PEOPLE
PERFORMANCE

An evidence review

**Practice summary
and recommendations**

June 2022

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Practice summary and recommendations

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① **Introduction**

The need for a deeper understanding of people performance

Employee performance is one of the most important outcomes in management and organisational life. It sits alongside other critical factors – including business strategy, markets, employee wellbeing and environmental and social impact – to determine the sustainability of an organisation. In people management research, it is probably the most measured organisational outcome, with links to goal-setting, feedback, motivation and commitment, pay and reward, wellbeing initiatives, investment in skills, leadership practices, culture or climate, values, and countless other areas.

This report focuses on people performance – that is, performance at individual and team level, rather than at a division or organisational level. Improving people performance is a central issue for HR professionals and managers, both to guide their own decision-making and to make the business case for investing in people.

At the governance level, there is usually a clear understanding of an organisation's key performance indicators (KPIs) and results, and an acute awareness that individual and team activity is a critical factor in them. CEOs want to know that there are processes in place to keep track of, maintain or improve performance. However, it can be unclear how KPIs cascade to performance at individual and team levels – that is to say, the specifics of what managers expect from their employees and teams, and how their contributions feed into wider organisational effectiveness.

To reliably track and increase people performance, HR leaders and employers need a solid understanding of what constitutes performance, how best to measure and report it, and what its nature is (for example, why it varies and what factors increase or impede it).

Aims of this report

This report aims to support HR leaders, and board and executive decisions, by developing a stronger understanding of employee- and team-level performance. By applying the principles of an evidence-based approach, we provide insights and guidance on how to best define, assess and act on people performance. Our research questions were:

1   What are the main aspects or components of people performance?

2   How can performance best be measured, and how can measures be used effectively in practice?

3   What are the main evidence-based models explaining what affects people performance?

The report does not offer a 'silver bullet' or one-size-fits-all approach to performance. Rather, it sets out to equip HR and other managers with the understanding they need to ask the right questions and help them measure people performance in a meaningful and useful way. It also aims to support a corporate governance focus on the *people* aspects of performance in a way that is explicit, evidence-based and healthy (for example, avoiding the 'dark side' of metrics, sometimes used to bully and harass workers).

An evidence-based approach

In today's age of information overload, it's easy to be swayed by the latest fads or received wisdom. Effective decision-making can be difficult – it requires us to critically question our assumptions, not be biased by anecdote and avoid cherry-picking the evidence that confirms our world view. Evidence-based practice gives well-established approaches to help with this. Hard proof is elusive, but we can identify the best available evidence,

including the most promising options to achieve our desired outcomes. Employers and people professionals need to take note of this if they are to identify best bets for action.

This evidence review summarises the best available scientific research on definitions, measures and models of people performance. It is based on a rapid evidence assessment (REA), a shortened form of the systematic review. To read about our methodology and technical aspects of the studies on which this report is based, see the accompanying scientific summaries, which are available at cipd.co.uk/evidence-people-performance. This report also draws on interviews with senior HR leaders, who reflected on the research evidence and related it to their own experiences. This is in line with the principles of evidence-based practice, which advocate drawing together evidence from multiple sources, including scientific literature and practitioner expertise.

② **Components of performance**

Performance is probably the most widely used outcome measure assessed in management and business. Most obviously, people performance relates to whether a worker or a team has achieved their goals. It seems intuitive that high performance is equal to excellent results, 'raising the bar' and working to the best of one's ability, and low performance suggests room for improvement. However, defining performance can sometimes be tricky:

> *'A lot of the organisational effectiveness metrics are quite quantifiable. Normally they're quite easy to articulate. Did we meet it or did we not? … But the people performance aspects are often more subjective. … It's actually quite hard to articulate and that's part of the challenge in terms of being able to drive true performance.'* (Katie Obi, Chief HR and Transformation Officer at Rizing)

In some jobs, understanding and measuring performance is straightforward – for example, in manufacturing standardised products or local food delivery. In many jobs, however, it is not always clear what constitutes people performance and what specific outcomes (if any) should be measured. This is especially true in more complex jobs – for example, among the ever-growing number of knowledge workers, who are tasked with exploring information and creating new insights. What constitutes 'a productive day at the office' may be unclear, not just for the employees themselves, but also for their direct managers and senior leaders.

In addition, employers can measure performance at either an individual or team level, with there potentially being some shift towards the latter:

> *'Earlier, the objectives set for employees were very much individual … [Now it's recognised that] more and more, organisations can only be effective through team achievements and collaboration.'* (Katie Obi, Chief HR and Transformation Officer at Rizing)

Types of people performance
In practice, the label 'performance' can refer both to the result of an activity and the way that result was achieved. From the scientific research, we can differentiate three broad types of people performance: task, contextual and adaptive.

Task performance
Task performance, also known as in-role, work-role or job performance, refers to the execution of specific activities included in one's job. It is often tied to specific quantitative and/or qualitative work *outcomes* or *results*, which can often be cascaded directly from organisational-level KPIs. However, it can also be tied to how employees or teams deliver their outcomes – that is, the *processes* used and the *behaviours* displayed.

For some occupations and functions, indicators of task performance are straightforward – for example, task performance indicators for a salesperson may centre on selling a company's products, visiting prospective customers, or documenting orders and purchases. For other occupations and functions, finding valid and reliable indicators of task performance may be challenging. For example, knowledge workers seldom have one single standard outcome, and the outcomes of their tasks may be hard to quantify, or contingent on various contextual and situational factors that are outside their control.

Contextual performance
Contextual performance, also called extra-role performance or organisational citizenship behaviour (OCB), goes beyond one's formal job role. It concerns voluntary activity that contributes to a healthy and productive work environment (the organisation's social and psychological climate), supports one's colleagues in their roles, or somehow benefits the organisation as a whole. Examples of contextual performance are helping co-workers finish a project, coaching junior colleagues, or supporting the organisation's social events. Often the way employees interact with co-workers and whether their behaviours and actions reflect the company's values are also considered contextual performance, hence the term 'organisational citizenship behaviour' is widely used. An example of why contextual performance is seen to be important in a waste management company is as follows:

> *'We don't want people to just come into work, do their tasks and go home. We want our people to be really connected to the organisation and what we are trying to do. Not just in being profitable, not just in being a waste management business, but actually in saving the planet. And we mean that. We want our people to get involved in sustainable development activities, to connect with social value, to do things that are giving back to society. Most recently, we've introduced a day a year to volunteer.'* (Dr Tracey Leghorn, Chief HR and H&S Officer, SUEZ Recycling and Recovery UK)

Adaptive performance
Adaptive performance refers to employees' ability to adapt to unexpected change in operational environments, levels of job demands or the nature of tasks. It can include being flexible or agile – either in the level of work output or how one carries out tasks – or supporting innovation. Examples include handling crisis situations, solving problems creatively, coping with work pressure, learning new tasks and procedures, proposing more efficient or effective ways of working, and participating in change initiatives.

