particularly in academic journals. Other topics, such as psychology and sociology, also apply to many issues facing managers. Their ability to search for and appraise research for its relevance and trustworthiness is essential.
- **Organisational data** must be examined as it highlights issues needing a manager's attention. This data can come externally from customers or clients (customer satisfaction, repeated business), or internally from employees (levels of job satisfaction, retention rates). There's also the comparison between 'hard' evidence, such as turnover rate and productivity levels, and 'soft' elements, like perceptions of culture and attitudes towards leadership. Gaining access to organisational data is key to determining causes of problems, solutions and implementing solutions.
- **Expertise and judgement of practitioners, managers, consultants and business leaders** is important to ensure effective decision-making. This professional knowledge differs from opinion as it's accumulated over time through reflection on outcomes of similar actions taken in similar contexts. It reflects specialised knowledge acquired through repeated experience of specialised activities.
- **Stakeholders**, both internal (employees, managers, board members) and external (suppliers, investors, shareholders), may be affected by an organisation's decisions and their consequences. Their values reflect what they deem important, which in turn affects how they respond to the organisation's decisions. Acquiring knowledge of their concerns provides a frame of reference for analysing evidence.

Combining the evidence

One very important element of evidence-based practice is collating evidence from different sources. There are six ways – depicted in our infographic below – which will encourage this.

1. **Asking** – translating a practical issue or problem into an answerable question.
2. **Acquiring** – systematically searching for and retrieving evidence.
3. **Appraising** – critically judging the trustworthiness and relevance of the evidence.
4. **Aggregating** – weighing and pulling together the evidence.
5. **Applying** – incorporating the evidence into a decision-making process.
6. **Assessing** – evaluating the outcome of the decision taken so as to increase the likelihood.

Through these six steps, practitioners can ensure the quality of evidence is not ignored and are able to evaluate the trustworthiness of evidence available. Appraisal varies depending on the source of evidence, but generally involves the same questions:

1. Where and how is evidence gathered?
2. Is it the best evidence available?
3. Is it sufficient to reach a conclusion?
4. Might it be biased in a particular direction? If so, why?

Evidence based practice infographic

(536 KB)

Misconceptions in evidence-based practice decision-making

There are some misconceptions and barriers which prevent the uptake of an evidence-based approach. However, each can be rebuffed:

- **Evidence-based practice ignores practitioner’s professional experience:** This simply contradicts the above arguments. Evidence-based practice does not prioritise one source of evidence over any other. Rather, accumulating evidence from the four sources discussed is most important.
- **Evidence-based practice is all about numbers and statistics:** While critical and statistical thinking is important, the process is not exclusively about numbers and quantitative methods.

- **Managers need to make decisions quickly and don't have time for evidence-based practice:** Even quick decisions require the most robust and trustworthy evidence.
- **The unique nature of each organisation means evidence from scientific literature does not apply:** Different organisations tend to face similar issues and respond in similar ways.

Briner argues that barriers exist in both academic and organisational spheres. He claims that students are often taught to learn theories, which may be questionable. Instead, they should be taught to think critically and for themselves, while questioning the quality of information. In organisations, political and career incentives may once again encourage sticking with the status quo, or current processes, which may not be effective.

Evidence of evidence-based practice effectiveness

CEBMA research indicates that an evidence-based approach is more effective in various ways than less structured decision-making processes which often favour personal experience over sound research:

- Risk assessments based on the accumulated experience of many people are generally more accurate than those based on one person's experience, ensuring forecasts are made independently before being combined.
- Judgements based on hard data and statistics are more accurate than those based on individual experience.
- Knowledge from scientific literature is more accurate than expert opinions.
- Decisions made through a combination of critically-appraised evidence from multiple sources yield more effective outcomes than those based on a single source of evidence.

These points reinforce the value in adopting a critical mindset – questioning assumptions and trustworthiness – with the goal of answering the question 'Is this the best available evidence?'

How to carry out evidence-based practice

Pietro Marengo of ScienceForWork states that much research on evidence-based practice has focused on what it is and why it is needed, rather than how to do it. However, a more practical approach has been encouraged in recent years, with practitioners in organisations being trained on the principles and know-how to make evidence-based decisions. A three-day training course on evidence-based management, the first of its kind, took place in Belgium in 2017 and focused on applying the theory of the evidence-based approach to real-life management decisions.

As the professional body for HR and people development, the CIPD takes an evidence-based view on the future of work – and, importantly, what this means for our profession. By doing this, we can help prepare professionals and employers for what’s coming, while also equipping them to succeed and shape a changing world of work.

Our [Profession Map](#) has been developed to do this. It defines the knowledge, behaviours and values which should underpin today’s people profession. It’s been developed as an international standard against which an organisation can benchmark its values. At its core are the concepts of being principles-led, evidence-based and outcomes driven. This recognises the importance of using the four forms of evidence in a principled manner to develop positive outcomes for stakeholders. As evidence is often of varying degrees of quality, it’s important that people professionals consider if and how they should incorporate the different types of evidence into their work.

Evidence-based practice is a useful concept for understanding whether practices in HR lead to the desired outcomes, and whether these practices are being used to the best effect. Listen to our podcast [Evidence-based practice for HR: beyond fads and fiction](#) which features a discussion on what evidence-based practice is, why it matters, and how to apply it at work.

One example of evidence-based practice could be the decision to implement a performance management system. In this situation, performance management data from the business, scientific evidence, insights from key stakeholders, and professional HR expertise would be used to develop the best performance management system for the specific organisational context. Examples of evidence for and against forms of performance management is given in our report [Could do better? Assessing what works in performance management](#).

We’ve also published evidence reviews on a number of other topics, including [employee engagement](#), [employee resilience](#) and [flexible working and diversity](#). All our evidence reviews will be featured on our Evidence Hub page, launching soon. For a learning and development perspective, listen to our [Evidence-based L&D](#) podcast. There’s also [Using evidence in HR decision-making: 10 lessons from the COVID-19 crisis](#), part of our coronavirus webinar series.

Useful contacts and further reading

Contacts

[Center for Evidence-Based Management \(CEBMA\)](#)

[ScienceForWork - Evidence-based management](#)

Books and reports

BARENDS, E. and ROUSSEAU, D. (2018) *Evidence-based management: how to use evidence to make better organizational decisions*. Kogan Page: London

RANDELL, G. and TOPLIS, J. (2014) *Towards organizational fitness: a guide to diagnosis and treatment*. London: Gower.

Visit the [CIPD and Kogan Page Bookshop](#) to see all our priced publications currently in print.

Journal articles

BRINER, R. (2019) The basics of evidence-based practice. *People + Strategy*. Vol 42, No 1. pp16-21.

LAGUNA, L., POELL, R. and MEERMAN, M. (2019) Practitioner research for the professionalization of human resources practice: empirical data from the Netherlands. *Human Resource Development International*. Vol 22, No 1. pp68-90. Reviewed in [In a Nutshell](#), issue 84.

ROUSSEAU, D. (2020) Making evidence based-decisions in an uncertain world. *Organizational Dynamics*. Vol 49, Issue 1, January-March. Reviewed in [In a Nutshell](#), issue 96.

SEVERSON, E. (2019) Real-life EBM: what it feels like to lead evidence-based HR. *People + Strategy*. Vol 42, No 1. pp22-27.

WRIGHT, P.M. and ULRICH, M.D. (2017) A road well traveled: the past, present, and future journey of strategic human resource management. *The Annual Review of Organisational Psychology and Organisational Behaviour*. Vol 4. pp45-65.

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