PEOPLE PERFORMANCE MODELS

An evidence review

Scientific summary
June 2022
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 160,000 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.
People performance models: an evidence review

Scientific summary

Contents

1 Introduction ........................................................................................................................ 2
2 Methods .............................................................................................................................. 2
3 Main findings ...................................................................................................................... 4
4 Conclusion ........................................................................................................................ 11
References............................................................................................................................... 12
Appendix 1: Search terms and hits........................................................................................ 15

Acknowledgements
This report was written by Eric Barends, Denise Rousseau and Emilia Wietrak of the Center for Evidence-Based Management (CEBMa).

Publication information

This report and the accompanying practice summary are available at cipd.co.uk/evidence-people-performance
1 Introduction

Rationale for this review
Improving employee performance is a key issue for HR professionals, both in terms of their own decision-making, and where they need to provide evidence to their colleagues and leaders on the value of investing in employees. Performance is the most common outcome considered in management and organisations and is linked to employee engagement, feedback, pay and reward, wellbeing initiatives, investment in skills, leadership practices, culture, values and countless other areas. To identify how best to improve performance, employers need to have a solid understanding of the most relevant contemporary models of people performance and how evidence-based these models are.

For this reason, the Chartered Institute of Personnel and Development (CIPD) approached the Center for Evidence-Based Management (CEBMa) to undertake a review of the research literature to learn more about widely used people performance models – specifically those focused at the level of individual workers or teams, rather than at the level of organisational effectiveness or strategy. This review presents an overview of the findings.

Main question: What will the review answer?
What is known in the scientific literature about widely used models of people performance?

Sub-questions are as follows:
1. What is people performance?
2. How evidence-based are current models of people performance?

2 Methods

Selection of models
This study reviewed the evidence base of a non-exhaustive selection of popular or influential models that are either framed or used as ways of explaining drivers of performance. The models were selected from the book Key Management Models: The 60+ models every manager needs to know (Assen et al 2009), suggestions from HR leaders and from our knowledge of the research literature.

Models were selected based on the following inclusion criteria:

- only models that relate to people management and employee performance
- only models that explain and/or illustrate factors that influence performance – or guide action on this.

In addition, the following exclusion criteria were used:

- strategic planning systems (for example, the balanced scorecard)
- assessment models, frameworks or tools (for example, the nine-box grid, 360-degree feedback)
- models of organisational performance (for example, Senge’s learning organisation)
- other models not about people management (for example, ergonomics or human factors).

Based on these criteria, the following nine models were included in this review.
Three models focus primarily on individual-level performance:

1. the Job Demand-Control-Support model
2. the Job Demands-Resources model
3. the Ability, Motivation, Opportunity framework.

Six models focus primarily on team-level performance:

4. the Goals, Roles, Processes and Interpersonal Relationships model
5. the Triangle of Commitment, Skills and Accountability
6. LaFasto’s Five Dynamics of Teamwork
7. Hackman’s Five Factor Model of Team Effectiveness
8. Lencioni’s Five Dysfunctions of a Team
9. Lombardo’s T7 model.

Search strategy: How were the research papers obtained?

To answer the review questions, the following databases were used to identify research papers: ABI/INFORM Global from ProQuest, Business Source Premier from EBSCO, PsycINFO from Ovid and Google Scholar. For our search, the following general search filters were applied:

1. scholarly journals, peer-reviewed
2. published in the period 2000–2022
3. articles in English.

Based on the performance models suggested by the CIPD, we conducted 35 different search queries, which yielded 350+ papers. An overview of all search terms and queries is provided in Appendix 1.

Selection: How were the research papers selected?

Selection took place in two phases. First, titles and abstracts of the papers identified were screened for relevance. In case of doubt or lack of information, the paper was included. Second, papers were selected for relevance after screening the full text. The outcome of the selection process for each model is reported in Appendix 1.

Critical appraisal: How was the evidence base of the models judged?