> *'Adaptive [performance] really shines a light on creativity and innovation in organisations to enable businesses to develop and grow and thrive and think about new and different ways of doing things. If you can encourage that in individuals and teams, then I think you're on to a good thing.'* (Nebel Crowhurst, Vice President People, INTO University Partnerships)

Outcomes or behaviours?
Positive workplace behaviours and adhering to effective processes are clearly important influences on performance outcomes. Because *outcomes* or *results* can be hard to gauge and are influenced by external factors other than people management, it can make more sense to focus on *behaviours* or *processes* in their own right, treating them as aspects of performance.

> *'The process is as important as the change itself, because the change needs to be supported by a strong set of processes.'* (Vivek Srivastava, Senior Agile Product Developer, Talent & OD, Novartis)

Components of performance

It may seem natural to associate task performance with outcomes or results, and contextual and adaptive performance with behaviours or processes. There is some truth in this – for example, in that task performance is often cascaded from organisational-level KPIs, whereas contextual performance includes citizenship behaviour – but it is not necessarily the case. Task, contextual and adaptive performance can all be understood as both the outcomes of activity and as how that activity was carried out.

For example, in customer-facing roles, behaving towards customers in an amenable and helpful manner is a core aspect of task performance, not an optional extra. On the other hand, a sales team may support another business unit's revenue generation, which is clearly a form of KPI or outcomes, yet this may be seen as contextual performance because it is not the responsibility of that team and is being done for the good of the organisation as a whole.

What's the boundary between task and contextual performance?

A related point is how to distinguish between task and contextual performance. The same actions or outcomes could be either task or contextual performance, depending on how the role has been scoped out. For example, an employee may coach a more junior co-worker to help their performance and do so voluntarily (contextual); then they may be promoted to manage that person and the same activity becomes a formal expectation of their job (task). Appraising and rewarding contextual performance may be challenging:

> *'Numerous times during my career, I have been part of conversations where we talk about the behaviours that we want to see, and we talk about that corporate citizenship, but then what we do is we reward the person that brings in the sales or the new business … You know what's right, but the commercial mindset can take you in a different way, in terms of what you reward.'* (Cathy Donnelly, Chief People Officer, Texthelp)

This raises a more specific question: can contextual performance be included in objectives or job descriptions, or must it remain outside them as optional or voluntary activity? The key to understanding this may be how specific the objectives are. Once an activity or outcome is explicitly stipulated in a formal objective, it's best described as task performance. However, objectives can set expectations on contextual performance in broader, less specific terms. We can see this in the use of corporate values. In essence, the message sent to employees is that: 'We want you to display these behaviours, or contribute to your colleague's work for the good of the organisation, but it's up to you how you demonstrate this.'

At what point should performance be defined?

Task performance concerns the core job responsibilities of an employee and will often be detailed in formal job descriptions and objectives. Having said that, our HR interviewees commented that an employee's job description can fast become out of date as their role evolves, and even objectives that are set more regularly may need to be adapted. In many jobs, it may be easier to describe performance in retrospect – for example, to discuss the value an employee has created during a performance review – than it is to specify in advance what will constitute good performance:

> *'[Performance] is really [a question of] the impact you create … not necessarily your objectives, but actually what was … the impact of those.'* (Alex Hogarty, Global Program Lead, Performance Management, Novartis)

It is worth persevering with relevant and clear objectives, because the evidence overwhelmingly shows that goal-setting can be a highly motivational exercise that increases performance.[1] But there should be some flexibility in assessing performance to recognise that an organisation's needs change.

Components of performance

Recommendations for practice

- Understand the mechanics of task, contextual and adaptive performance for your employees and teams. How is value created in your organisation? What forms do the three types of performance take? And which are the most important, given your operational environment and business needs?

- Be deliberate in choosing when to define people performance at an individual employee or team level. Where key tasks are performed in collaboration and responsibility for results is shared, it makes sense to focus on team performance.

- The terms 'task', 'contextual' and 'adaptive' performance may not be the right language for the culture or climate of your organisation. If so, find alternative terms that do fit, while covering the same ground.

- Identify common forms that task, contextual and adaptive performance take in your organisation and provide illustrative examples of 'what good looks like' to everyone in the organisation. These may be tailored to different functions to focus people on the forms of performance that are most important for effectiveness in their particular context.

- Managers throughout the organisation should identify clear objectives with their reports, to make use of the motivational effects of goal-setting (see our factsheet for guidance on how this can be done).

- At the same time, it is important to recognise that what constitutes good performance may change as business needs change. Employees should be encouraged to adapt in response to this and managers should not be rigid in reviewing objectives in a changing context.

③ Measuring performance

Performance measurement has always been a major focus of management research and practice, yet it has grown as an area since the late 1980s and is now *'common practice across all sectors'*.[2] In this section, we discuss factors to consider, in order to measure people performance in a useful and productive way.

Why measure performance?

Data from performance measures are considered a solid basis to inform many decisions in corporate governance and strategic and operational management. They can be used in close tandem with performance management in what is often called a *'closed loop control system'*, through *'the process of measuring what matters, reporting those measures, reviewing performance and taking action'*.[3]

There are two main reasons for measuring performance:

1 Data can be used for *administrative* purposes, relating them to set objectives and informing decisions on pay and promotions, to motivate employees and teams and hold them to account.

2 Data can be used for *developmental* purposes, to inform decisions on training and resources, with the aim of improving human capital or team effectiveness.

The purpose of performance measures is an important consideration and should not be overlooked: research shows that ratings obtained for administrative purposes tend to be more generous than those obtained for employee development purposes.[4] This means that a lack of clarity on why measures are being collected will make them less reliable.

Performance *measures* are distinct from performance *management*: the former is information that can be used in different ways; the latter is a set of practices and processes that often centre on periodic performance appraisals. It seems that a common challenge for employers is to foster genuine day-to-day conversations about performance without it becoming a tick-box exercise, a process for process' sake, or a case of covering one's back. Performance and related terms, such as impact, value, effectiveness and productivity, should be words to embrace – not shy away from.

