

The impact and effectiveness of leadership development activities for senior leaders

Rapid Evidence Assessment

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Institute for Employment Studies

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Executive summary

Ipsos MORI, working in partnership with the Institute for Employment Studies, has been appointed to evaluate the first three years of the National Leadership Centre (NLC), a centre set up to support the development of public sector senior leaders. To contribute to the development of the theory of change underpinning the overall evaluation, this rapid evidence review was commissioned to explore the evidence on the outcomes and impact of public sector leadership development programmes. The review specifically aims to understand the impact of:

- networks and networking
- peer-to-peer learning
- other delivery methods
- senior leadership development on productivity and other employees (“trickle-down”)

Overall, the body of evidence relating to the outcomes of senior leader development was disparate, small and weak. Therefore, only the outcomes with the strongest evidence base are discussed in this executive summary. Most studies adopted a qualitative approach to provide an insight into the outcomes, and the process by which leader behaviour change occurs, while also considering the wider contextual factors. Despite some challenges with evidence quality, the assessment of the literature led to the following conclusions:

1. Participating in networks and engaging in networking behaviours can result in benefits for the individual.

- **Networking can facilitate information gathering.** This information can be advice from peers, sectoral knowledge or best practice insights and can benefit both the individual and their organisation by providing support during challenging situations and encouraging innovative behaviours.
- **Bigger networks provide opportunities for future employment.** Networking plays a role in providing access to alternative employment opportunities through introductions to people in other organisations. The perceived assurance of alternative employment options may lead to increased risk appetite among leaders that can support organisational innovation.
- **Belonging to a network can create a shared social identity, development of social capital and increased collaboration.** Networking can enable the development of a social identity as a leader, and social capital, which may enable better collaboration and development within the leadership role. Development of a social identity can increase the sense of belonging as part of a management team and create strong ties that facilitate access to new people and organisations.

2. Peer-to-peer learning encourages individual behaviour change and skill development, which can result in benefits to the organisation.

- **Action learning groups and one-to-one peer support, such as mentoring and coaching, provide chief executives and directors with space to reflect** on work and personal matters. Bringing leaders together was found to enhance reflexivity and self-reflection and provide access to different leadership perspectives, which was reported to increase confidence and influence leadership practice. A one-to-one peer support relationship enables leaders to explore issues more deeply than they would in a group setting.
- **Both action learning and one-to-one peer support was found to facilitate the development and implementation of effective leadership skills** for leaders of various levels. In particular, the improvement of communication, team working, and strategic thinking. These can result in behaviour change, such as adopting a different communication approach or increased collaboration with others.
 - Individual behaviour change can also result in wider outcomes, such as the development of new programmes or a shared organisational language. For some leaders, changes in personal communication style result in more effective workplace relationships and the ability to address strategic level questions at a senior level.
- **Evidence from more junior leaders shows that action learning groups can enable the development of ongoing relationships** both within and outside their organisations. Participating in action learning sets was found to reinforce, or refocus, leader perspectives on collaboration and partnership working. It is evident that leaders either intended to or actively utilised the relationships formed during learning sets to tackle organisational or systemic issues.

3. Leaders value a range of delivery methods to support their development, which are considered most impactful when used in combination rather than isolation. Several delivery approaches were found to be most beneficial for leaders:

- Leaders of various levels value **residential course elements** for providing a 'protected space' for reflection. The intensity of residential components is predominantly considered a benefit, particularly the time it provides to work with a group of peers. However, the time away from home is sometimes an issue.
- Senior leaders valued the **input from experts** for providing new knowledge, reassurance and an opportunity to widen their network. The quality of the speaker and the content is a significant factor that influences leader satisfaction. A mix of theory and practice appears to be favoured, with content that focuses on personal stories of 'journeys to the top' being received more negatively.
- Senior leaders tended to value **on-the-job training** above other forms of learning. For those aspiring for the top posts, some studies found that internships, simulation activities and case study work were considered valuable experience. However, the literature did not identify appropriate experiential activities for the most senior leaders.

4. There is no evidence exploring the impact of senior leadership development on productivity outcomes.

No papers were found that explored the impact of senior leader development on productivity. There may be several reasons why productivity did not appear as an outcome of interest:

- Many studies **observe outcomes over a short time frame** – productivity gains are likely to happen over a long period of time, and therefore are not going to materialise during the research period.
 - **Measuring productivity in the public sector is inherently complex**, particularly due to the different outputs for each service area. Considering senior leadership development will involve participants across the service areas, a single measure of productivity cannot be implemented.
 - **Leadership development programmes are likely to have an indirect effect** on organisation outcomes – wider contextual factors, both internal and external to the organisation, will influence the impact a leader can have following a development programme.
 - **Isolating productivity gains to any one leadership intervention is problematic** – many factors contribute to organisational productivity, therefore limiting the direct influence a senior leader can have.
 - There is a lack of **focus on development for senior leaders**, with more papers relating to junior leaders - it could be argued that junior leaders have less influence on overall productivity and therefore it is a less relevant outcome measure.
5. **There are significant evidence gaps and challenges associated with the current body of evidence.**

This evidence review highlights a lack of relevant and high-quality evidence to comprehensively answer the research questions. Further research is required to:

- **Prove impact and improve evidence quality** - overall, there is limited evidence relating to the effectiveness of leadership interventions aimed at senior leaders. Much of the literature used weak research methodologies that relied on self-reported data, single sources and methods of data collection, and omission of comparison groups. On the whole, there is a need for better quality research to be conducted for this demographic.
- **Generate a consistent body of research** - a further challenge when assessing the evidence is the lack of consistency in the outcomes measured. The purpose, design and implementation of the interventions included in this review varied considerably, and therefore prevented the comparison of “like for like” programmes. To build confidence in the findings, more research measuring similar outcomes is required.
- **Focus on senior leaders** - senior leaders are less well researched compared to their more junior counterparts. The responsibilities, potential isolation, capabilities, and past experience that come with being a chief executive are unique to that role, which means their development needs and outcomes are likely to be distinctly different (Blackler and Kennedy, 2004). Therefore, evidence gathered from less senior leaders may not be directly applicable to the very top level of leadership. Due to the unique

nature of the chief executive role, further research must be conducted to understand the outcomes associated with high level development programmes.

1 Introduction and National Leadership Centre context

1.1 Introduction

In March 2018, the Public Services Leadership Taskforce was established to advise Government on the role of leadership development in improving productivity and outcomes across public services. The Taskforce sought to understand the challenges faced by senior leaders of public services. It found that public services are more complex than ever and face increasing pressures, for example a growing and ageing population, and preparing for the uncertain consequences of changing social, cultural, economic and technology contexts. It found that the right support was not always available to senior leaders to help them address these challenges and reach their full potential.

The National Leadership Centre (NLC) was established in response to the Taskforce recommendations. It was set up as a joint three-year pilot between the Cabinet Office and HM Treasury. It aims to support the development of senior leaders through the design and delivery of a leadership development programme and a public sector leader network. The NLC also delivers a programme of original research and evaluation to build the evidence base of public sector senior leadership. Collectively, the three core strands of activity aim to develop and support senior public sector leaders to drive productivity and quality improvements in the services they lead and the wider systems within which they operate, with the ultimate aim of improving outcomes for citizens and users of public services.

Ipsos MORI, working in partnership with the Institute for Employment Studies, has been appointed to deliver a process, impact and economic evaluation of the first three years of the NLC. A first draft Theory of Change for the NLC was developed during the scoping and design phase of the evaluation. The purpose of the current study is to explore the evidence on the outcomes and impact of public sector leadership development programmes to strengthen the assumptions of, and develop, the Theory of Change.

This evidence review focuses on reviewing leadership development activities aimed at senior leaders due to their unique role within an organisation. While there is a wider body of evidence relating to leadership development in general, 'leaders' tended to be considered as a homogenous group regardless of their level of seniority. However, senior leaders experience a very different set of challenges in comparison to their more junior counterparts: they manage other leaders and have very wide spans of control; they work in a different operational context as they are interfacing with the environment external to the organisation; they set and guide the organisational vision and strategy over a long time frame; and they are individuals with the highest level of accountability (Reynolds, McCauley and Tsacoumis, 2018). These factors are very likely to require a different set of

skills and capabilities that should be reflected in senior leadership development activities. The subsequent outcomes of senior leader development are also very likely to be different to those experienced by junior leaders.

1.2 Key terms

The following key terms are used throughout the report:

- Industry – a group of organisations that share a primary operating function or output eg healthcare or technology.
- Junior leader – a leader who has responsibility for a smaller element of an organisation, such as a department, but is not accountable for the organisation as a whole.
- Leadership development programme – any formal development activities designed and delivered to improve leadership skills.
- Networking – the process of meeting people and developing relationships through formal or informal events and activities, such as conferences, industry events or educational/developmental activities. In the context of this report, networking refers to the development of professional relationships.
- Network – the structure of social connections that results from networking. Networks can include members from a variety of sources, such as work, education and social (eg clubs and charities); in the context of this report networks refer to those applicable to a professional context.
- Peer-to-peer learning – leadership development activities that aim to facilitate learning from peers. Examples of peer learning include:
 - Action learning – an activity where small groups of people work together on real problems by acting and learning from those actions collectively.
 - One-to-one peer support – a one-on-one relationship where a more experienced person supports the professional development of a less experienced individual. This can include activities such as mentoring and peer coaching.
- Productivity – the measure of how many units of output is produced from one unit of inputs, which is calculated by dividing total output by total inputs¹.
- Sector – groupings of organisations in the economy that share common operating characteristics, eg public, private and third.
- Senior leader – a leader who is close to, or part of, the highest level of management in an organisation, such as a chief executive or director. Typically, the accountable individual in an organisation.

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<https://www.ons.gov.uk/economy/economicoutputandproductivity/publicservicesproductivity/methodologies/sourcesandmethodsforpublicserviceproductivityestimates>

- “Trickle-down effect” – the extent to which senior leader improvement, following development, results in gains amongst their direct reports or in other areas of the organisation.

1.3 Research questions

To address the evidence gap and contribute to the development of the NLC’s theory of change, the NLC identified four primary research questions to be explored through the rapid evidence review:

1. What is the evidence for the effectiveness and impact of **peer-to-peer learning** for senior leaders?
2. What is the evidence for the effectiveness and impact of **networking** for senior leaders?
3. What are the most effective leadership development **delivery methods**?
4. What is the evidence of the impact of leadership interventions on the **productivity of leaders**?
 - a. **The trickle-down effect:** to what extent do productivity gains of senior leaders result in productivity gains amongst their direct reports?