The evidence base of the models was assessed using the following three criteria:

1. Is the model used as a theoretical framework or conceptual model in academic publications?

This criterion indicates whether scholars consider the model to provide a plausible explanation for the relationship of the model’s elements (for example, predictors, conditions, requirements) with performance outcomes. It is essentially about whether a model is a common theoretical reference point in research. This is not a question of shallow popularity, but whether a model has been convincingly integrated into the body of academic thinking.
2 Are the elements of the model assumed to drive performance well supported by empirical evidence?
Are the component parts of the model evidence-based? That is to say, is there a strong research base showing that these are important factors for performance, effectiveness or productivity outcomes? In that case, those factors can be used as a valid and reliable starting point for HR interventions.

3 Is the model empirically tested?
Is the model as a whole, including the linkages between its components, empirically tested? This more stringent criterion indicates whether core assumptions of the model are supported by empirical evidence, and as such, whether the model can be used as a valid and reliable diagnostic tool or a tool to inform the design of HR interventions.

For a detailed explanation of how we judged the methodological quality of empirical studies supporting (or refuting) the models, see CEBMa Guideline for Rapid Evidence Assessments in Management and Organisations (Barends 2017).

3 Main findings

Question 1: What is meant by people performance?
In management and business, ‘performance’ is probably the most widely used outcome measure to assess whether a person (such as an employee) or a group of persons (such as a team) have achieved their goals. Likewise, people performance may well be the single most studied and used dependent variable in organisational and personnel psychology. A high performance indicates that people have done an excellent job and work to the best of their ability, whereas low performance suggests that people can do better. Looking more closely, however, it is not always clear what people performance is and how it can be measured. In fact, the term is used for a wide range of different constructs, and can refer to both the outcome of an activity as well as the way that outcome was achieved. To create some clarity, we provide an overview of the three most widely used dimensions of people performance.

Task performance
Related terms: in-role performance, work role performance, job performance
Task performance refers to the execution and outcome of job-specific activities that are part of one’s formal job description. It concerns the core job responsibilities of an employee and is often tied to specific quantitative and/or qualitative work outcomes, as well as the way these outcomes are delivered (Borman 2017; Sonnentag et al 2008). For some occupations and functions, even if performing a task well is very demanding or complex, the indicators of task performance are relatively straightforward. For example, task performance indicators for a firefighter may include responding quickly to fire alarms, extinguishing fires, performing rescue operations and mitigating chemical spills. For other occupations and functions, however, it may be quite difficult to find valid and reliable indicators. For example, knowledge workers seldom have one single, standard outcome. In addition, the outcome of their tasks is often hard to quantify and contingent on a wide range of contextual and situational factors that are outside an employee’s control (Ramirez and Steudel 2008).

Contextual performance
Related terms: extra-role performance, organizational citizenship behavior (OCB)
Contextual performance refers to activities that go beyond one’s formal job description. It concerns voluntary behaviour that contributes to the organisation’s social and psychological climate: this serves as a catalyst for employees’ task activities and benefits the organisation as a whole (Borman 2001; Harper 2015; Podsakoff 2009). Examples of contextual performance are: helping
co-workers finish a project, coaching junior co-workers, suggesting a more efficient way of working, and organising or participating in company’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 to be contextual performance; hence the term ‘organizational citizenship behavior’ is widely used.

Adaptive performance

**Related terms: flexible work behaviour, agile performance, individual creative and innovative performance (CIP)**

Adaptive performance refers to employees’ ability to adapt and adjust to unforeseen changes and demands in the workplace. It concerns an employee’s capability to efficiently deal with new, uncertain or unpredictable work situations (Harari et al 2016; Jundt et al 2015; Pulakos et al 2000; Sonnentag et al 2008). Examples of adaptive performance are: handling crisis situations, solving problems creatively, coping with work stress, learning new tasks and procedures, proposing new, creative and innovative ways of working, and participating in change initiatives.