One way to support fruitful performance conversations is to focus on measures that are meaningful for employees as well as the business. For example, Novartis measures employees' experiences of behaviour that supports performance:

> *'Our performance is really focusing on what are the key behaviours and how do we embed those and create that behaviour change both as individuals, but also as a team and the wider organisation.'* (Alex Hogarty, Global Program Lead, Performance Management, Novartis)

> *'We want to understand associates' sentiments … whether the check-ins are meaningful or not and so on … We used to have check-ins, but it was like a tick in the box. Today, the check-in is much more comprehensive, where you have a variety of areas that the manager and associate can talk about and support the associate in their journey to create impact.'* (Vivek Srivastava, Senior Agile Product Developer, Talent & OD, Novartis)

Choose your performance measures carefully

Measurement is not the be-all and end-all and there is the potential for a 'tyranny of metrics', in which targets seem to take a life of their own and the pressure to record and maintain them hinders rather than helps effective working.[5] '*What gets measured gets done*' is a well-worn adage,[6] but critiques of this line of thinking date as far back as the 1950s.[7] A recent description of the risks is:

> *'There are things that are worth measuring. But what can be measured is not always what is worth measuring; what gets measured may have no relationship to what we really want to know. The costs of measuring may be greater than the benefits. The things that get measured may draw away from the things we really care about. And measurement may provide us with distorted knowledge – knowledge that seems solid but is actually deceptive.'*[8]

This resonates with practitioners:

> *'I've got a very simple philosophy, which is, just because you can measure it doesn't necessarily mean you should measure it … My mantra's always "measure what matters." … "What are the key two or three HR metrics which should … drive the business?" Then let's focus on those.'* (Marc Weedon, International HR Director, Zuora)

If measurements are to be minimal, it is imperative that managers select them carefully to make sure they are relevant and robust. Relevance depends on organisational strategy and operational priorities. However, we can offer general guidance on selecting or developing measures that are robust or trustworthy, as discussed next.

In the Appendix, we present some measures of performance that have been developed and tested in scientific research.

Measuring performance

The science of measurement

Developing robust measures is a technical business. HR leaders may not need to understand the detail to a level whereby they can create measures themselves, but they should have enough understanding that they can ask the right questions and be discerning consumers of the measures that researchers or consultants present. Broadly, the two most important criteria are *validity* (it must be clear what is really being assessed) and *reliability* (that the applied measurement tool produces consistent results over time). These are discussed in more detail in Box 1.

Box 1: Reliability and validity: constructing robust measures

Social science is often concerned with phenomena that cannot be measured from direct observation in a systematic and accurate way. Thus, we devise tools that assess them indirectly, often by posing standardised survey questions with set response options. For complex phenomena – like various aspects of people performance – usually a single question is not enough to assess the underlying construct, so we form a composite scale from a suite of questions that hold together statistically.

There are established scientific criteria for developing solid, useful measures. First, we can assess their *reliability* – that is to say, whether they produce consistent or stable results over time, given the same or similar conditions. If a survey question is ambiguous or overly complex, the same person is likely to answer it differently on different days, not because their circumstances have changed, but because they are unsure how to respond. In this example, the confusion and inconsistency inherent in the measure is a sign of low reliability.

Second, trustworthy measures must be useful assessments of the specific thing they claim to represent. This is a measure of *validity* and comes in different forms. One aspect is *discriminant validity*: whether the measure tells us something different from other potentially related measures. For example, if a new measure of performance overlaps substantially with a more established measure, we can consider whether it is redundant.

Another aspect is *predictive validity*: the ability of a measure to predict important outcomes at a later point in time. Typically, performance is considered an outcome in its own right, so the predictive validity of people performance measures has been rarely tested. However, we can also look at a measure's *convergent validity*: that is, its statistical associations with other important outcomes. This is gained from cross-sectional data (measured in a single time period). Convergent validity can be considered less rigorous a test than predictive, in that it does not indicate the direction of causality (which factor is an antecedent and which is an outcome).
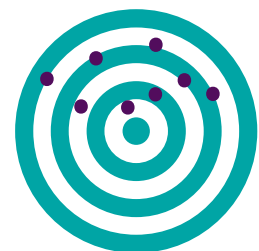

| Reliable and valid | Valid, not reliable | Reliable, not valid | Not reliable, not valid |

Measuring different types of performance

In practice, measures of people performance often focus on *overall* or *general* performance. But given that task, contextual and adaptive performance refer to different aspects (see Section 2), they should be measured separately and not used as a proxy for one another. For example, if the number of sales is the most relevant indicator of a sales agents' task performance, their reward should not be based on a supervisor's rating of their contextual performance. Conversely, if all dimensions of performance are deemed equally important, it is inappropriate to reward the sales agent solely based on gross sales.

Using multiple sources

Although task and contextual performance are different dimensions, research evidence shows that they are correlated. That may be because they are genuinely related and influence each other; or it may be due to bias because the same person often assesses both – for example, a supervisor may appreciate an employee helping out their colleagues (contextual performance) and, as a result, evaluate their task performance more positively than they would do otherwise. This is a good reason for using *multiple sources* in measuring performance – for example, as well as one's line manager, assessments of colleagues, reports, other managers and central management information are beneficial.

Frequency of measures

Of course, the performance of employees changes as they learn and develop on the job, but in general, the best research evidence has found that individual job performance changes little over time. Although performance *ratings* tend to change over time, there is strong evidence that this variation is due to unreliable measurement. True performance tends to remain stable. Thus, it may not be useful to track people performance on a highly regular basis. For example, it may be wiser to measure performance in line with the timeframe over which one could reasonably expect an employee to master their tasks, or to see how changing environments or external events affect performance.

Subjective and objective measures

One decision in assessing performance is whether to use objective or subjective measures. 'Objective measures' refer to 'hard' countable behaviours or outcomes. For example, an orthopaedic surgeon's performance may be assessed based on the number of patients treated in the past month, the number of surgical procedures performed, and/or the number of patients re-admitted due to medical complications. 'Subjective measures' consist of ratings provided by supervisors, co-workers, clients or employees themselves. For example, an orthopaedic surgeon's performance may be judged based on patients' feedback on treatment progress or treatment satisfaction.