2 Methodology

2.1 Methodology for evidence review

The literature review gathered evidence from peer reviewed academic, and non-academic, sources. The search of the academic literature utilised the meta-search database EBSCOhost, which trawls the most relevant journal databases. Five academic databases were identified that searched the journals likely to contain literature most relevant to the research questions. Therefore, the initial literature search used the following databases:

- American Psychological Association PsycInfo
- The British Education Index
- Business Source Premier
- Education Resource Information Centre (ERIC)
- MEDLINE

However, to mitigate any risks of limiting the search to the databases identified above, Google Scholar was also used to ensure all relevant evidence was identified.

Included in the grey literature search were:

- leadership and management/HR publications
- professional bodies (eg CIPD)
- government and sectoral publications, specifically focusing on leadership academies.

2.2 Search parameters

Due to the unique focus of the NLC, the initial search parameters were designed to ensure the evidence was as relevant to the NLC context as possible. Boolean search terms² were used to gather evidence from:

- evaluations of leadership development interventions
- senior leaders, eg at chief executive level
- the public sector

² A method of search that uses combinations of words and phrases (eg network, leader, “public sector”) in conjunction with operators (eg AND / OR) to limit or broaden the scope of search a parameter (eg network AND leader AND “public sector”).

- G7 countries
- the last 10 years.

However, due to the stringent search parameters in place, the initial search strategy produced limited results. Therefore, in consultation with the NLC, the parameters were widened to include more junior leaders (one to two levels below the chief executive), evidence from the private sector and research older than 10 years. For evidence relating to networking, papers were included that did not include a leadership evaluation; this is due to networking often taking place outside of a leadership intervention.

As a result of the search, over 1500 abstracts were reviewed for relevance to the research questions. Abstracts that did not meet the search parameters described above were excluded from further review. Of the abstracts reviewed, based on the information presented approximately 130 articles were considered relevant enough to be reviewed in full. The full text was downloaded, and each paper was then reviewed using a template to extract the methodological, intervention and outcome data relevant to each research question. These data were independently reviewed by two researchers to assess the appropriateness for inclusion in the final evidence review. This review process identified 34 papers to be included in the final evidence review. As widening the search parameters threatened the contextual relevance of the evidence to the NLC, each paper underwent an assessment of quality and relevance to confirm its suitability to contribute to answering the research questions.

2.3 Assessment of evidence quality

To investigate the research questions, this review draws upon a range of evidence from various academic and non-academic sources. An assessment of evidence is an integral element of the review process. While there are numerous models used to assess research quality, many require 'higher quality' evidence to demonstrate cause and effect, ideally using comparison groups and randomised control trials. The majority of papers included in this review do not attempt to use quantitative methods or comparison groups to prove causation³, with authors arguing that evaluators need to look beyond the numbers and use a mix of methods that seek to understand 'how' and 'why' something is happening, rather than just the 'what' (Burns, 2009). Therefore, qualitative methods are favoured, not just to identify outcomes, but to understand the mechanisms, processes and contextual factors that shape them. When assessing the quality of the evaluation evidence included in this review against a framework such as Nesta⁴, the lack of control or comparison groups to isolate impact rendered most papers of low quality (level two out of five). Therefore, to provide a more nuanced assessment of the specific strength of each

³ The use of qualitative methods and the need for comparison groups to produce causal explanations is a long-standing debate, with some academics arguing that qualitative research can provide insight into causal chains. For further discussion see Maxwell (2004).

⁴ https://media.nesta.org.uk/documents/standards_of_evidence.pdf

piece of qualitative evidence, this review assessed the evidence based on four criteria considered integral for high quality qualitative research (Mays and Pope, 2000):

- the transparency of the research method and analysis approach;
- triangulation - the use of various research methods to increase credibility of findings;
- attention to anomalies/negative cases; and
- research reflexivity.

In addition to the above points, the research design was also considered in terms of its ability to infer causality and to show the longer-term sustainability of the findings.

It is difficult to categorise and rank qualitative evidence quality in the same way as quantitative, as it requires researcher consideration and judgement of multiple criteria, individually and collectively, to arrive at an overall judgment of quality. The data collected at the extraction phase was analysed against the criteria described above to form the assessment of quality, which was independently assessed by two researchers to mitigate the risk of subjectivity. However, to aid interpretation of the quality of the evidence, this report presents it as low, moderate, and high quality. The guidelines below provide descriptors for each standard of evidence considering the five criteria⁵:

- **Low quality:** Minimal methodological and analytical detail provided; cross-sectional / descriptive design; single method of data collection, single source of data collection (eg self-reported); no or minimal mention of anomalies or contradictory evidence; and no or minimal consideration of the researchers influence or role in the research process. In total, 32 per cent of the evidence reviewed was considered of low quality.
- **Moderate quality:** Some methodological and analytical detail provided; pre and post-test design / some exploration of change processes; data collected via several methods (eg interviews and observation) or sources (eg self-report and peer observation); acknowledgment of anomalies or contradictory evidence; and acknowledgment of the researcher's influence or role in the research process. In total, 42 per cent of the evidence reviewed was considered of moderate quality.
- **High quality:** Full methodological detail provided; longitudinal design / exploration of change process, data collected via multiple methods (eg a variety of qualitative methods, perhaps also including a quantitative element) and sources; discussion of anomalies or contradictory evidence; and discussion of the researcher's influence or role in the research process. In total, 26 per cent of the evidence review was considered of high quality.

Furthermore, to contribute to the quality assessment, the contextual relevance of each paper to the NLC was assessed based on the seniority of the leader participants, the sector of investigation and the country of the evaluation (see Annex Table 9.1).

⁵ The descriptors provide a guideline only and may not capture all elements of the quality assessment. Some evidence may perform highly on some criteria and more poorly on others; researcher judgement is paramount to interpreting the evidence and making a final judgement on the quality.

2.4 Limitations of the evidence base

There are several limitations associated with the papers included in this review that must be considered when concluding from the evidence. Firstly, due to the specific search parameters (even after widening the original criteria), the resulting evidence base is limited, therefore there is not a large body of evidence relating to each outcome. Secondly, the quality of the evidence is varied meaning that greater confidence can be placed in some outcomes compared to others. Thirdly, there is minimal evidence focusing on chief executive officer (CEO) level senior leaders, therefore lower levels of senior leadership have also been considered. However, evidence from more junior leaders may not apply or be generalizable to senior leaders. Fourthly, while the review aims to identify the impact of specific leadership development delivery methods, many of the evaluations reviewed do not isolate the specific impact of each delivery methods. Therefore, conclusions are sometimes drawn about the impact of the programme as a whole. Finally, some evidence is from the private sector and non-UK settings, which limits the applicability of the findings to the NLC context. Throughout this report, where these limitations are present in the evidence, they are identified in the description of the paper and considered when drawing conclusions.

2.5 Structure of the report

This following report presents the research findings from the evidence review. It is organised in four sections, corresponding to each of the research questions. However, due to the interconnected nature of the questions, the same evidence is sometimes discussed across multiple research questions. Where possible, the research included in this review involves an evaluation of a senior leadership development intervention in a public sector context. The report is structured thusly:

- Chapter 3: The impact and effectiveness of networks and networking behaviours
- Chapter 4: The impact and effectiveness of peer-to-peer learning
- Chapter 5: Leadership development delivery methods
- Chapter 6: Productivity and “trickle-down effect”
- Chapter 7: Conclusions and implications

3 The impact and effectiveness of networks and networking behaviours

Chapter summary

This chapter explores the evidence that relates to the impact and effectiveness of networks and networking for senior leaders and organisations. The research shows that networking can have an impact on an individual, with some lower quality evidence also suggesting it can benefit an organisation more widely. At the individual level, networking can:

- **Enable shared social identity and collaboration** - moderate quality evidence suggests that networking with peers enabled participants to develop their social identity as a leader and to develop social capital (social relationships that have beneficial or productive outcomes), leading to more collaboration and feelings of support. Development of a social identity helps individuals to increase their sense of belonging as part of a management team and creates trusting relationships that facilitate access to new people and organisations.
- **Facilitate information gathering** - there is some moderate evidence that networking and having a network can enable the gathering of information that supports senior leaders in their role. This information can be advice from peers, exposure to information or best practice insights, all of which can benefit both the individual and their organisation by providing support during challenging situations and encouraging innovative behaviours.
- **Provide opportunities for future employment** - there is moderate evidence that networking plays a role in providing access to alternative employment opportunities through introductions to people in other organisations. The perceived assurance of alternative employment options may lead to increased risk appetite that supports organisational innovation.

There is a weaker selection of evidence to suggest that networking may also impact:

- Leader networking behaviours may facilitate greater **investment and capacity for innovation and organisation effectiveness**, assessed by correlational and self-reported measures in the US.
- **Managerial effectiveness**: networking may increase managerial effectiveness at a range of levels, as reported by team members, when the manager was also involved in other external behaviours such as external monitoring and representation.
- **Access to potential organisational benefits** - directors that sit on the board of multiple organisations across sectors may provide organisational benefits such as: serving as sources of funds and human capital to the public sector, providing reputational and marketing benefits to the private sector, and building social capital and trust for both.

For this section chapter, ten papers were reviewed, five of which were from the UK and five of which were from the US, Europe or Australia. Of the ten papers, six were academic articles and four were from the grey literature. Half of the papers were from the public and Higher Education (HE) sectors, while the other half were from the private sector.

3.1 Understanding networks and networking

- Networking - events, both internal and external to an organisation. These typically consist of face-to-face events or meetings that bring together a range of stakeholders. They can be formal, where the sole purpose of the event is to network with others, or informal where networking occurs organically at events held for another primary purpose.
- Networks – social structures based on ‘connections’ made through work, education and socially. This is described as the ‘connectedness’ of a person to others within a network. The network can be drawn upon to enable successful collaboration and outcomes for individuals and organisations.

The evidence reviewed in this chapter aims to consider networks and networking in relationship to leadership development activities. However, as they are both commonly utilised outside of a leadership development context, several of the papers presented do not evaluate networking as a component of leadership development. Instead, they explore the impact and outcomes of networks more generally. The outcomes identified in this review are grouped at two levels, individual and organisational. Individual level outcomes were more commonly identified in papers that were relevant to the research questions.