Individual versus team performance

In addition to these three performance dimensions, a distinction can be made between individual performance and team performance. In most cases, team performance is simply the sum of team members’ individual performance. However, in some functions, tasks are typically performed in collaboration with others, in particular where complex tasks require the input and expertise of multiple employees – in those cases, outcome measures at the team level should be used.

Outcome versus process performance

Finally, performance can refer to both the outcome of an activity and the way that outcome was achieved. For this reason, sometimes a distinction is made between outcome performance and process or behavioural performance. Some scholars argue that task performance is more outcome-focused, whereas contextual and adaptive performance are more process- or behaviour-focused (Roe 1999). However, others state that the distinction between outcome and process may be helpful to some extent but, in most cases, are too simplistic for assessing people’s performance.

**Question 2: How evidence-based are current models of people performance?**

Table 1 gives an overview of our assessment of the selected models.

The Job Demand-Control-Support model

**Description**

The Job Demand-Control-Support (JDCS) model has dominated the occupational health psychology domain in the past two decades (Van der Doef 2022). The model was developed in the late 1970s and explains how job characteristics influence employees’ psychological wellbeing. Its basic assumptions are that high levels of job demands create job stress, but that this stress can be reduced by granting employees more control and autonomy over when, where and how they do their work, and sufficient (social) support (Karasek 1990). Although the model is still widely used, it has evolved over time and is now superseded by the Job Demands-Resources model (see below).

**Evidence base**

This review identified 11 meta-analyses and 30+ longitudinal studies in which the JDCS model was used as a theoretical framework or was empirically tested. Although most studies largely support the assumed relationship between job demands, job control, social support and employee wellbeing, some meta-analyses found that the assumed moderating influences of job control and social support are somewhat inconsistent (Van der Doef 1999). In addition, meta-analyses that
People performance models: an evidence review

included longitudinal studies found that a reciprocal relationship or reverse causation may explain the positive associations that job control and social support have with employee wellbeing (Häusser et al 2010; Tang 2014). Finally, this review did not find meta-analyses or high-quality primary studies that tested whether the model explains job performance. However, research on the drivers of knowledge worker performance (CIPD forthcoming a) found that, if employees feel their manager helps in times of need, praises them or their team for a task well done, or recognises them for extra effort, their task performance increases. A similar positive relationship with performance was found for psychological empowerment: the perception that employees have autonomy to decide how to do their jobs (Spreitzer 2008).

Table 1: Selected models that help explain performance

<table>
<thead>
<tr>
<th>Model</th>
<th>Relevance to performance</th>
<th>Established theory</th>
<th>Evidence for components</th>
<th>Evidence for model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Demand-Control-Support (JDCS)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Job Demands-Resources (JD-R)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ability, Motivation, Opportunity (AMO)</td>
<td>✓ ✓</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>Team level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goals, Roles, Processes and Interpersonal relationships (GRPI)</td>
<td>✓ ✓</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>The Triangle of Commitment, Skills and Accountability</td>
<td>✓ ✓</td>
<td>×</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>LaFasto’s Five Dynamics of Teamwork</td>
<td>✓ ✓</td>
<td>×</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>Hackman’s Five Factor Model of Team Effectiveness</td>
<td>✓ ✓</td>
<td>×</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>Lencioni’s Five Dysfunctions of a Team</td>
<td>✓ ✓</td>
<td>×</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>Lombardo’s T7 model</td>
<td>✓ ✓</td>
<td>×</td>
<td>✓</td>
<td>×</td>
</tr>
</tbody>
</table>

Note:  
× = not established in scientific research  
✓ = reasonably established  
✓ ✓ = well established