There is a common belief that subjective measures do not represent a real level of performance as well as objective measures. Certainly, there is scientific research to back up the view that there are challenges with subjective measures. For example, subjective measures of a person's performance can be prejudiced due to their ethnicity, gender, age or sexual orientation, or the quality of their relationship with their boss or colleagues. In addition, self-reported ratings can be influenced by personality traits such as one's self-esteem or confidence.

However, it is not necessarily the case that 'hard' quantifiable outcome measures are the best indicators of performance. There is a strong body of research to show that objective measures often lack validity (see Box 1). This can be because the measures that are available or thought to be important are too narrow to fully reflect performance. For example, a surgeon will be assessed on the number of patients they treat and the number of re-admissions. They may treat fewer patients than their peers because they spend

more time teaching and supervising junior doctors, and they may have higher rates of re-admissions because they conduct more complex procedures that have a higher chance of medical complications.

Another important insight from research is that the relationship between subjective and objective measures of performance is generally weak as they measure different things. In practical terms, they are not interchangeable and should not be used as a proxy for one another.

In short, both subjective and objective measures face problems, so care should be taken with both. To get a fuller, more accurate assessment of people performance, both should be used.

Recommended scales of people performance

Objective measures of performance often draw on management information that can be clearly cascaded from organisational-level targets. Subjective measures, on the other hand, usually use survey questionnaires to quantify people's assessments. When survey questions are clustered to form a composite measure, this is called a 'scale'. Numerous scales have been developed for people performance – below we describe some of the tried-and-tested (valid and reliable) scales that can be recommended. Full scales can be found in the Appendix. We also note some of the challenges in using these scales (see Box 2).

Task performance scales

Most of the performance scales we find in scientific literature were designed to measure task performance, which means they were based on the activities that make up specific job descriptions. Thus, we find numerous scales tailored to different occupations and functions – for example, nurses, sales agents, account managers, university lecturers, physicians and police officers. We also find scales for specific aspects of task performance, such as service performance or safety performance; and a small number of *generalised* task performance scales designed to be used across a range of occupations. However, although many scales are available, the evidence for their reliability and validity tends to be weak.

Contextual performance scales

In contrast to task performance, most contextual performance scales are generic, and not tied to specific functions or occupations. The Organizational Citizenship Behavior (OCB) scale developed by Podsakoff and colleagues is perhaps the best-known instrument and is well validated.[9] The original version of this questionnaire consists of 24 agree/disagree statements, but other academics have usefully reduced this list to develop shorter measures of OCB. Others have grouped the items into two dimensions that focus on the organisation and other individuals. Examples of items include:

- OCBI (focus on individuals):
  - *'Help others who have been absent.'*
  - *'Willingly give time to help others who have work-related problems.'*

- OCBO (focus on the organisation):
  - *'Attend functions that are not required but that help the organizational image.'*
  - *'Keep up with the developments in the organization.'*

Adaptive performance scales

Some scales assessing task performance also measure elements of adaptive performance, such as responsiveness, behavioural flexibility or learning ability. Scales that solely measure adaptive performance are often generic. A widely used and reliable generic scale is the Job Adaptability Inventory (JAI), a self-report scale developed by Pulakos that measures eight dimensions of adaptive behaviour.[10]

Multidimensional scales

We also find multidimensional scales designed to measure several types of performance at once. One such scale that is widely used is the 18-item, self-reported Individual Work Performance Questionnaire (IWPQ). This consists of three subscales for task performance, contextual performance and counterproductive work behaviour (to some extent the opposite of OCB). Examples of items are:

- Task performance:
  – *'I managed to plan my work so that it was done on time.'*
  – *'I kept in mind the results that I had to achieve in my work.'*

- Contextual performance:
  – *'I took on extra responsibilities.'*
  – *'I worked at keeping my job skills up to date.'*

- Counterproductive work behaviour:
  – *'I complained about unimportant matters at work.'*
  – *'I made problems greater than they were at work.'*

Box 2: Challenges of using validated measures in practice

Applying measures validated by academics is recommended because they are tried and tested to be trustworthy tools. However, practitioners can encounter challenges in doing this:

1   Not all scales are easily accessible. Some are often published in academic journal articles that require subscription or purchase (although CIPD members can access many journals through their EBSCO subscription). Others, typically developed by consultants, cannot be used without a licence.

2   What is used in academic studies may not be realistic for employers to use regularly, in particular because many scales are long (some with over 100 questions). In some cases, shorter versions have also been tested; this can be seen in *work engagement*, as discussed in our evidence review of this area.[11] People professionals can adapt measurements themselves, selecting relevant items from existing scales, but if this version is not also tested, the outcome assessment may not be valid or reliable.

Measuring factors related to performance

As a complement to measuring performance itself, people professionals may choose to measure factors that are distinct from performance, but which are known to relate to it. Measuring such factors can be helpful in directing and tracking organisational activity and potentially factors which managers or employees themselves are able to influence more directly than their performance. These may include: whether people have manageable workloads; work–life balance; social support in general, or more specifically, perceived supervisor support; shared goals or alignment with organisational vision; and employee satisfaction. For example, Zuora focused on employee participation, recognition and turnover:

'Those are the three metrics that mattered and if we were increasing participation, increasing recognition, driving down churn for people who had just joined the organisation, then, for me, that was a successful outcome … We've got to build an organisation which enables people to enjoy what they do and receive recognition for what they do and progress within the business.' (Marc Weedon, International HR Director, Zuora)

A recent CIPD survey of FTSE 100 companies presents some encouraging findings regarding the broader range of measures used. Eighty per cent of organisations reported on at least one KPI relating to the workforce. The most common measures were of safety (for example, Lost Time Injury Rate), gender diversity and the employee engagement score.

The best way to establish which factors predict or leverage performance is to refer to systematic reviews of the best available research evidence, but it may also help to conduct research within your own organisation. In the next section we review some of the key models that explain people performance.

Recommendations for practice

- Develop understanding of the science of measurement in your HR function. HR and other business leaders should have, or have access to, enough knowledge that they can be savvy consumers of performance metrics.
- Choose measures carefully to make sure they are trustworthy: both valid representations of what is *relevant* to the business and gauges that are *reliable* over time.
- Prompt all managers to be explicit and deliberate about why they are using measures: in particular, whether it's to inform administrative decisions like pay awards, or decisions on training and development.
- Encourage managers and teams to discuss performance on a day-to-day basis, with reference to measures as relevant, to identify ways the team can learn and improve.
- Remember that different types of performance tell us different things and are not interchangeable. Try to distinguish measures of task, contextual and adaptive performance.
- Use a combination of *objective* and *subjective* performance measures. They tell us different things and are both valuable.
- When using subjective measures, use the tried-and-tested scales wherever possible. Start with those shown to be reliable and valid by independent academic research. If you adapt them, it is strongly recommended to test their validity and reliability again: this will need specialist research capability.
- Use *multiple sources* for measures – for example, from different people and from centralised management information – to 'triangulate' and get more accurate data.