3.2 Individual level outcomes

3.2.1 Creating a shared social identity and collaboration

Networking appears to encourage the feeling of belonging to a group of leaders that share a common social identity, which can increase social capital and support collaborative working.

Moderate quality evidence by Bolden et al (2008) explores the views of senior leaders in the Higher Education (HE) sector. They identify that networking between individuals in similar roles is important in the construction of a **sense of belonging to the management cadre**. The authors state that a sense of a **common social identity** is said to be necessary for individuals to develop into their role as leaders of the organisation, particularly for academic leaders who are also specialists in a subject area; such specialisms can create barriers to their transition into senior leadership which needs more of an organisation focus. It is concluded that identifying as a leader, and as part of a leadership team, is critical for ongoing leadership development. The research, although HE specific, could be applicable to the NLC context as it could facilitate the sense of belonging to a wider system outside of the individual’s direct specialism.

The NHS Leadership Academy’s Intersect Programme is a leadership development Programme that aimed to develop important leadership attributes of more junior leaders, including social and emotional intelligence, interpersonal relationships and self-awareness. The programme consisted of six residential workshops with online

discussions for 40 participants from public and third sector organisations. A high-quality evaluation (Boyd et al, 2016) found that the **networking that arose through this programme strengthened the participants' social capital⁶** and that this **civic connection** enabled **successful collaboration**. This was evidenced by participant feedback quotes both in relation to ongoing connections with those they had encountered through this programme and to the skills they had acquired to enable better collaboration with other parties. Iles and Preece (2006) also referred to networking as leading to **social capital formation** which provided both organisational and individual benefits in the form of strong ties and trusting relationships that facilitated access to new people and organisations.

This concept is also touched upon in Hawkins et al's (2018) toolkit for managers and leaders of UK Public Service Mutuals, hybrid social enterprises created from existing service providers in the public sector. The research suggests that an individual's outlook is '*likely to be informed by the attitudes and experiences of others in their social network*' (p12) including **their sense of themselves as a leader**. The toolkit goes on to provide case studies and advice on supporting leaders to develop their social network, for instance by:

- encouraging them to maintain 'committed, interactive and profitable exchanges' with internal and external stakeholders;
- recommending a leadership workshop in which participants consider their communities of practice and network of relationships;
- creating a capacity building network for future leaders; and
- developing opportunities for meaningful contact with key influencers.

3.2.2 Networks as a source of information

Networks can act as a forum to gather information, such as advice from peers, sectoral knowledge, and best practice insights; all of which can provide support during challenging situations and encourage innovative behaviours.

The importance of networking as an information gathering tool was identified in UK mixed sector research by Iles and Preece (2006). The North East England branch of the Academy of Chief Executives (ACE) was composed of 10 to 12 members who were experienced chief or senior executives of unspecified local organisations. The high-quality evaluation found that **networking can be a source of advice, information, support and intelligence**. Iles and Preece (2006) categorised this as either '**intra**' or '**extra**' **organisation**. They used 'intra' to refer to knowledge to support participants' own organisational policies and practices such as advice from other members on decisions they need to take. 'Extra' related to extending their organisation's network of contacts beyond their organisation to bring in external expertise and allowing exposure to new information and different perspectives on business matters.

⁶ Social relationships that have beneficial or productive outcomes.

Further lower quality and less relevant evidence comes from research by Faleye et al (2014), which presents correlational data on the link between CEO 'connectedness', a proxy for network size, and their propensity to support investment in corporate innovation. Examining the data collected, they found that better-connected CEOs engaged in increased and higher quality innovation⁷. The authors proposed that access to information via networking is one means of explaining how connectedness relates to innovation. They suggest that the CEOs' connectedness gives them access to information which they can use to identify innovation opportunities (discussed further in section 3.3.1). Similarly, moderate quality evidence from the Performance and Innovation Unit Report (PIU, date unknown) discusses that increased **knowledge of their immediate and wider industries (systems, best practice and theory)** is an outcome that can be developed via networking in public and private sectors.

3.2.3 Opportunities for future employment

Some evidence shows that networks provide leaders access to alternative employment opportunities. The perceived assurance of other employment options may lead to increased leader risk-taking relating to innovation.

Iles and Preece (2006) also explored how networking as part of the Academy of Chief Executives could support the members to **extend their personal networks to further their careers**. Based on semi-structured interviews with the members, they state that an important benefit is related to possible future jobs and how extending their own personal network supports the members to develop their existing careers or gives them avenues to explore careers in other industries. This UK study across various industries is relevant to the NLC context as the networking was available to members as part of regular group meetings.

This individual benefit of networks is also outlined by Faleye et al (2014) who state that CEOs benefit from the '**labour market channel**': the concept that having a network provides '**labour market insurance**' by improving the CEO's prospect of successfully finding alternative employment should their current role end. The authors' analysis of US CEOs re-employment shows that the probability of being re-employed as a CEO rises from 8.1 per cent for those in the lowest quartile based on connectedness to 36.4 per cent for those in the third quartile, suggesting that a large personal network can mitigate the adverse career effects of CEO job losses. They suggest that having this insurance in relation to expectations of speedy re-employment is an individual benefit to the CEOs and allows them to take greater risks in pursuit of innovation. Despite this study taking place in the US private sector, the similarity in the implementation of networks and the value placed in them does not appear to differ significantly across different contexts.

⁷ The analysis controlled for a range of confounding variables that previous research identified as influencing innovation, including; organisation size, firm leverage, growth opportunities, chief executive age and tenure, and operating profitability.

3.2.4 Improving managerial effectiveness

Lower quality quantitative evidence, and less relevant to the NLC context⁸, provided by Hassan et al (2018) explored how **networking, external monitoring** (seeking out external information and people that can support the needs of the organisation) **and representing** (externally representing the organisation to support its interests), relate to managerial effectiveness. These three practices are collectively termed 'external behaviours'. Correlational analysis of the behaviours, as rated by their direct reports, of leaders of various levels of seniority found that '**networking improved managerial effectiveness only when one or both of the other external behaviors (external monitoring and representing) were used to a moderate or high extent**' (Hassan et al, 2018, p 464). The authors suggest that this finding is relevant to all levels of leadership but recommend that further research could be done to fully explore this.

3.3 Organisational level outcomes

There is a limited and weaker evidence base that demonstrates some potential organisational level outcomes associated with networking, including increased innovation and operational performance.

3.3.1 Organisational innovation

A weaker set of evidence suggests that networking may contribute to increased organisational innovation, measured by perceived capacity for innovation and investment in research and development.

Looking at the **public sector in European countries**, lower quality correlational evidence (Lewis et al, 2018) found that leaders of various levels with **higher self-reported levels of external networking were linked with greater innovation capacity**, but that networking has a weaker effect than leadership type, which they categorise into five types based on survey responses: altruistic, entrepreneurial, network governance, transactional and transformational. The various levels of seniority included in the research limits the ability to isolate the finding to senior leaders, as it may be that other levels of leadership play a large role in innovative behaviours.

In the private sector, lower quality evidence analysed self-reported survey data from leaders of various levels in the USA. The survey looked specifically at networking behaviours that were designed to promote product and service innovation which they termed **leader networking behaviours for innovation (LNBI)**, including conference attendance, meetings with people from other departments or divisions, and meeting experts to discuss possible new products. Organisational support for innovation was rated based on self-reports from employees in each work unit. Their analysis suggests **that both senior and junior leader LNBI are positively related to organisational support**

⁸ Conducted in the USA and looking at leaders of various levels. Although unspecified, the findings are most likely to relate to leaders in private organisations.

for innovation (Chung et al, 2020). In another US private sector example, Faleye et al (2014) also found that **better-connected CEOs were linked with greater investment into innovation**. The authors suggest that greater innovation arises from connectedness by two mechanisms: first, the CEOs' connectedness gives them access to information which they can use to identify innovation opportunities and, secondly, the previously referenced (see 3.1.1) labour market insurance effect of a large network reduces the risk of innovation, making it a more attractive option.

3.3.2 Work unit effectiveness

Previous lower quality evidence has shown that networking can improve work unit⁹ performance as operationalised through measures of innovation (Chung et al, 2020). Correlation research from a variety of industries in the USA, explore the impact of networking on work unit effectiveness further, where employees self-reported their perception of the overall quality of work and overall performance of their work unit. Hassan et al (2018) also found that, similarly to improving managerial effectiveness, **networking improves work unit performance** but only when one or both of the other external behaviours (external monitoring and representing) (Hassan et al, 2018) are applied.

3.3.3 Access to potential organisational enablers

Vidovich and Currie (2012) conducted moderate quality evidence that mapped the real interactions between the corporate and the non-profit sectors in Perth, Australia and thereby demonstrated 'the growing interpenetration among the state, the market, and civil society' (p.507). Their method was to identify the high performing companies that have market capitalisation of over 100 million Australian dollars. They cross referenced the directors of these companies to identify if they held directorships at any other private or public sector organisations. Their analysis of the overlap of board members showed that four of the six private sector organisations with the greatest interconnectedness were also in the group with the highest total assets and that all of the non-profit organisations have a link with at least one high performing company. The authors suggest that these findings demonstrate that the connections are a **source of funds and human capital to the public sector**, provide **reputational and marketing benefits to the private sector** and can **build social capital** and trust for both. It was however not made clear how the connections at board level could create these benefits. This paper may be relevant to NLC members as they may have senior staff who are acting as board members in other organisations, and this creates an awareness of the possible benefits.

⁹ the term 'work-unit' refers to the team, department, division, or company for which the immediate manager is the designated leader. Organisational level effectiveness was not measured as not all leaders in the research had responsibility at an organisational level.