The Job Demands-Resources model

Description
The Job Demands-Resources (JD-R) model is one of the most widely used and influential models in industrial and occupational (IO) psychology. The original model was introduced in 2001 to identify antecedents of burnout. It was put forward as an alternative to other models of employee wellbeing, such as the Job Demand-Control-Support model (above) and the effort-reward imbalance model. Its central premise is that occupational stress results from an imbalance between (physical and/or psychological) job demands and the (organisational or psycho-social) resources available to deal with those demands (Demerouti et al 2001). Examples of job demands are required skills, physical effort, working hours, workload and emotional pressures. Examples of job resources are role clarity, autonomy, supervisory support and workplace climate, along with professional development and career opportunities. The JD-R model assumes that when job demands are ‘excessive’, they become ‘bad things’ that drain employee energy. In contrast, job
People performance models: an evidence review

resources are ‘good things’ that protect employees from the negative effects of extreme job demands, enhancing wellbeing and performance (Schaufeli 2017). Although the original central outcome of the JD-R model was ‘burnout’, extended applications of the model include other workplace outcomes, such as work engagement, job satisfaction, organisational commitment, turnover intention and task performance (Bakker and Demerouti 2017; Schaufeli 2017).

Evidence base
This review identified 19 meta-analyses and 50+ longitudinal studies in which the JD-R model was used as a theoretical framework or was empirically tested. This large number of studies indicates that the model is widely used in academia and supported by a substantial body of research. Indeed, a recent meta-analysis that included 29 high-quality studies confirmed the central assumption of the JD-R model (Lesener et al 2019). It should be noted that the studies included in this meta-analysis did not measure the association with job performance, but rather wellbeing and other outcomes. However, a recent systematic review of 202 studies found a positive relationship between job demands and resources at the team/unit level and individual employee productivity, although as this drew on cross-sectional studies, the relationship may be partly explained by ‘reverse’ causality (Roczniewska et al 2022). In addition, previous evidence reviews by CEBMa found positive relationships between various job resources (such as supervisory support, a coaching leadership style, workplace climate, employee recognition and non-financial rewards) and performance outcomes (for example, Barends et al 2022a, Barends et al 2022b, Wietrak et al 2021).

The Ability, Motivation, Opportunity framework
Description
The Ability, Motivation, Opportunity (AMO) framework is used in the human resource management (HRM) domain to explain the relationship between how people are managed and subsequent performance outcomes (Kellner et al 2019). It is often used to explain the mechanism of high-performance work practices or systems (HPWPs or HPWSs). An early version of the framework was developed by Vroom (1964), who stated that people’s performance is a function of training and selection (ability) and motivation. In the early 1980s, the framework was further developed by Blumberg and Pringle (1982), who added a third dimension: opportunity. The AMO framework’s core assumption is that people’s performance is a function of their capacity to perform (including variables such as level of education, knowledge, skills and experience), willingness to perform (for example, motivation, commitment, personality and expectations), and opportunity to perform (for example, working conditions, leader support, processes and time). In addition to the domain of employment and people management, the framework is also widely used in disciplines such as consumer behaviour, marketing and advertising.

Evidence base
This review identified ten meta-analyses and five longitudinal studies in which the AMO framework was used as a theoretical foundation. Although some authors have pointed out that, despite its wide use in both popular and scientific literature, the AMO framework has seldom seen empirical testing (see, for example, Kellner et al 2019). A systematic review published in 2016 included 48 empirical studies, of which 33 provided a statistical analysis of the relationships that ability, motivation and opportunity-enhancing practices have with performance. Although the authors conclude that the AMO framework provides a better understanding of the relationship between HRM and performance and state that ‘well trained and skilled employees will perform better, and a motivated worker will be ready to go the extra mile’, all studies included in their review were cross-sectional in nature, preventing conclusions about cause and effect.

In addition, it was found that, in most studies, the definition and selection of the AMO variables lack consistency and precision. In particular, a very large body of research on work motivation shows
that ‘motivation’ is a very broad construct for which numerous definitions are available, and, as a result, numerous motivational theories exist (for more discussion, see our evidence review on the topic). Also, indicators used to operationalise the AMO framework tend to lack precision. The model is often applied to HR practices rather than aspects of people’s work: for example, induction training may be listed as an ability-enhancing practice, without assessing whether employees’ human capital is increased; or performance-related pay may be classified as a motivation-enhancing practice, without assessing employees’ level of work motivation. Overall, the AMO categories are clearly important areas for performance, but alternative models do a better job of explaining specific predictors of performance.