(4) **What drives performance?**

So far, our discussion has centred on what performance is and how it can be measured. Clearly, another crucial aspect of performance is to understand what drives it. Many management models exist to explain this and they can act as useful frameworks to clarify thinking and prompt action. But which models have the strongest evidence base? That is to say, what are the factors that have been conclusively shown to genuinely influence performance?

The list of variables that are claimed to have an impact on performance is vast and it would be near impossible to summarise them all in a single review. As we noted at the start, performance is likely the most common outcome measure in research – this can be seen in our previous evidence reviews.[12]

Which models of people performance are most evidence-based?

We reviewed the evidence for nine models that are frequently used in management research and practice to explain people performance. We limited our review to models explaining individual or team performance; for example, excluding models for business strategy. For more information on our inclusion and exclusion criteria, and how we assessed the evidence base of each model, see the accompanying scientific summary.

Below we summarise the two contemporary models that we can recommend as having the strongest evidence base – the JD-R and GRPI models – and the other models that we considered. For more information on how we reviewed the models and what the research evidence tells us, see the accompanying scientific summary.

Job Demands-Resources (JD-R) model

The central premise of the JD-R model is that occupational stress results from an imbalance between the demands of a job and the resources people have available to deal with them. Job demands and especially resources are described as broad categories of physical, psychological, social or organisational aspects of jobs:

- **Job demands** include the skills and capabilities required of employees, the level of workload or intensity of the job and emotional pressures. *'Examples are a high work pressure, an unfavorable physical environment, and emotionally demanding interactions with clients.'*[13] Extreme job demands drain employees' energy, leading to stress and (in a longer term) burnout that, in turn, diminish performance.

- **Job resources** are those things that directly help people carry out tasks, reduce their job demands or increase their capacity to cope with them. They include role clarity, technical tools, autonomy or empowerment to make decisions, learning and development, and support from one's supervisor and colleagues. Job resources 'protect' employees from the negative effects of excessive job demands, improving their wellbeing and performance. Note that the model refers to *personal* resources, not the *human* resources available to an organisation or the *process of resourcing* (or recruitment).

The Job Demands-Resources (JD-R) model was originally developed in academic research to predict employee wellbeing – in particular, stress and burnout – rather than performance. However, researchers have since applied the model to performance many times and consistently demonstrated it to be a powerful explainer of it. The components of the model and the links between them are empirically tested and supported by a substantial body of research:

> *'What is interesting about the Job Demands-Resources model is, effectively, … the more you can attend to the wellbeing and the wellness of your staff, the greater they will perform, which I believe in. … The simplicity of [the JD-R model] is really quite attractive.'* (Paul Boustead, Chief People and Culture Officer, University of Leeds)

The JD-R model does not cover all areas of interest to performance – for example, effective recruitment is an important area not included. Nonetheless, it is the most evidence-based model that we have. Employers would do well to actively use it to inform effective HR practices and develop effective managers.

Goals, Roles, Processes and Interpersonal Relationships (GRPI) model
The GRPI model was developed in the 1970s and is used in management consultancy as a diagnostic and training tool.[14] It proposes that to be effective, a team requires clarity, agreement and support in four areas:

1 **goals:** the team's purpose, targets, desired results and progress toward these outcomes
2 **roles:** clear distribution of the task and responsibilities within the team
3 **processes:** information-sharing, decision-making and problem-solving
4 **interpersonal relationships:** the quality of relationships between team members and the general atmosphere within the team.

The first two aspects – setting stretching but realistic goals and clearly defining roles – can be seen as discrete activities in their own right. Some suggestions on these areas are available in our factsheets on performance management and job design.

The latter two inform a broader range of activity and need to be scoped out in a way that is appropriate to the context. Teams can use various processes to communicate information and make decisions. For example, virtual or remote teams benefit from greater clarity of roles and more formal co-ordination of activity, as our evidence review in this area discusses.

The quality of relationships between the members of a team is also multifaceted – for example, including social cohesion, interpersonal trust and psychological safety. It will be influenced by various activities, such as the regularity and format of team meetings as well as dedicated team-building exercises, and also by team characteristics, such as its size, location, the dominant professional values and its members' personalities.

The scientific literature strongly supports each of these four elements as drivers of team performance. However, the model as a whole – including the interaction between its four components and their combined influence on performance – has not been empirically tested. Despite this limitation and the fact that some components need to be scoped out and tailored to context, the model gives a clear and cohesive focus on activity to ensure teams are effective, and is sufficiently evidence-based that it can be used with confidence.

Outdated or imprecise models
The second group contains two models that received certain empirical support but are somewhat vague (the AMO framework) or outdated (the JDCS model).

Ability, Motivation, Opportunity (AMO) framework
The Ability, Motivation, Opportunity framework relates people's performance to their *capacity* to perform (including their level of education, knowledge, skills, development opportunities and experience), *willingness* to perform (for example, motivation, job satisfaction, commitment, personality and expectations), and *opportunity* to perform (for example, working conditions, leader support, processes and time).

These categories are clearly important areas for performance, but the framework does not adequately flesh them out. Indicators or measures used for the AMO framework tend to lack precision and there is no explanation of the mechanics of why different factors affect performance. Part of the problem is that measures often focus on whether an employer has practices in the relevant AMO area, rather than on how much ability, motivation or opportunity workers actually have. For example, whether an employer provides on-the-job training is not a good indicator of *ability*, as the training may be poor quality or irrelevant; and whether an employer uses performance-related pay is not a good indicator of *motivation* as, done inappropriately, it can be very demotivating.[15] In addition, work

motivation is a broad construct that must be unpacked. People can be motivated to do many different tasks – for example to engage in organisational change, give feedback or achieve core targets – and there are several explanations of why people are motivated that are not specified in the AMO framework (for more information, see our evidence review on work motivation).

The AMO framework could be useful to structure strategic people management decisions, in a similar way to the analysis tools PESTLE (political, economic, sociological, technological, legal and environmental influences) and SWOT (strengths, weaknesses, opportunities and threats). That is to say, it may be a useful checklist by identifying factors for consideration in business planning. However, this is not the same as a model that convincingly explains the mechanics of improving performance.