4 The impact and effectiveness of peer-to-peer learning

Chapter summary

This chapter explores the evidence relating to the impact and effectiveness of peer-to-peer learning for senior leader development. The most common peer learning activities identified in this review were action learning sets¹⁰ and one-to-one peer support¹¹. The evidence from this chapter illustrates that peer-to-peer activities can result in individual, and potentially organisational level outcomes:

- Peer learning spaces can facilitate the **creation of beneficial relationships and networks**, which may lead to the formalisation of cross system networks to support service resilience. Participating in the **action learning sets can reinforce, or refocus, leader perspectives on collaboration and partnership working**. It is evident that leaders either intended to or actively utilised the relationships formed during learning sets to tackle organisational or systemic issues.
- **Action learning groups and one-to-one peer support provide chief executives and directors with space to reflect** on work and personal matters. Bringing leaders together can enhance self-reflection and provide differing perspectives on issues brought to the group, such as considering their wellbeing and decision-making motivated by a desire to improve their work life balance. **One-to-one peer support enables leaders to explore issues more deeply** than they would in a group setting.
- Both **action learning and one-to-one peer support can facilitate the development and implementation of effective leadership skills** for leaders of various levels. The skills the leaders reported developing were varied, and often closely related to either the programme's or individuals' goals. In particular, the **improvement of communication, team working and strategic thinking appears to be associated with peer-to-peer learning**, which resulted in some behaviour change, such as adopting a different communication style or increased collaboration with others.
- Scantier evidence suggests that individual behaviour change can also result in wider outcomes, such as the development of new programmes or a shared organisational language. Changes in personal communication style could result in more effective workplace relationships and the ability to address strategic level questions at a senior level.
- Weaker evidence predominantly from more junior leaders suggests **an increased sense of personal resilience and confidence can result from participation in the learning sets**. In some cases, this was due to the sense of personal support their peers provided. In

¹⁰ Action learning is a continuous peer learning process that involves a group of peers working together over time to address complex situations. Learning or 'actions' from the group sessions is applied to the real-world context and the results are subsequently reflected on.

¹¹ One-to-one peer support is where support is provided at an individual level by someone of a similar position / seniority. This can be formal or informal, but typically takes the form of coaching or mentoring.

several instances, the increased resilience and confidence led to behavioural changes, such as courageous decision making, which in turn had the ability to influence organisational or system level outcomes.

For this chapter, eight papers were reviewed, six of which were from the UK and two of which were from the US and Europe. Of the eight papers, six were academic articles and two were from the grey literature. Seven of the papers were from the public sector, while only one was from the private sector.

4.1 The impact and outcomes associated with action learning

The impact and outcomes associated with the action learning activities included in this chapter can be conceptualised at two levels: individual and organisational. **Individual level outcomes were more commonly identified in the literature**, and often directly attributed to the leadership development programme by the senior leaders. However, **organisational level outcomes were less commonly identified** and were typically considered a result of the changes made at an individual level combined with contextual factors. Therefore, organisational outcomes were often considered an indirect effect of a leadership development programme.

4.1.1 Creation of individual and system networks

Good quality evidence suggests that participation in action learning sets can facilitate the creation of beneficial relationships and networks, which may lead to the formalisation of cross system networks to support service resilience.

Evidence of moderate quality, although highly relevant to the NLC, from an action learning based programme designed for NHS chief executives who had been in post for over seven years, showed that chief executives who participated in the programme reported that it facilitated a **network of professionals in similar positions**. The evaluation found that working with a group of people in similar roles facilitated an **open and honest environment and created relationships that may be of value in the future** (Blackler and Kennedy, 2004). Unfortunately, details were not provided about the utility of these relationships in the longer term.

Higher quality evidence, although from an evaluation of a leadership programme aimed at more junior leaders in UK adult social care, provides further evidence **that network creation is a positive outcome of action learning based programmes** (Jarvis, Gulati, McCririck, and Simpson, 2013). In this programme, some learning activities involved working in smaller groups designed to develop relationships and consider system or service improvement. **The diversity of peer group participants, in terms of role, sector and organisation, served as a learning opportunity for participants**. The range of expertise was considered to help 'influence participants' behaviour back in the workplace as they became more accommodating of divergent and emergent views' (p.39). As well as influencing individual behaviours, the creation of networks was also thought to have an organisational level impact. Data suggested that the formation of these

learning sets contributed to **shifting informal existing networks to formal, cross-system networks**. The creation of formal networks, rather than informal relationships, connected stakeholders from different local authorities and facilitated the **establishment of more stable networks that created the opportunity for service improvement**. It was concluded that this **contributed to ongoing organisational and service resilience**. The impact of the networking permeated the participants' organisations, as some directors who had not participated in the programme began to appreciate its value.

A higher quality qualitative evaluation was conducted of another NHS intervention, the Nye Bevan programme, which was aimed at more junior leaders who were seeking to apply for board level roles in the near future (Robinson, Tamkin, Carter, Garrow and Varney, 2016). The programme utilised action learning sets, making up nearly 40 per cent of face-to-face time, and required participants to apply the learning to their workplace. The evaluation showed that following participation, **more junior leaders engaged in more system leadership behaviours such as** engaging with the wider health industry through networking or taking on new roles outside their organisation. The programme focus on this objective motivated several participants to behave differently and instigate change programmes, actions participants claimed would not have taken place without the programme. Some **participants engaged with the wider health economy through networking with external stakeholders**, or took on new roles outside their immediate organisation. The programme appeared to **encourage participants to think about their role in the context of the wider system, not just the organisation**. Interviewees also reported that participants were more likely to consider wider stakeholders, such as patients, service users, carers and families of all backgrounds, in their decision making. Some participants had joined or set up networks within or outside their organisation, or said they were now playing a much more active role in external networks (Robinson et al, 2016).

An **increase in networking behaviour** was noted in a lower quality case study write-up detailing the impact of a global action learning programme for 'executive' leaders within an American private healthcare company. This was a programme that aimed to improve 'globalization', innovation, strategic thinking, and communication. The evaluation was presented as a case study, supposedly based on a Theory of Change, and included 360-degree data collected from the participants, peers, supervisors and subordinates. However, limited detail about the methodological and analytical approach to the evaluation significantly reduces the confidence in the findings (Watkins, Lysø, and deMarrais, 2011). As a result of the programme, the authors reported an **increase in global networking**, whereby participants were working with peers across the globe to solve problems, based on the relationships developed on the programme.

4.1.2 Opportunity for reflection on personal and work matters

An action learning space provides leaders with the much-needed space to 'step back' and reflect on personal and work decisions. The opportunity to reflect with a group of peers provides different perspectives to problem solving and decision making.

Lower quality, but highly relevant, evidence from the experienced NHS chief executives programme showed that in line with programme intentions, it provided the opportunity for

them to **'step back' and reflect on personal matters**, such as critical career and work decisions. The programme activities, especially the collaboration with other participants, were reported to have a **positive influence on the job and career decisions made by participants**. In particular, chief executives reported making decisions motivated by a desire to improve their work life balance following their participation, with several managing to achieve this goal. Furthermore, the programme provided the opportunity for chief executives **to reflect on their organisation and the NHS more widely**. This included participants considering their organisation in the wider context of the NHS and taking a more strategic approach to priorities and delivery. However, the **considerable pressure of their day jobs made it difficult for some chief executives to stand back from the day to day**, which limited the benefits of the programme for some. This highlights the complex system in which these senior leaders operate, and the influence that the external environment has on an individual's ability to develop or change. These findings were in line with the intended purpose of the programme, which aimed to 'help participants stand back from the imperatives of the moment and reflect on the dilemmas of their situations in new ways' (Blackler and Kennedy, 2004 p.182).

The evaluation of the Nye Bevan programme found that the learning sets were considered a 'high point' by most programme participants, as **there was a 'collective hunger to learn'** (Robinson et al, 2016 p.28), **and the peer group provided ongoing support and enabled deep self-reflection for more junior leaders**. The programme was based on the principles of reflection, self-managed learning and peer assessment that would enable participants to take responsibility and accountability for their own learning, and to assess and be assessed by their peers in learning sets. The authors concluded that the learning sets were successful in promoting learning and self-reflection in three ways:

- Acting as a forum for effective information exchange and networking.
- As a depiction of the process of developing and maintaining relationships.
- As a group setting which mirrors the workings of a board.

Most participants believed they had developed greater self-awareness, even those who withdrew from or failed the programme.

4.1.3 Improved knowledge and implementation of effective leadership skills

Action learning groups facilitated a better understanding of what effective leadership is and supported the development of a range of leadership skills, such as: teamworking, relationship building, communication and innovation.

The Nye Bevan programme as a whole, which included a significant action learning component, was considered to have **improved participants' critical awareness** of their approach to leadership, biases and attitude to diversity by encouraging a process of reflection. It was also found to **improve their ability to work constructively within a team**, offering and receiving feedback and providing support and challenge to improve individual and team performance. Participants spoke of **thinking much more deeply**

about their teams and their colleagues. Examples included participants engaging more actively with staff to improve their workplace conditions, asking their opinions about services, and encouraging them in their development. Set advisers involved in facilitating learning sets in the programme told how the programme was delivering high quality leaders who champion the patient voice. Participants gave examples of how they **changed their behaviour to be more patient-centred** through embedding values, moving to genuine co-production with service users, and recognising patients as experts in their own conditions. Although it was considered easier for those in patient-facing roles, others created opportunities to shadow people on the front line and to make explicit the links between their own roles and patient outcomes and experience. However, these outcomes could not be isolated specifically to the action learning alone and the programme was aimed at non-board level leaders, so the findings may not be directly applicable to the most senior leaders.

In the UK higher education sector, a Top Management Programme for senior leaders such as Vice Principals, Pro-Vice-Chancellors or Executive Deans, was evaluated using anonymised qualitative data. It is not entirely clear how the data was collected and analysed, and therefore is considered of lower quality (Gentle and Clifton, 2017). The research sought to understand if organisations whose leaders participated in such a programme were more likely to become 'learning organisations'. That is, do the organisations become more able to create and transfer knowledge as a result of senior leader participation. The design of the programme was intended to be an exemplar of the approaches that leaders could adopt in their own organisations to create a learning culture. Action learning sets were a core feature of the programme, where participants brought 'live' issues to discuss with peers. The researchers concluded, based on their observations, that participation in the **action learning sets over time facilitated participants to 'reframe' their issues** to greater reflect the links to elements of the learning organisation; **leaders recognised that they are not the most important agents of change** and that **effective interpersonal relationships underpin learning structures.**

The National Public Health Leadership Institute (PHLI), based in the USA, provided development for senior leaders in the public sector. The programme focused on bringing together participants from multiple organisations due to the importance of collaboration when tackling public health goals. The activities incorporated five learning approaches, including a 'major' team-based action learning project for leaders to address a community health problem in collaboration with their peers. The evaluation was of moderate quality and found that the outcomes most associated with the action learning project were **an improvement in their general leadership understanding** (such as what leadership is, how leadership self-development and collaboration are related to better leadership, and how to lead in one's organisational context) and **improved knowledge and skill development**, particularly in relation to teamwork (Miller, Umble, Frederick, and Dinkin, 2007)

As a consequence of the PHLI action learning project, some participants reported **changing their leadership practices.** These changes included taking on new leadership roles and **leading more effectively, coaching and teaching others and collaborating/partnering with other organisations.** Participants highlighted that

relationships established in the action learning groups **helped them to strengthen their organisation's collaborative relationships** with other organisations – this included developing a new partnership or strengthening an existing one. Partnering with other organisations in relation to public health issues resulted in **new programmes or initiatives being introduced**, which could facilitate system-wide change and public health benefits. However, the impact of the new initiatives was not discussed.