The GRPI model

Description

The GRPI model was first introduced by Richard Beckhard in 1972. The acronym GRPI stands for goals, roles, processes and interpersonal relationships, which were considered by Beckhard as the essential elements of teamwork. The model is frequently referred to in popular management literature and is used as a diagnostic and training tool by HR managers and consultants. The model’s basic assumption is that, to be effective, a team requires clarity, agreement and support with regard to four features:

- **Goals:** what is the purpose of the team, what are the targets or the desired outcomes, and how is progress measured?
- **Roles:** who is doing what, and are all roles and responsibilities clearly described and understood?
- **Processes:** how is information shared, decisions made, and conflicts resolved?
- **Interpersonal relations:** is there trust among team members, and what is the general atmosphere within the team?

Evidence base

This review did not identify any relevant scientific studies in which the GRPI model was empirically tested or was used as a theoretical framework. However, the model’s basic assumption regarding the relevance of the four elements for team effectiveness is strongly supported by scientific literature. For example, setting clear and challenging goals is one of the most powerful and evidence-based interventions for enhancing performance (Barends et al 2016). In addition, numerous empirical studies have consistently demonstrated that role ambiguity (lack of information regarding how to perform the job adequately and uncertainty about expectations) and role conflict (the mismatch between expectations and demands on the part of two or more team members) are negatively associated with performance. The same counts for process variables such as information-sharing. Finally, a large body of research on team effectiveness has shown that manifestations of interpersonal relations in a team such as social cohesion, intra-team trust and psychological safety are important drivers of team performance (CIPD forthcoming b).

The Triangle of Commitment, Skills and Accountability

Description

The Triangle of Commitment, Skills and Accountability is a team effectiveness model developed by Katzenbach and Smith. After examining teams across several companies, they published this model in their 1993 book, *The Wisdom of Teams*. They described their model in a triangular diagram with three points representing the larger deliverables of a team: collective products, performance results and personal growth. To reach these goals, three components are required, which make up the sides of the triangle:

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.

The model became popular in the domain of HR management when Katzenbach and Smith presented the outcome of their research and the ensuing model in their article, ‘The Discipline of Teams’ in the *Harvard Business Review* (Katzenbach and Smith 1993a).

**Evidence base**
The research by Katzenbach and Smith used to support their model is a qualitative study based on the outcome of interviews with ‘hundreds of people on more than 50 different teams in 30 companies and beyond, from Motorola and Hewlett-Packard to Operation Desert Storm and the Girl Scouts’ (Katzenbach and Smith 1993). To our knowledge, this research has never been through peer review and was never published in an academic journal. In addition, this review did not identify any relevant scientific studies in which the model was empirically tested or used as a theoretical framework. However, one of the model’s basic assumptions, the relevance of committing to meaningful, specific goals, is strongly supported by the scientific evidence (Barends et al 2016). Its other assumptions are less well studied or supported by the scholarly literature.

**LaFasto’s Five Dynamics of Teamwork**
**Description**
The Five Dynamics of Teamwork is a team effectiveness model developed by Frank LaFasto and Carl Larson. It is based on their research regarding effective teams and was first published in 2001 in their book, *When Teams Work Best*. The core assumption of the model is that there are five dynamics that determine a team’s effectiveness:

1. **Team members:** people with the right skills, experience, problem-solving abilities, openness, action orientation and a positive personal style
2. **Team relationships:** healthy working relationships among members
3. **Team problem-solving:** members working effectively together to solve problems
4. **Team leadership:** a team leader that focuses on the team goal, ensures a collaborative climate, builds confidence, sets priorities, demonstrates technical know-how and manages performance
5. **Organisational environment:** right processes and a company culture that promotes team commitment.

**Evidence base**
The research by LaFasto and Larson that supports the model is a cross-sectional survey among 6,000 team members in a variety of organisations. To our knowledge, this research has never been submitted to peer review and was never published in an academic journal. In addition, our review did not find any relevant scientific studies in which the model was empirically tested or used as a theoretical framework. Finally, it is unclear whether the model’s basic assumption regarding the relevance of the five dynamics is supported by the scientific evidence, as they are very broad and lack specificity.