Job Demand-Control-Support (JDCS) model

The Job Demand-Control-Support (JDCS) model overlaps with the JD-R model (see above). It states that stress levels increase when job demands are high, but can be reduced by granting employees more control and autonomy over when, where and how they do their work, and sufficient (social) support.

The JDCS model has strong support in scientific research but is now largely superseded by the more expansive JD-R model. The JDCS model was itself an expansion of an earlier Job Demand-Control (JD-C) model.

Non-evidence-based models

Several popular management models of team effectiveness have only weak support from scientific evidence. Most of these models refer to the processes that explain performance (for example, goal-setting or trust) but their components are vaguely defined, broad categories, rather than specific factors of influence. This makes it hard to test the models.

The Triangle of Commitment, Skills and Accountability

This model is presented as a triangular diagram with three points representing the larger deliverables of a team: collective products, performance results and personal growth. To reach these goals, the three requirements that make up the sides of the triangle should be met:

1 **Commitment:** team members are committed when they have meaningful, specific goals.
2 **Skills:** team members need problem-solving, technical and interpersonal skills to perform.
3 **Accountability:** team members must have personal and mutual accountability.

LaFasto's Five Dynamics of Teamwork

According to this model, there are five dimensions (dynamics) that determine a team's effectiveness:

1 **team members:** the value that the members bring to the team, in skills, experience, openness, actions orientation, positive personal style, and so on
2 **team relationships**
3 **team problem-solving**
4 **team leadership:** the leaders' focus on team goals, collaborative climate, building confidence, setting priorities, their technical know-how and performance management
5 **organisational environment:** the processes and culture that promote team commitment.

What drives performance?

Hackman's Five Factor Model of Team Effectiveness
The Hackman model outlines five conditions that must be present for teams to be successful:

1 **being a 'real team':** clearly defined team roles, boundaries, interdependency and stable membership
2 **compelling direction:** compelling goals and expectations and motivating incentives
3 **enabling structure:** a team structure that encourages teamwork and communication
4 **supportive context:** adequate resources, rewards, information, co-operation and support
5 **expert coaching:** access to a mentor or a coaching leader who can help the team through issues.

Lencioni's Five Dysfunctions of a Team
The Lencioni model's focal point is on problems that cause teams to be dysfunctional. It outlines five team dysfunctions – in a hierarchical order – that must be addressed by the team leader for the team to be effective:

1 lack of trust
2 fear of conflict
3 lack of commitment
4 avoidance of accountability
5 inattention to results.

Lombardo's T7 model
Lombardo's T7 model represents seven factors (five internal and two external) that affect the performance of teams. The internal factors are:

1 **thrust:** common goal
2 **trust** in team members
3 **talent:** skills and experience required to produce results
4 **teaming skills:** ability to solve problems and perform as a unit
5 **task skills:** ability to get things done on time.

The external factors are:

1 **team–leader fit**
2 **team support** from the organisation.

Recommendations for practice

• Performance is determined by a constellation of factors that may interact with each other. To understand or explain performance more fully and guide effective action to improve it, it is best to focus on more than one model.

• We particularly recommend two models of people performance:

  – the Goals, Roles, Processes and Interpersonal Relationships (GRPI) model
  – the Job Demands-Resources (JD-R) model.

  These are solidly evidence-based and clear frameworks that should help guide action that drives performance. We recommend using both, as they complement each other by focusing on teams and individuals respectively.

• Other models may suit an organisation's specific operational context or strategy, but care should be taken in using them. Be willing to question the assumptions that the models make and the precision of the measures used to apply them.

⑤ Conclusion

To ensure their organisations thrive, boards, executive leaders and managers need a clear understanding of performance, not only at the aggregate organisational level, but also at team and individual employee level. This is a central aspect of people management on which HR professionals should be able to advise.

Defining and measuring people performance

The first step is to define what employees and teams are expected to do – what constitutes people performance in different roles and departments. This may include relatively straightforward targets cascaded from organisational KPIs, but in most contexts it will also be broader than this. This is especially so in complex jobs that may involve generating insights from data or collaborating with colleagues to bring together multiple processes. If targets are leveraged hard and objectives do not reflect the true breadth of performance, there is a serious risk of unintended consequences of harmful or unsustainable behaviour, or of important aspects of organisational success being ignored.

Once performance has been defined, HR and other leaders are in a better place to identify meaningful measures. However, there are complications here too, as measures must be trustworthy as well as relevant. We have attempted to show the main technical aspects of this and give practical recommendations that help employers get a better handle on how individual employees and teams are performing.

Based on the scientific evidence, we highlight the following considerations:

- **Task, contextual and adaptive performance are distinct:** identify which are the most important aspects for your current context, if necessary adapting the language, and do not treat them as substitutes for one another.

- **One *type* of performance measure is not better than another:** it is a good idea to use multiple measures (for example from different sources or raters). In particular, subjective and objective measures of performance are both useful in principle, tell us different things, and can both be (in)valid and (un)reliable, depending on their application.

- **There are established criteria for what makes a measure robust:** employers would do well to avoid ones that do not meet these criteria, or at least use them with great caution. Tried-and-tested scale measures of employee performance do exist, although they can be unwieldy. However, there are opportunities here to contribute to the body of knowledge: if the psychometric properties of a relevant scale are limited, or the items are too many and need to be reduced, employers can work with researchers to develop a measure that is practical as well as robust.

The levers that increase performance

What influences people performance is a topic we will continue to investigate in future evidence reviews. There are potentially a vast number of factors of influence that one could not cover in a single report.

Many models attempt to explain performance: we have selected some of the most prominent that focus on teams or individual employees. We have identified two that are salient and clear in explaining how to influence individual and team performance, each of which has a solid evidence base:

- **the Job Demands-Resources (JD-R) model**, which focuses on individuals, including the physical and psychological factors that enable them to perform

- **the Goals, Roles, Processes and Interpersonal Relationships (GRPI) model**, which focuses on the team and the factors that help groups of people work effectively.

Closing remarks

HR and other business leaders must establish a clear line of sight between what occurs within teams and individual roles and the sustainable effectiveness of the organisation. For this to happen, managers and colleagues at all levels should discuss performance continually.

'Performance' is not a word to avoid, nor should it be seen as synonymous with the (often tired and outdated) cycle of formal performance management processes. Indeed, in some ways, 'performance management' may be an unhelpful label, suggesting that the challenge for managers is to pin down and control performance. Instead, if we accept that people naturally want to do well in their jobs, the challenge is to understand the dynamics of performance, remove blockers and give employees 'wings to fly'.