Although lower quality evidence and not as applicable to the NLC context, the American case study previously discussed in section 4.2.2 (Watkins, Lysø, and deMarrais, 2011) also reported a change in leadership practices. Authors reported an **increase in innovative thinking and practices** (a core objective of the programme), and **improvement in communication abilities** (in terms of taking a one-to-one peer support approach to subordinates, recognising others' communication styles and preferences and processing information more effectively). Similarly, a European programme in a private company (although targeting more junior leaders) saw similar outcomes. These included: **more effective communication** (related to understanding different people, the importance of teams, and involvement in change processes), **being more change orientated, thinking more strategically, and collaborating more** – the 'sharing of experience' was highly valued and encouraged participants to continue to find opportunities to learn from one another. Finally, as an unexpected outcome, 'the program **enabled a shared language** across companies and sectors, greater awareness and collaboration, and fostered a regional culture for collaboration' (p.230).

4.1.4 Increased personal resilience

Less evidence suggests that participating in action learning contributed to building confidence and resilience. Increased confidence was shown to influence personal and work-related decision making.

Participation in an action learning based programme led to **increased work-based resilience and determination** for some experienced NHS chief executives. The implications of increased determination were varied, with some examples including chief executives persevering with challenging work projects or remaining in the NHS when they may have otherwise left (Blackler and Kennedy, 2004). Although not explored in the evaluation, it is likely these types of outcomes could positively benefit the wider system as critical skills and experience are not lost. Unfortunately, the specific elements of the programme that enabled the participants to feel more determined are not identified in the evaluation, therefore it is unknown how much is due to peer-to-peer learning.

For senior managers in adult social care, the inclusion of peer learning groups led to a **feeling of continued support** throughout the programme, and a commitment to continue participating in the learning groups following completion of the programme. It was reported that the **relationships formed became a source of personal resilience** for participants, providing strength to have the confidence of their own mind. This could manifest, for example, as an increased confidence to provide their opinion in meetings (Jarvis et al, 2013). Further evidence relating to more junior leaders comes from the evaluation of the Nye Bevan programme (Robinson et al, 2016). It was found that, as a

whole, **the programme (not specifically the action learning groups) increased participant ability to lead with confidence and take courageous decisions and actions** that make the aspirations of the NHS a reality. Several participants reported courageous decision-making as their key ‘takeaway’, for example in dealing with a difficult situation, or showing resilience in the face of complex and long-term activity. However, this finding may be less applicable to the NLC context, as the participants were more junior leaders, and therefore their low confidence may be caused or perpetuated by the senior leaders themselves. Senior leaders may experience fewer internal barriers in relation to their confidence and courageous decision-making.

The evaluation of the Nye Bevan programme considered how action learning may influence behaviour change. As well as providing a group space for reflection, action learning sets can mimic the workings of a senior team in an organisation. Participants may use the action learning space as a safe testing ground for adopting new perspectives and behaviours in an environment similar to their working context. Working with peers, either in a group or one-to-one, appears beneficial to stretch and challenge thinking – particularly, the asking of challenging questions appears to enable leaders to consider alternative perspectives and ultimately unlock solutions themselves. The ability to test new approaches in a safe space can lead to increased confidence before taking these ideas back to the organisation. Furthermore, the process of action learning and one-to-one peer support often mirrors effective leadership behaviours, such as a focus on collaboration, problem solving and reflection; therefore the activities themselves become an exemplar of leadership best practice (Robinson et al, 2016).

4.2 The impact and outcomes associated with one-to-one peer support

Fewer studies explored the impact of senior leader one-to-one peer support, such as coaching or mentoring, with only two studies (both of which were conducted in the UK) meeting the criteria for inclusion in the review. Both studies were based in public or third sector organisations and included either chief executives or director-level leaders.

4.2.1 Space for reflection and strategic thinking

One-to-one peer support appears to provide a safe space, above and beyond that of action learning, to reflect on ‘deep’ issues and consider alternative approaches to work-based problems.

In the first study, a mentoring scheme was established for Directors of Finance in the NHS, lasting between six and 12 months (Stead, 2005). The design of the scheme did not limit activities purely to one-to-one peer support, but also included action centred learning (ACL) workshops and assessed work, which were believed to offer maximum value. The ACL approach aimed to offer a collective forum for peer support, in addition to the one-to-one peer support sessions. Mentors, typically experienced Directors of Finance, went through a process of training and were carefully matched to the programme participants based on mentee needs; one-to-one peer support sessions were scheduled for every four to six weeks. The evaluation was of moderate quality and found that mentors and

mentees felt **the action centred learning principles that underpinned the one-to-one peer support fostered an environment for reflective and critical thinking**. The mentors also noted that the principles encouraged **mentees to acknowledge their own resourcefulness and agency**, in so far as understanding they have the personal resources to deal with their own problems and issues. The one-to-one nature of the relationship facilitated a level of intimacy that enabled mentees to **discuss 'deep' issues that they were unlikely to raise in a group session**. This was more common if the mentor was willing to listen and commit time to the relationship. The 'deep' issues often related to complex organisation matters, such as organisational restructuring, which could often be sensitive and political in nature. The sensitive and complex nature of the issues did lead to additional stress experienced by the mentor, highlighting the need to consider the support needs of the mentor in senior level schemes. A further benefit identified was **the flexibility to adapt the one-to-one peer support content to the current context**; as the sessions were led by the needs of the mentee, they could use the time to address 'live' issues. Evaluation evidence showed that the content of the one-to-one peer support sessions was often changed if a current issue presented itself (Stead, 2005).

A further lower quality study explored the impact of a pilot 'cascading leadership' programme, a one-to-one peer support scheme for third sector CEOs, designed to utilise peer learning to increase organisational effectiveness and develop strong leaders from within the sector. Thirty CEOs were involved in the pilot, half of whom were 'clients', and half 'consultants'. Although not explicitly defined in the paper, the development activities would commonly be described as peer coaching. The consultants received training before providing consultation, underpinned by 'relational' principles, meaning they should support clients to find their own solutions rather than giving direct advice. Both clients and consultants were expected to benefit from involvement in the scheme. An independent evaluation assessed the immediate impact of the pilot (Lewis and Davis, 2016), although was considered of lower quality due to the lack of methodological and analytical detail provided. Similarly to the previous study, the **clients appreciated the time out from the pressures of their day job to reflect on key strategic questions and organisational priorities**. Moreover, the clients felt that the **challenging questions asked by the consultants prompted them to take a 'fresh view' on the organisational strategy and priorities**, leading them to think about the development of new work approaches eg the formation of a management team. The consultants also benefited from this questioning style and reported **asking more challenging questions in internal and external meetings**. The process of reflection and strategic thinking was enhanced by the peer-to-peer nature of the intervention; the consultant being a peer CEO legitimised the support they provided as they had shared similar experiences. Furthermore, utilising experience from within the third sector, rather than seeking external support, was thought to contribute to capacity building within the sector.

4.2.2 Leadership skills development and organisation effectiveness

Similarly to action learning, one-to-one peer relationships can support the development of leadership skills, particularly related to communication, which may improve perceived leadership capability.

The lower quality Lewis and Davis (2016) study reported that participants had also developed their leadership skills. Clients reported developing their professional skills during the pilot, however the specific skills addressed were different for each client as the sessions responded to their particular needs. Examples of the skills believed to be improved included: **communication skills, problem solving and confidence/self-belief**. Clients reported some workplace changes had occurred as a result of the skill development, such as: the numbers of funding applications submitted; the evaluation tools used; and the development of effective policies. **Some clients also felt that their management and relationship skills had developed, leading to building stronger staff relationships**. As a result of the skill development, some felt that their personal changes subsequently **improved staff confidence and competence**, which had a positive impact upon organisational effectiveness. Additionally, some clients believed they **developed more effective and positive relationships** with their boards and chairs, and as a result saw an **increased ability of the board to address key strategic questions**. For consultants, they believed that their coaching skills were stronger as a result of the pilot. They felt some organisational practices were now stronger as a result of adopting a coaching style (Lewis and Davis, 2016). As a pilot, at least two consultancy sessions were experienced, but the support was not intended to be long-term. However, the short-term nature of the intervention casts some doubt about the sustainability of the findings. Additionally, while the independent evaluation is positive, the evaluation method is unspecified, which creates further concerns about the validity of the findings.

5 Leadership development delivery methods

Chapter summary

This chapter analyses the evidence on the impact and effectiveness of other delivery methods, in addition to peer learning and networking, for the leadership development of senior leaders. The methods included both face-to-face taught elements (eg seminars, lectures, workshops and residential), online learning (eg webinars, online discussion forums) experiential learning (eg simulation or in-work learning) and blended methods.

Most interventions found in the literature used a **range of delivery methods, which was considered most conducive for influencing effective leadership development.**

- **Input from experts** - experts provide leaders with new knowledge and reassurance, ideas to influence their leadership practice, and an opportunity to widen their network. However, the quality of the speaker and the content is a significant factor that influences leader satisfaction. A mix of theory and practice appears to be favoured, with repetitive or 'my journey to the top' content being received more negatively.
- **Residential programmes** - leaders of various levels value a residential element for providing a 'protected space' for reflection and networking. The intensity of residential components is predominantly considered a benefit, particularly the time it provides to work with a group of peers. The time for reflection and reflexivity can lead to feelings of calm and improved confidence, thereby improving leadership practice. However, the time away from home was considered a barrier for some.
- **Experiential and on-the-job training** – senior leaders reflecting on their most influential learning experiences across their career believed that work-based development was the most beneficial, particularly in developing strategic thinking. Experiential and 'real life' training is considered of more value than traditional taught or academic approaches.
- **Online versus face-to-face development** – not enough evidence was found to ascertain senior leader preference, or the effectiveness of activities delivered virtually compared to face-to-face.
- **Multiple delivery methods and difficulties isolating impact** – most development programmes consisted of multiple learning methods and evaluations typically did not attempt to separate out impact for the different components. Overall, the evidence suggests that programmes would have been less effective without a complementary mix of activities, and it is the cumulative effect of multiple development methods that adds most value.