**Hackman’s Five Factor Model of Team Effectiveness**
**Description**
Richard Hackman received wide recognition in academia for developing the job characteristic theory (Hackman and Oldham 1980). This theory states that there are five conditions for people to
be intrinsically motivated to perform their jobs to the best of their ability. The theory is discussed in CEBMa’s evidence review of work motivation (Wietrak et al 2021). In the following decades, Hackman shifted his research focus to team effectiveness. In 2002, he proposed an effectiveness model in his book, Leading Teams: Setting the stage for great performances. The model is based on his research of cockpit crews, sports teams, symphony orchestras and restaurant kitchen staff, and outlines five conditions that must be present for teams to be successful:

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

**Evidence base**
The research by Hackman – on which the model is based – is mostly case studies and observations not published in peer-reviewed academic journals. In addition, this review did not identify any relevant scientific studies in which the model was empirically tested or used as a theoretical framework. Finally, although the scientific evidence supports the relevance of setting goals, defining roles and providing support, it is unclear whether the model’s five conditions are supported by scientific evidence, as they are broad and lack specificity.

**Lencioni’s Five Dysfunctions of a Team**

**Description**
Where most team performance models focus on drivers, conditions and enablers, the Lencioni model focuses on problems that cause teams to be dysfunctional. The model was developed by consultant Patrick Lencioni and published in his best-selling book, *The Five Dysfunctions of Team* (2002). The model lists five team dysfunctions – in a hierarchical order – that must be dealt with 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.

The model became particularly popular in sport and was applied by several American football team coaches.

**Evidence base**
This review did not identify any scientific studies in which the model was empirically tested or used as a theoretical framework. Although there is strong evidence that lack of trust negatively impacts team performance, it is unclear whether the relevance of the other four dysfunctions is supported by scientific evidence, as they are broad and lack specificity.

**Lombardo’s T7 model**

**Description**
The T7 model was developed by Michael Lombardo and Robert Eichinger in 1995. The model represents seven factors that affect the performance of teams. Based upon their review of
research literature, they identified five internal factors and two external factors. All factors conveniently start with a ‘T’, hence the name ‘T7 model’. The five internal factors are as follows:

1. **Thrust**: team members should have a common goal.
2. **Trust**: team members should have confidence in their teammates.
3. **Talent**: team members should have the required skills and experience to produce results.
4. **Teaming skills**: team members should have excellent problem-solving skills and perform as a unit.
5. **Task skills**: team members should have the ability to get things done (and on time).

The two external team factors are as follows:

6. **Team–leader fit**: the leader should have a management style that works for the team.
7. **Team support from the organisation**: the company’s leadership, policies and resources enable the team to perform.

According to the model, all five internal factors must be present for a team to be successful. However, if two external factors (leadership and organisational support) are lacking, this will impede the team’s effectiveness.

**Evidence base**
This review did not identify any scientific studies in which the model was empirically tested or used as a theoretical framework. Although there is strong evidence that a lack of common goals and trust negatively impacts team performance, it is unclear whether the relevance of the other five factors is supported by scientific evidence, as they are too broad and lack specificity.

**4 Conclusion**
In both the scientific and popular management literatures, there are several performance models that claim to show how to drive performance or help teams work together more efficiently. This review identified three models widely used in academia and six other models often referred to in popular management, business and consulting literatures. The three models used in academia are all sufficiently supported by empirical studies. The JDCS and JD-R models, however, were originally developed as diagnostic tools for adverse occupational health outcomes rather than task performance. The AMO framework is rather broad and generic, which limits its practical application as a starting point for HR interventions to increase performance.