This report has centred on tools to foster and inform performance conversations. None are perfect. For example, it's important to recognise that performance measures are not the be-all and end-all and there is a potential 'tyranny of metrics' if they receive too much focus or become too complex. Nonetheless, employers can use them not just to track performance, but also to understand what is driving it and plan effective action to improve it.

By using relevant and convincing measures and referring to evidence-based models, HR and other leaders can foster regular discussion of people performance that is informed and focused. They should select measures and models carefully and use them actively.

⑥ Appendix: performance scales

Examples of scales to measure performance in the work context, published in academic journals.

General and multidimensional scales

Individual Work Performance Questionnaire (IWPQ)[16]

The IWPQ consists of three subscales: task performance, contextual performance and counterproductive work behaviour. The items are evaluated on a five-point Likert scale ranging from 'seldom' to 'always' for task and contextual performance, and from 'never' to 'often' for counterproductive work behaviour.

The scale has been tested to show adequate reliability and validity (convergent and divergent validity).

Task performance
1   I managed to plan my work so that I finished it on time.
2   I kept in mind the work result I needed to achieve.
3   I was able to set priorities.
4   I was able to carry out my work efficiently.
5   I managed my time well.

Contextual performance
6   On my own initiative, I started a new task when my old tasks were completed.
7   I took on challenging tasks when they were available.
8   I worked on keeping my job-related knowledge up to date.
9   I worked on keeping my work skills up to date.
10 I came up with creative solutions for new problems.
11 I took on extra responsibilities.

12   I continually sought new challenges in my work.
13   I actively participated in meetings and/or consultations.

Counterproductive work behaviour

14   I complained about minor work-related issues at work.
15   I made problems at work bigger than they were.
16   I focused on the negative aspects of a situation at work instead of the positive aspects.
17   I talked to colleagues about the negative aspects of my work.
18   I talked to people outside the organisation about the negative aspects of my work.

Job Performance Scale[17]

The Job Performance Scale measures task and contextual performance. It includes 29 items evaluated on a seven-point Likert scale, ranging from 'strongly disagree' to 'strongly agree'.

The psychometric properties of the scale are sufficient (both reliability, and content and construct validity). However, so far, this questionnaire has been validated only in the context of higher education, so its relevance could be limited.

Task performance

Job knowledge

1   If I need to perform a task that I'm not familiar with, I seek information that allows me to perform it better.
2   I don't think I could execute my tasks effectively if I didn't have a certain amount of experience.
3   The way I perform the basic tasks required in my job is not always in agreement with what I'm capable of doing (R = negative item to be reversed in scoring).
4   The way I perform the basic tasks required in my job corresponds completely to the performance that the organisation where I work asks from me.

Organisational skills

5   It is not always easy for me to perform tasks on time. (R)
6   When I have a deadline to perform a certain task, I always finish it on time.
7   If I had to perform a task in conjunction with other workers, I would probably be responsible for the planning, organising and monetarising of the work to be done.
8   I always leave my tasks to the last minute. (R)
9   I am always aware when there is a lack of the resources (material or human) needed for the efficient performance of the organisation.

Efficiency

10   Sometimes, I feel disappointed with my performance at work, because I know I could have done better.
11   I consider myself a fundamental worker to the organisation I work for, due to the high quality of my performance.
12   Receiving feedback (from my subordinates, my colleagues, my supervisor or from the organisation) is fundamental in order for me to continue performing my duties with dedication. (R)

Contextual performance

Persistent effort

13   When something is not right at work, I don't complain because I am afraid that others won't agree with me. (R)
14   Usually, I take the initiative to give constructive feedback in order to improve the performance of other workers (subordinates, colleagues, supervisor or workgroups).

15 In the event the organisation did not provide the training that I consider necessary to perform my duties effectively, I would seek information from other sources.
16 I'm still able to perform my duties effectively when I'm working under pressure.
17 As soon as I arrive at work, I set aside all my personal problems, so that my performance is not harmed.

Co-operation

18 Usually, I dedicate less effort to work when performing a task in conjunction with other people. (R)
19 I am always willing to assist other workers from the organisation, even when I don't have much time available.
20 Usually, I also perform tasks that are not related to my specific duties.

Organisational conscientiousness

21 Frequently, I arrive late at work. (R)
22 It's really difficult for me to miss work, even when I'm feeling sick.
23 I would never adopt actions that could harm the wellbeing of the other workers.
24 When I think that the goals of the organisation conflict with my personal goals, my dedication to work decreases. (R)
25 I take my job really seriously, so I always comply with the rules and procedures imposed (by my supervisor or by the organisation), even when no one is around.

Interpersonal and relational skills

26 My communication skills are so good that I'm always able to capture everyone's attention.
27 Communication inside organisations, even in workgroups, is fundamental so that people can perform their tasks effectively.
28 When I write a message to others (other workers or students), I feel a certain difficulty in expressing what I'm thinking.
29 When someone has a different opinion from mine, I usually convince them that my opinion is the best.

Scales to measure contextual performance

Organizational Citizenship Behavior Scale (OCB) developed by Podsakoff et al[18]
This is considered the original OCB scale. It has been tested to show adequate reliability and validity (criterion, convergent and divergent validity).

The scale consists of 24 items, evaluated on a seven-point Likert scale ranging from 'strongly disagree' to 'strongly agree':

1   Help others who have heavy workloads.
2   Is the classic 'squeaky wheel' that always needs greasing. (R)
3   Believes in an honest day's work for an honest day's pay.
4   Consumes a lot of time complaining about trivial matters. (R)
5   Tries to avoid creating problems for co-workers.
6   Keeps abreast of changes in the organization.
7   Tends to make 'mountains out of molehills'. (R)
8   Considers the impact of his/her actions on co-workers.
9   Attends meetings that are not mandatory, but are considered important.
10 Is always ready to lend a helping hand to those around him/her.
11 Attends functions that are not required, but help the company image.
12 Reads and keeps up with organization announcements, memos, and so on.
13 Help others who have been absent.

14 Does not abuse the rights of others.
15 Willingly helps others who have work-related problems.
16 Always focuses on what is wrong, rather than the positive side. (R)
17 Takes steps to try to prevent problems with other workers.
18 Attendance at work is above the norm.
19 Always finds fault with what the organization is doing. (R)
20 Is mindful of how his/her behavior affects other people's job.
21 Does not take extra breaks.
22 Obeys company rules and regulations even if no one is watching.
23 Helps orient new people even though it is not required.
24 Is one of my most conscientious employees.