For this section of the review, 12 academic papers, eight of which were from the UK and four of which were from the US, were included with a mix of private and public sectors represented. These articles were supplemented by eight papers found in the grey literature, all of which examined training programmes for senior leaders from the UK public sector.

5.1 Residentials

Senior leaders value the use of residentials in leadership development as they offer space away from the day job to think deeply, reflect on their work issues, and network with others. However, the time away from home was found to be a barrier for some leaders.

A high-quality evaluation of the NHS Leadership Academy's Intersect Programme identified positive reactions to the use of residentials (Boyd et al, 2016). The Intersect programme was targeted at leaders across the public sector who were already in, or close to, executive roles, and who had cross-sector experience and influence. The aim of the programme was to improve 'systems leadership' by developing social and emotional intelligence, promoting more effective interpersonal relationships within the workplace, and increasing self-awareness and reflexivity. It did this through group exercises and taught elements delivered in six 3-5 day residential workshops over a 12 month period, alongside facilitated online discussion. In terms of reactions to the programme, **participants valued the 'protected space' of the residential element, which offered a chance to think deeply and reflect on work issues alongside others in the cohort.** The evaluation also identified the impact of the programme; **the surveys showed significant changes in self-assessed measures of emotional intelligence, transformational leadership and civic capacity** for programme participants. Data from interviews reported that **participants had gained insights into their leadership behaviours and the confidence to engage more in the leadership of systems.** Furthermore, a follow-up survey provided further high quality evidence that these benefits were sustained and insights into a causal chain were identified; participants reported a greater ability for reflection and reflexivity, leading to feelings of calm and improved confidence, thereby improving their leadership practice (Boyd, Nelson and Shawhan, 2017). However, while the reactions to particular components such as residentials were favourable, participants could not attribute particular changes in their attitudes or behaviour to individual elements and instead attributed change to the programme as a whole (see section 5.6 below).

Another moderate quality study evaluated the Leading Powerful Partnerships programme, a five-day residential programme delivered by the National College of Police Leadership for multi-agency leaders in senior roles (Meaklim and Sims, 2011). The aim of this programme was to 'release innovation, strengthen personal power and enhance partnership working' (Meaklim and Sims, 2011, p.22) and to enable participants to understand leadership within the context of the 'Big Society' and increasingly austere financial times. The course elements within the residentials included simulations based on case studies where individuals planned how they would approach a challenge (such as reducing child poverty), alongside other exercises and expert inputs from both academia and practitioners. According to the authors, the **participants welcomed the intensity of the five-day residential programme, and valued working closely within a syndicate group of leaders.** Some interviewees reported **longer-term benefits, including improved confidence in themselves and in their ability to work in partnership with others.** Some participants attributed this increased confidence and improved partnership working to spending increased time with partner members and better understanding of their cultures, while others attributed it to having the space and time to reconnect with

their own skills and abilities. However, it was not clear how senior the programme delegates were.

A further higher quality evaluation was conducted of a leadership development programme for senior managers working in adult social care in the UK, (discussed in section 4.1.1), comprising of a launch day and three residential blocks each three days long (Jarvis et al, 2012). The paper identified participants' reactions to residentials, which were seen as **challenging and demanding but providing a safe space for discussion and reflexivity**. However, as previously discussed, the programme was not aimed at chief executive level, with some participants expressing frustration that their chief executives blocked the application of their learning when back in the day job.

A moderate quality evaluation, drawing on the perspectives of four delegates and their colleagues, was recently conducted on Advance HE's Top Management Programme (TMP), aimed at executive team members in higher education providers (McCracken, McCrory, Farley and McHugh, 2019). The programme consisted of three residential weeks, designed to equip senior leaders with the necessary skills to extend thinking and practice, and to face the challenges of HE leadership. It is delivered using a cohort structure over three residential weeks. While the evaluation did not specifically isolate the impact to the residential structure, the overall programme was found to encourage reflection about an individual's personal leadership style, stimulate innovative and strategic leadership behaviours and develop communication and decision-making skills. One example of leadership change following the programme, identified by a participant's colleague, was a participant who was instrumental in promoting a strategy to ensure all teaching within the university was underpinned by robust research. Other specific examples of improved leadership practices were given by colleagues of the participants, such as using **better soft skills when dealing with staff and thinking more strategically**. The authors described how these improvements were related to the confidence developed and reassurance offered through the TMP, as well as through delegates being encouraged to experiment and having a safe space to reflect.

When considering the use of residentials with senior leaders, or staff at any level, it is important to balance the positives of this approach alongside the negative of time spent away from home. Moderate quality research identified **that residentials can be a double-edged sword for participants**. While the intensity of the experience was valued by many, the **length of time spent away from home was one of the most commonly cited negatives** and some found that during the residentials there was insufficient free time to think and reflect. (Campbell, Stewart and Kodz, 2011).

5.2 Input from experts

Expert input provided senior leaders with knowledge on topics they could then take back to their organisations, and reassurance that they were already taking the right approach, as well as an opportunity to widen their networks. However, one paper found that content focused on a 'senior leader journey to the top' was not as well received.

Two of the higher quality academic papers identified used data from the same study evaluating the Academy for Chief Executives in the North of England (Iles and Preece, 2006; Preece and Iles, 2009). In this intervention, chief executives and aspiring chief executives of local organisations (their sector was not specified) were invited to become members of the Academy, which held monthly meetings rotated around the members' premises. Each meeting lasted for a day, and usually began with an expert 'speaker session', centred around a business topic, followed by a discussion session. Once a year, members attended a two-day residential 'retreat', which allowed for discussions, presentations and networking. The evaluation was of higher quality and found that **members valued the speaker sessions, and the input they received from these 'recommended' experts**. They appreciated being exposed to new or different perspectives on business matters and/or being offered reassurance on the approach they were already taking in their organisations. In addition to being able to network with other members, they appreciated being able to widen their network with the invited speakers. Further feedback showed there **was a preference for presentations mixing theory and practice**. Members valued presentations that included theory, as this helped them to justify actions in their organisations, but also needed the presentations to be relevant to practice (Preece and Iles, 2009). However, neither of these papers discussed any of the impact of the speaker sessions.

In the evaluation of the Leading Powerful Partnerships programme (described in section 5.1), as well as appreciating the residential element and working with a syndicate group, **participants found the challenges from panel members (senior leaders from the private and public sectors, and academics) worthwhile and thought-provoking** (Meaklim and Simms, 2011). However, as above, the impact of these sessions on individuals was not considered.

In some of the programmes targeted at leaders working at the next level down in seniority, such as those hoping to apply for the top posts, invited speakers included those working at the most senior level. For example, Advance HE's Top Management Programme included sessions with visiting vice chancellors, which some participants found **influential in shaping their leadership behaviour** (McCracken et al, 2019). The colleague of one programme participant remarked upon the participant's improved ability to use 'soft power' to ensure resource allocation meetings were harmonious and less adversarial. Reflecting on this, the delegate explained that the visits from vice chancellors had helped her to challenge the common underlying assumption that senior leaders should always be very influential in terms of leadership. Another delegate believed that engaging with visiting vice chancellors and other guest speakers on the programme had emphasised the importance of focusing on core strategic objectives, as well as the importance of having a very clear 'operational oversight' which could enhance his own leadership practice.

For senior police officers, the **quality and experience of speakers was regularly cited as one of the greatest positives of the course and officers valued having the opportunity to learn from senior leaders** (Campbell et al, 2011). However, some interviewees thought that the quality and experience of some of the speakers could have been higher, and that a better range of guest speakers would have been useful. Further low-quality evidence found that expert speakers who just reflected on their own

experiences did not contribute to learning (HMICFRS, 2019). This highlights the importance of getting the right balance of speakers and ensuring that they can offer something over and above any others that are invited.

5.3 Experiential learning

Leaders of various levels believe that work-based learning is most beneficial for their development, particularly in relation to developing their strategic thinking capability. In some cases, leaders preferred the use of simulated work situations, rather than real life, to provide a wider range of experiences.

5.3.1 The role of on-the-job training in the journey to the top

Two studies, one from the US and one from the UK, asked those in the top jobs in healthcare organisations to rate their previous experiences at work in benefitting them in their current senior level roles. In both cases, the senior leaders were encouraged to include experiences spanning several years, including prior to their appointment to the top role. As such, these studies did not specifically focus on programmes or interventions aimed at the most senior leaders in public services. Nevertheless, both studies highlight the value placed by senior leaders on on-the-job, experiential learning over formal training.

A moderate quality study from the UK interviewed 20 current and two former NHS chief executives who started their careers as doctors, in order to understand their career paths and the facilitators and barriers encountered along the way (Ham et al, 2011). The training and development accessed by medical leaders en route to becoming chief executives was highly variable.¹² The study found that most **interviewees valued learning on the job above taking part in formal programmes**. Nonetheless, given the responsibilities of NHS chief executives and increasing public scrutiny of performance, **many felt there should be more professional training and development at the start of their leadership journey than they had been offered**.

The other moderate quality retrospective study was carried out in the US, and surveyed senior leaders in healthcare to identify the specific experiences that contributed to their ability to think strategically (Goldman et al, 2009). This found that **on-the-job experiences were rated above formal learning experiences** in contributing to strategic thinking. 'Serving as CEO of an organization', 'handling a substantial threat to organizational survival', and 'starting a major organizational project' were all rated higher than other learning experiences in contributing to strategic thinking. However, education-related experiences, ranging from a master's in business administration degree to military training, were considered to play a part. Another finding related to the role of conferences

¹² Including a master's degree in medical leadership, executive programmes run by business schools, leadership programmes offered by the British Association of Medical Managers and, for two participants, the Aspiring Chief Executive programmes organised by Strategic Health Authorities. Aside from the latter programme, it was unclear from the paper at what stage in the participants' careers they had undertaken these other leadership programmes.

and reading activities; nearly all of the respondents reported undertaking these activities and ranked these as moderately high in importance, but not as high as any of the work experiences. Overall, there were higher ratings for sector specific conferences and reading activities; non-sector specific contributions were seen to make only an average contribution to the ability to think strategically and received the lowest rankings in the entire survey (although 40 per cent of respondents placed high value in receiving experiences presented by other industries).