The six models often referred to in popular management literature all lack direct empirical support. Although some models contain factors that have been shown to be strong predictors of performance (for example, goal-setting and interpersonal trust), the scientific evidence is inadequate to establish the reliability and validity of these models as a whole. In addition, most of the factors used in these models are rather broad and often lack specificity. It should be noted, however, that elements of the GRPI model are supported by strong, high-quality evidence and, as such, can be the basis for a reliable diagnostic tool and a starting point for evidence-based HR interventions to increase people’s performance.

**Limitations**
This REA aims to provide a balanced assessment of what is known in scientific literature about the evidence base of performance models by using the systematic review method to search and critically appraise empirical studies. However, to be ‘rapid’, concessions were made in relation to the breadth and depth of the search process, such as the exclusion of unpublished studies, the use of a limited number of databases and a focus on empirical research published in the period 2000–
As a consequence, some relevant studies may have been missed. Given this limitation, care must be taken not to present the findings presented in this REA as conclusive.

References


# Appendix 1: Search terms and hits

## Job Demands-Resources model

**ABI/Inform Global, Business Source Elite, PsycINFO**  
peer-reviewed, scholarly journals, January 2022

<table>
<thead>
<tr>
<th>Search terms</th>
<th>ABI</th>
<th>BSP</th>
<th>PSY</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1: ti(JDR) OR ab('JDR model')</td>
<td>32</td>
<td>12</td>
<td>21</td>
</tr>
<tr>
<td>S2: ti('demands resources') OR ab('demands resources')</td>
<td>492</td>
<td>100</td>
<td>812</td>
</tr>
<tr>
<td>S3: S1 OR S2</td>
<td>501</td>
<td>110</td>
<td>816</td>
</tr>
<tr>
<td>S4: S3 AND filter MAs OR SRs</td>
<td>11</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>S5: S3 AND filter-controlled OR longitudinal studies</td>
<td>58</td>
<td>15</td>
<td>59</td>
</tr>
</tbody>
</table>

## Job Demand-Control-Support model

**ABI/Inform Global, Business Source Elite, PsycINFO**  
peer-reviewed, scholarly journals, January 2022

<table>
<thead>
<tr>
<th>Search terms</th>
<th>ABI</th>
<th>BSP</th>
<th>PSY</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1: ti('demand control') OR ti('control support') OR ab('demand control support')</td>
<td>85</td>
<td>128</td>
<td>282</td>
</tr>
<tr>
<td>S2: S1 AND filter MAs OR SRs</td>
<td>3</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>S3: ti('demand control support') OR ab('demand control support')</td>
<td>53</td>
<td>75</td>
<td>192</td>
</tr>
<tr>
<td>S4: S3 AND filter-controlled OR longitudinal studies</td>
<td>3</td>
<td>8</td>
<td>31</td>
</tr>
</tbody>
</table>
### Ability, Motivation, Opportunity framework

**ABI/Inform Global, Business Source Elite, PsycINFO**  
peer-reviewed, scholarly journals, January 2022

<table>
<thead>
<tr>
<th>Search terms</th>
<th>ABI</th>
<th>BSP</th>
<th>PSY</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1: ti('AMO model') OR ab('AMO model')</td>
<td>9</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>S2: ti(abilit*) AND ti(motivation*) AND ti(opportunit*)</td>
<td>48</td>
<td>49</td>
<td>29</td>
</tr>
<tr>
<td>S3: ab('ability motivation opportunity') OR ab('ability motivation and opportunity')</td>
<td>57</td>
<td>113</td>
<td>60</td>
</tr>
<tr>
<td>S4: S1 OR S2 OR S3</td>
<td>99</td>
<td>148</td>
<td>78</td>
</tr>
<tr>
<td>S5: S4 AND filter MAs OR SRs</td>
<td>7</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>S6: S4 AND filter-controlled OR longitudinal studies</td>
<td>3</td>
<td>8</td>
<td>3</td>
</tr>
</tbody>
</table>