Organizational Citizenship Behavior scale developed by Lee and Allen[19]

Sixteen items used in the present study were selected from a pool created by previous OCB scales, and assess two dimensions: OCB aimed at the organisation, and OCB aimed at the individual (eight items per dimension). The respondents are asked to indicate, using seven-point scales, ranging from 'never' to 'always', how often the target person engaged in the described behaviours.

Both dimensions have adequate reliability in different samples (different studies), but it's unclear how the scale's validity has been tested.

OCBI items (focus on individuals)
1 Help others who have been absent.
2 Willingly give your time to help others who have work-related problems.
3 Adjust your work schedule to accommodate other employees' requests for time off.
4 Go out of the way to make newer employees feel welcome in the work group.
5 Show genuine concern and courtesy toward co-workers, even under the most trying business or personal situations.
6 Give up time to help others who have work or non-work problems.
7 Assist others with their duties.
8 Share personal property with others to help their work.

OCBO items (focus on the organization)
9 Attend functions that are not required, but that help the organizational image.
10 Keep up with developments in the organization.
11 Defend the organization when other employees criticize it.
12 Show pride when representing the organization in public.
13 Offer ideas to improve the functioning of the organization.
14 Express loyalty toward the organization.
15 Take action to protect the organization from potential problems.
16 Demonstrate concern about the image of the organization.

Unifactorial Citizenship Performance (UCP) scale[20]

The UCP scale measures contextual performance. The scale has been tested to show adequate reliability and validity (criterion, convergent and divergent validity).

The six items cover three dimensions (two items per dimension):
• personal support: the amount of help and co-operation provided to colleagues
• organizational support: the degree to which people comply with rules and show loyalty to the organization)
• conscientious initiative: the level of persistence and initiative demonstrated.

Respondents are asked to assess how accurately the statement presented in the items describe the individual being rated. Ratings for each item are made on a five-point scale, ranging from 'not at all accurately' to 'very accurately'.

1   Cooperates fully with others by willingly sacrificing own personal interests for the good of the team.
2   Knows and follows both the letter and the spirit of organizational rules and procedures, even when the rules seem personally inconvenient.
3   Consistently takes the initiative to pitch in and do anything that might be necessary to help accomplish team or organizational objectives, even if such actions are not normally part of own duties.
4   Avoids performing any tasks that are not normally a part of own duties by arguing that they are somebody else's responsibility. (Reverse scored)
5   Goes out of his or her way to congratulate others for their achievements.
6   Looks for opportunities to learn new knowledge and skills from others at work and from new and challenging job assignments.

Scales to measure adaptive performance

Dutch Adaptability Dimensions and Performance Test (D-ADAPT)[21]
The D-ADAPT scale measures adaptive performance. Although the reliability of the scale is adequate, its validity has not been tested.

The scale has 31 items based on the eight dimensions of job adaptive performance proposed by Pulakos and colleagues. The scale can be used to measure adaptability requirements of a job, and for self-assessment in adaptability competency. For each item, participants are asked to answer two questions, using a five-point rating scale:

• How important do you consider this behaviour for your work? [1 (not important) to 5 (very important)]
• How effective do you consider yourself at performing this behaviour in your work? (self-assessment) [1 (not effective) to 5 (very effective)]

1   Analysing an unfamiliar problem.
2   Considering a complex problem from multiple perspectives.
3   Adapt your plan to solve a problem.
4   Comparing different solutions to the same complex problem.
5   Adopt [choose] an unusual solution to a problem.
6   Getting an overview of a crisis situation to make proper decision.
7   Monitoring how an emergency situation unfolds to adapt your behaviour to this situation.
8   Thinking about how to solve a threatening situation.
9   Take action at the right moment when a situation turns dangerous.
10 To set new priorities when a crisis situation becomes too dangerous.
11 To be open to how people from a different cultural background behave.
12 To inquire [obtain information] about rules, values and habits of another culture.
13 To use your knowledge of a culture to predict the behaviour of people.
14 Considering how to behave in an unfamiliar culture.
15 Adjust your goals to accommodate people from a different culture.
16 Observe the behaviour of others to get to know them.
17 Taking the possible reactions of others into account.
18 To develop new ways for cooperation.
19 Changing your mind because of other team members' ideas.

20 To tailor your decisions to others' wishes.
21 Recognizing signs of stress in complicated situations.
22 Determining why you are feeling stressed.
23 Predicting how stress will affect your quality of work.
24 To think how you can prepare yourself for stress.
25 Choose between different options to reduce stress.
26 Recognize when physical circumstances make your job harder to carry out.
27 Acknowledging your limits in physically demanding situations.
28 To think of the physical demands when taking up a task.
29 Decide how to keep performing optimally under heavy physical circumstances.
30 To think of ways to persevere under demanding physical circumstances.
31 To adjust your plan to expected changes in the physical task environment.

⑦ Notes

1 This is discussed in our evidence reviews on goal-setting and performance appraisal. See: Gifford, J. (2016). _Could do better? Assessing what works in performance management_. London: Chartered Institute of Personnel and Development.

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3 Bititci et al (2018, p654).

4 For discussion of this, see Gifford (2016).

5 Muller, J.Z. (2018) _The tyranny of metrics_. Princeton, NJ: Princeton University Press.

6 Peters, T. (1986) _What gets measured gets done_. Blog.

7 Ridgway, V.F. (1956) Dysfunctional consequences of performance measurements. _Administrative Science Quarterly_. Vol 1, No 2. pp240–47 (quote from p240).

8 Muller (2018, p3).

9 Podsakoff, P.M., MacKenzie, S.B., Moorman, R.H. and Fetter, R. (1990) Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. _The Leadership Quarterly_. Vol 1, No 2. pp107–42.

10 Pulakos, E.D., Arad, S., Donovan, M.A. and Plamondon, K.E. (2000) Adaptability in the workplace: development of a taxonomy of adaptive performance. _Journal of Applied Psychology_. Vol 85, No 4. p612.

11 Gifford, J. and Young, J. (2021) _Employee engagement: an evidence review of an umbrella term_. London: Chartered Institute of Personnel and Development.

12 For example, see our evidence reviews on employee engagement, incentives and recognition, mental wellbeing, employee resilience and performance management. See also our evidence hub, launching soon.

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