When considering skill development, aspiring senior police leaders believed that the **key skills for senior roles were learned through experience on the job** and through both positive and negative role models, although they also thought additional development was gained through training and other leadership development interventions. In particular, **'acting up' experience** (ie temporary promotions) was commonly cited as **the best preparation for a senior police leadership role** (Campbell et al, 2011).

5.3.2 Simulation activities

Simulation activities used in leadership development are learning activities that are designed to reflect a real situation or system. Only one study was identified, from the UK, which evaluated a programme including a simulation exercise for senior leaders, although as it took place in the private sector it is less applicable to the NLC context (Gordon, 2013). This looked at the impact of a leadership intervention for small and medium-sized enterprise (SME) owner-managers in the private sector, where the delegates were asked to simulate (ie play the part of) being a non-executive director (NED) in other delegates' businesses and being the host in their own company to a network of other NEDs. The simulation activity was designed to support the implementation of corporate governance in SMEs and help the owner-managers to become better strategic leaders.

A small, low quality evaluation of the programme found that the **programme had impacted considerably on their personal development and strategic thinking** (Gordon, 2013). Some of the personal benefits included **increased self-confidence and a willingness to share** what really worried them. In addition, participation in the programme allowed owner-managers space for **self-reflection**; both the meetings and the process of preparing were acknowledged as providing clarity on issues previously not fully understood. Other impacts reported included **adopting some of the processes co-developed within the cohort**. The participants also reported benefits of the programme at the organisational level. Owner-managers told how the programme helped sustain their business through a difficult financial period. One business was on the verge of going into receivership when two delegates helped work on a plan that saved the company. In another company, the owner-manager told how the programme helped his business to stay resilient by providing an opportunity to consider the best way forward.

Lower-level leaders also valued 'real life' development scenarios. Aspiring senior police officers value development that imitated real experience (Campbell et al, 2011). In particular, **a real-time, scenario-based training session with live data was highly regarded and received some of the most positive feedback** on course content. Similarly, in IES' evaluation of the NHS Leadership Academy's Nye Bevan programme,

many of the participants appreciated the simulations that formed part of the programme (Robinson et al, 2016). Participants felt that the Nye Bevan Programme had really helped prepare them for real life situations.

5.3.3 Addressing real workplace issues in learning

In two of the papers, the authors discussed the deliberate use of real work issues in the programmes. In the Leading Powerful Partnerships programme, course delegates were required to complete a project on a relevant issue facing their organisation, which was written up into a 3,000 word paper and presented to a panel for scrutiny. The emphasis of the project element was on seeking out appropriate research and reflecting on the topic in such a way as to find greater understanding and applicability to the workplace. The majority of **participants found the project element of the programme challenging, but commented on its usefulness in terms of evidence-based decision making** and the skills developed through putting together their argument in the paper and in a presentation (Meaklin and Sims, 2011). However, in a lower quality evaluation of a leadership programme aimed at faculty leaders in a US university, there were some negative comments regarding the focus on real work problems (Myrsiades, 2001). Some thought it would be **better to focus on case studies rather than actual work problems as this would allow them to have a more widely ranging discussion** and see the sort of problems faced by other universities.

5.3.4 Secondments and work experience

Senior policing officers, alongside work experience opportunities within their own service, **highly valued secondments and short-term placements in other organisations** (Campbell et al, 2011). Many said they would have valued more opportunity for these earlier in their career. Some of the interviewees had worked or shadowed others in another organisation or force, either as part of a short placement or for a longer period. The majority of interviewees believed these experiences helped develop skills and knowledge relevant for senior policing roles.

5.4 Online and distance learning

Only two papers were identified that looked at online or distance, a method of learning that fully, or predominantly, takes place in a virtual setting, so there was little evidence to identify how well this works.

A voluntary two-year **distance learning further education programme for senior military leaders in the US was found to improve respondents' cognitive ability to perform complex functions** such as long-term planning, boundary spanning, and network development, all of which are vital for strategic-level policy and decision making (Myers, 2008). The further education programme was aimed at the top 20 per cent of senior leaders in the US military and included 12 courses online, to be completed independently, and 2 two-week summer residential courses consisting of lectures and seminar discussions. The impact of the programme was measured using a high-quality

research design. **Valued aspects that emerged from the research included the wide range of online curriculum materials, and the online forum discussions.** The data indicated that the respondents found that online curriculum materials, online forum discussions, and their ability to apply the curriculum materials to their personal leadership experiences significantly contributed to their cognitive development. **The authors argued that the online nature of the distance programmes allowed a greater range of information sources to be used.** They concluded that the programme presented a flexible educational system that was able to facilitate lifelong learning whilst at the same time accommodating leaders' competing professional and personal demands. However, the research on cognitive development did not separate out the in-person elements of the course from the online elements, so it is unclear how effective the online elements would have been without the residential blocks included. Although the further education element of the programme is not directly comparable with the NLC, the research does offer some evidence about the utility of online platforms for senior leader development.

By contrast, in the evaluation of the Intersect Programme in the UK which also included an online discussion forum, there were mixed views over how well the online component had worked (Boyd et al, 2016). As part of the programme, weekly online discussions were held in between modules using the NHS Leadership Academy's online system or 'Virtual Campus' faculty initially, and then delegates took it in turns to share a 'provocation', which could be a challenging issue, question or insightful experience for others to respond to. Whilst some participants in the evaluation liked the Virtual Campus, **many found the online engagement difficult**, due to IT issues, inability to navigate the website, there being too many provocations or a lack of time, and a perceived lack of engagement by other delegates. The evaluation team monitored the **engagement of participants in these online discussions and found that initial enthusiasm was not sustained**, and involvement reduced over time.

5.5 Outcomes associated with different delivery components

The US-based National Public Health Leadership Institute (PHLI) yearlong leadership development programme targeted senior public health leaders, is described fully in section 4.2.4 (Miller et al, 2007). The evaluation of this programme was of moderate quality, but was unique in that it set out to understand how learning methods work individually and together to produce outcomes for participants. The authors recognised (mirrored by the evidence found in the literature) that studies tend to either emphasise results with only a brief description of the programme or present a full description of the programme with only brief results.

In terms of satisfaction with the different elements, the category of **assessment tools and coaching was consistently ranked highest, followed by the skill-building seminars, the action learning project, textbooks and readings, and distance-learning conference calls.** In terms of outcomes, the evaluation found evidence through the survey that the PHLI led to changed leadership understanding, knowledge and skill development, increased confidence, increased self-awareness, leadership practice changes, and organisational results. For the most part these were linked to the action

learning project and the assessment tools and coaching. **The assessment tools and coaching were most often associated with increased self-awareness.** However, some linked their **increased awareness of their own leadership style and increased confidence to skills building seminars.** Also, where **knowledge and skill development were discussed by a small number of participants, these were related most often to skill-building seminars.**

Small numbers of participants reported changed leadership practices in relation to specific course components. Where **improved communication within and outside their organisations was discussed, this was most often within the context of the skill-building seminars and assessment tools and coaching.** A small number of participants also **linked coaching and teaching others in their organisations to the skill-building sessions, while four linked this to the learning project.** In terms of further benefit, at the organisational level, several participants attributed some general organisational benefits such as development of job descriptions, better coordination among departments, and improved employee engagement with skill-building seminars.

Another important finding from this evaluation was that textbooks and readings were rarely mentioned in conjunction with outcomes. This echoes the findings described earlier in the study by Goldman and colleagues, which found that readings were seen by healthcare chief executives as less likely to be linked to their development of strategic thinking than other learning activities (Goldman et al, 2009).

5.6 Difficulties isolating impact

As stated at the beginning of this chapter, all the papers included in this element of the review consisted of multiple learning methods and most did not attempt to separate out impact for the different components. The evaluations often asked about reactions to different elements but then looked at impact overall. Where some attempts to ask participants to separate out impact were made, it was often very difficult for participants to do so. (Miller et al, 2007; Boyd et al, 2016; Boaden, 2006). Different learning methods were seen to build upon and complement each other. For example, an action learning project helps leaders to understand and apply insights from a particular seminar or leadership style assessment. Overall, the evidence suggests that programmes would have been less effective without a complementary mix of activities, and it is the cumulative effect of multiple development methods that adds most value.

6 Productivity and “trickle-down effect”

Chapter summary

This chapter focuses on the impact of leadership development on productivity outcome, and the extent to which this results in productivity gains amongst their direct reports, ie the “trickle-down effect”. Despite extensive searches, very little evidence on these topics was found for the most senior leaders, with no papers exploring the impact of senior leader development on productivity. Based on reflections from evidence reviewed throughout this report, there may be several reasons why productivity did not appear as an outcome of interest:

- **Short time frame of most evaluations** – productivity gains are likely to happen over a long period of time, however many of the papers observed outcomes in a relatively short timeframe, therefore are unlikely to observe productivity changes.
- **Measuring public sector productivity is complex** – with different output measures to consider for each service area of the public sector, the task of calculating productivity may be too complex to consider for some evaluations.
- **Indirect effect of leadership development** - many internal and external factors contribute to the organisational productivity, therefore limiting the direct influence a senior leader can have. Attributing productivity outcomes to a specific development intervention may be unachievable.
- **Lack of focus on senior leaders** - with more papers relating to more junior leaders, it could be argued they have less influence over productivity and therefore is a less relevant outcome measure.

The review identified a small amount of lower quality evidence on the wider trickle-down effect following senior leader development activities, suggesting that:

- leaders share their learning following participation in leadership development.
- leader networking behaviour can influence employee support for innovation further down the hierarchy.

During the search, higher quality papers were identified that looked at trickle down relating to more junior leaders. Although not the focus of the search, there was limited evidence of:

- Cascading and transfer of learning from programme participants to other team members, particularly around working more effectively as a team.

However, without a further review aimed at more junior leaders, it is unknown how well these represent the wider body of evidence on the impact of leadership development. In this chapter, two papers are discussed in relation to the lack of evidence regarding productivity and three relating to trickle-down effect. All three papers for the trickle-down effect explore more junior leaders, two of which are from the UK public sector and one of which is from the education sector in the US.