### Goals, Roles, Processes and Interpersonal Relationships model

**ABI/Inform Global, Business Source Elite, PsycINFO**  
peer-reviewed, scholarly journals, January 2022

<table>
<thead>
<tr>
<th>Search terms</th>
<th>ABI</th>
<th>BSP</th>
<th>PSY</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1: ti('GRPI model') OR ab('GRPI model')</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>S2: ti(goals) AND ti(roles) AND ti(processes)</td>
<td>12</td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td>S3: ab('goals roles processes')</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>S4: S1 OR S2 OR S3</td>
<td>12 (NR)</td>
<td>18 (NR)</td>
<td>26 (NR)</td>
</tr>
</tbody>
</table>

*NR = not relevant*
People performance models: an evidence review

### Triangle of Commitment, Skills and Accountability

**ABI/Inform Global, Business Source Elite, PsycINFO**  
peer-reviewed, scholarly journals, January 2022

<table>
<thead>
<tr>
<th>Search terms</th>
<th>ABI</th>
<th>BSP</th>
<th>PSY</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1: ti(triangle) AND ti(commitment)</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>S2: ti(commitment) AND ti(skills) AND ti(accountability)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>S3: ab('commitment skills and accountability')</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>S4: ab(triangle) AND ab(Katzenbach)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>S5: ab(model) AND ab(Katzenbach)</td>
<td>2</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>S6: S1 OR S5</td>
<td>3 (NR)</td>
<td>6 (NR)</td>
<td>0</td>
</tr>
</tbody>
</table>

### LaFasto’s Five Dynamics of Teamwork

**ABI/Inform Global, Business Source Elite, PsycINFO**  
peer-reviewed, scholarly journals, January 2022

<table>
<thead>
<tr>
<th>Search terms</th>
<th>ABI</th>
<th>BSP</th>
<th>PSY</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1: ti('five dynamics') OR ab('five dynamics')</td>
<td>1</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>S2: ti('dynamics of teamwork') OR ab('dynamics of teamwork')</td>
<td>3</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>S3: ab(teamwork) AND ab(LaFasto)</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>S4: S1 OR S2 OR S3</td>
<td>5 (NR)</td>
<td>14 (NR)</td>
<td>7 (NR)</td>
</tr>
<tr>
<td>People performance models: an evidence review</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Hackman’s Five Factor Model of Team Effectiveness

**ABI/Inform Global, Business Source Elite, PsycINFO**  
peer-reviewed, scholarly journals, January 2022

<table>
<thead>
<tr>
<th>Search terms</th>
<th>ABI</th>
<th>BSP</th>
<th>PSY</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1: ab(Hackman) AND ab(model) AND ab(team*) filter: date &gt; 2002</td>
<td>6 (1)</td>
<td>5 (NR)</td>
<td>6 (NR)</td>
</tr>
</tbody>
</table>

### Lencioni’s Five Dysfunctions of a Team

**ABI/Inform Global, Business Source Elite, PsycINFO**  
peer-reviewed, scholarly journals, January 2022

<table>
<thead>
<tr>
<th>Search terms</th>
<th>ABI</th>
<th>BSP</th>
<th>PSY</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1: ti(‘five dysfunctions’) OR ti(‘5 dysfunctions’) OR ab(‘five dysfunctions’) OR ab(‘5 dysfunctions’)</td>
<td>3</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>S2: ab(Lencioni) AND ab(model) AND ab(team*)</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>S3: S1 OR S2</td>
<td>5 (NR)</td>
<td>8 (NR)</td>
<td>2 (NR)</td>
</tr>
</tbody>
</table>

### Lombardo’s T7 model

**ABI/Inform Global, Business Source Elite, PsycINFO**  
peer-reviewed, scholarly journals, January 2022

<table>
<thead>
<tr>
<th>Search terms</th>
<th>ABI</th>
<th>BSP</th>
<th>PSY</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1: ti(T7)</td>
<td>15</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>S2: ab(Lombardo) AND ab(model) AND ab(team*)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>S3: S1 OR S2</td>
<td>15 (NR)</td>
<td>1 (NR)</td>
<td>1 (NR)</td>
</tr>
</tbody>
</table>