6.1 Definition of productivity

According to the Office for National Statistics (ONS), public sector productivity is ‘*the measure of how many units of output are produced from one unit of inputs, and is calculated by dividing total output by total inputs*’¹³. Inputs include labour, goods and services and capital that are required to produce a public service output, such as healthcare services or teaching. Therefore, different ‘service areas’ (eg healthcare, education) within the public sector will have different output measures. The ONS provide a methodology for calculating productivity for each services area and an at aggregate level, but is it complex¹⁴. When searching the literature, productivity did not feature as an outcome measure for any of the evaluations of senior leader interventions development.

6.2 Lack of focus on productivity outcomes

The reasons for the evidence gap concerning productivity were not identified or discussed in the literature we obtained. However, based on reflections of the evidence base as a whole, there are several probable reasons for the evidence gap.

One of the reasons for a lack of evidence related to productivity is undoubtedly the overall **dearth of literature for senior leader development in the public sector**. There does appear to be a wider gap in evidence on organisational impacts across the wider body of literature on leadership impact (Avolio, Reichard, Hannah, Walumbwa and Chan, 2009). This meta-analysis assessed the causal impact of 200 leadership interventions, of which only two provided sufficient data to calculate an effect size for organisational performance, measured using profitability data (productivity was not calculated).

Other possible reasons for the lack of evidence at this level concern the **challenges for researchers in designing appropriate methodologies to measure productivity**. As discussed, measuring public sector productivity is complex, especially as it is measured in different ways depending on the ‘service area’ eg healthcare, education. In the private sector, measuring productivity is relatively straightforward as outputs are financial¹⁵. In the public sector, senior leaders will have a range of output goals for their organisation that do not have a ‘price’. As public sector leaders are not typically responsible for raising revenue, it is especially difficult to calculate the impact of leadership development even though it may be possible to measure changes in leadership style and skills (Horton, 2009).

Furthermore, **many of the studies found for this review had a short time frame**, and it is likely that a longer time frame is required for any impact on productivity to be observed. It may be that impacts for senior leaders, which by their nature involve multiple processes

¹³<https://www.ons.gov.uk/economy/economicoutputandproductivity/publicservicesproductivity/methodologies/sourcesandmethodsforpublicserviceproductivityestimates>

¹⁴ Ibid.

¹⁵ <https://blogs.lse.ac.uk/politicsandpolicy/understanding-public-sector-productivity-%E2%80%93-the-lse%E2%80%99s-simple-guide/>

and individuals, take longer to occur than for more junior leaders. In the meta-analysis described above, the impact of leadership development was seen to be stronger for lower-level managers than those more senior (Avolio et al, 2009). The authors speculated that this was due to the short time scales of these studies, as impacts on more senior leaders may be more complex and take longer to be actualised.

Finally, it is important to remember that **leadership development does not occur in a vacuum** and the organisational impact of such programmes is not considered to be linear by many of the authors included in this review. In terms of the mechanisms for change, many papers suggest that senior leadership development activities can alter leadership behaviours, and the change in leader behaviour can subsequently have a wider organisational influence. However, many other organisational and external factors will play a role in the implementation and success of any changes initiated. In recognising this, many papers adopted a qualitative approach to understand the outcomes and mechanisms of senior leader behaviour change, rather than to prove a “cause and effect”. Similarly, **senior leaders do not have direct control over every element that contributes to their organisation’s productivity**, therefore the influence of other contextual factors may influence productivity outcomes regardless of the effectiveness of a leadership development programme on the individual.

6.3 Evidence of the trickle-down effect

The papers found on the trickle-down effect did not look at the gains of direct reports following a senior leader development programme. Rather, they looked at the cascade of learning and behaviour from senior leaders down to those lower in the organisation. Whilst they did not discuss impact, they did indicate how that impact might be achieved.

In a small moderate quality qualitative evaluation of the Intersect Programme, targeted at leaders across the public sector in the UK, participants described sharing their learning with colleagues in their own workplace (Shawhan et al, 2018). In addition to a change in their own leadership practice, there was a ‘ripple effect’ of the learning to their peers, where participants deliberately passed on their learning to others, which the authors saw as increasing any ‘return on investment’ for the sponsoring organisation.

In IES’ higher quality evaluation of the Nye Bevan programme, aimed at senior leaders aspiring to board positions in the NHS, learning set advisers who facilitated the programme described the ‘powerful ripple effect’ it had throughout the system (Robinson et al, 2016). One advisor described programme participants as becoming more action-orientated, listening more and being more conscious of the emotional temperatures of colleagues. The set advisers thought that the programme impacted the wider health system by contributing to succession planning within the NHS by and delivering high quality leaders who champion the patient voice. Whilst the evaluation described programme participants as being more patient-centred, it did not detail how the programme trickled down to their direct reports.

Evidence from a lower quality mentoring study also found that as a result of CEO’s development, they could observe increased confidence and competence in their staff. This led to ‘increased organisational effectiveness’ (although how this manifested was not

specified) and improved ability of the board to answer strategic questions (Lewis and Davis, 2016).

Lower quality evidence from a US technology firm looked at the impact of Leader Networking Behaviour for Innovation (LNBI) on employees' perceptions of organisational support for innovation (Chung et al, 2020). It looked at levels of LNBI carried out by managers, such as 'attending a rapid brainstorming session at lunch', 'attending a seminar or course that would jumpstart my knowledge', or 'attending a conference'. The large cross-sectional study, found that that senior leaders' LNBI influences unit-level support for innovation through influencing junior leaders' LNBI. Whilst this study did not examine the impact of networking on innovation itself, the authors expected this to occur as previous research has found a link between perceptions of support and objective measures of innovation. Another finding was that innovative behaviours were increased when junior leaders and senior leaders perceived themselves as sharing similar demographic characteristics as one another. Perceived similarity was thought to facilitate interaction up and down the hierarchy and increase the likelihood of junior managers role modelling senior leader behaviour. The authors highlighted the importance of diversity training and a positive diversity culture in organisations, as this will help reduce any potential tension and conflict between managers and employees who perceive themselves as demographically different, and therefore maximise the effects of any manager networking activities.

A further lower quality evaluation of a leadership programme aimed at senior leaders in Higher Education sought to identify if the organisations whose leaders participated in the programme were more likely to become 'learning organisations' that demonstrate an increased ability to create and transfer knowledge. However, despite the programme including specific design features to facilitate collective learning, intended for participants to replicate in their organisations, there was very little evidence that this replication occurred. Anecdotal evidence collected via informal conversations suggested that this may have been due to the programme not making the transferability of the activities and approach explicit to participants (Gentle and Clifton, 2017).

6.4 Evidence from less senior leaders

Whilst some studies examined the impact of leadership development on more quantifiable measures such as profit and cost savings, these were for more junior leaders in the organisation so not the population of interest in the review. Considering that the overall evidence base is limited, the following papers are discussed in detail as they provide insight into the mechanisms by which improved productivity and trickle-down may operate following a leadership development intervention in the UK public sector.

The most relevant of these was a moderate quality evaluation of a bespoke leadership training programme for middle managers in a UK local authority (Dexter and Prince, 2007). This programme was tailored to reflect the council's Leadership Charter, which required that managers demonstrate effectiveness in seven key areas: providing vision and direction; managing performance; planning and reviewing activities; developing people; developing themselves; communicating effectively, and; demonstrating integrity

and commitment. The training consisted of 360 degree feedback followed by four modules covering leadership, self-management, managing others, operational and quality management and public sector management. The qualitative evaluation of the training, which sought feedback from 32 middle managers who completed the training, found that most could report evidence of individual and organisational benefits including: better processes and **project management; more effective team working; developing networks and collaborative working; and improved self-management**. One strength of this study was that it included interviews with line managers as well as course delegates, so did not rely solely on self-report. In terms of productivity, two examples of financial impact were detailed in the paper. One came from a line manager who saw that his subordinate had grown in confidence following the programme. This enabled him to manage more high level work including a review of the department's processes to identify areas for cost efficiencies, which in turn led to 'hundreds of thousands of pounds' (Dexter and Prince, 2007, p.222) of cost savings for the council. Another line manager told how, following the programme, his subordinate 'grabbed hold of strategic thinking and the tools that were offered throughout the programme' and used them to good effect. **He produced and used a solid business plan which significantly increased revenues and generated a profit for the council**. Since improving the finances of the council did not appear to be an explicit aim of the training (at least as far as was detailed in the paper), these are two examples of unintended impact, whereby an improvement in individual leadership skills following the programme led to further benefits for the organisation.

The same study provided information on the trickle-down effect of leadership development from middle managers to their direct reports. One of the line managers told how his subordinate (a middle manager) had **cascaded his knowledge from the programme to those in his team**. The middle manager was described as lacking confidence and being indecisive prior to the programme, which had spread through his team. Following the programme, the middle manager realised he was a valued member of the team and started 'thinking about others and empowering people' (Dexter and Prince, 2007, p.223). He introduced regular team meetings and became more involved with training, using and cascading his knowledge from the programme on areas such as quality systems and customer focus. This in turn 'enabled us as a group and them as a team to do all that work stress-free' (participant from Dexter and Prince, 2007, p.223). Some of the specific training and development activities undertaken on the programme, eg on giving and receiving feedback, were used by the middle manager in his own team training events.

Another relevant high-quality example looked at the 'ripple effect' that graduates of a one-year medical education faculty leadership development programme had on their peers and supervisors in a US university setting (Goldman, Wesner, Plack, Manikoth and Haywood, 2014). Through interviews with supervisors and peers of programme graduates, they found **evidence of 'second-hand learning', a transfer of learning from the programme participant which led to changes in practices, behaviours and attitudes**. Examples of changes in practice included new or modified procedures or customs that were learned, accepted and adopted by the workgroup. Changes in behaviours included modifications to the way workgroup members interacted and performed their work, whilst changes in attitudes were evident in how workgroup

members viewed teaching, scholarship and leadership, for example by being more enthusiastic and open to asking for assistance or trying new techniques. This study was useful in that it explored not only the nature of the impact but also how that impact occurred. Peers and supervisors noted how graduates interpreted what they learned on the programme and transferred it by explaining concepts, role-modelling behaviours and engaging in dialogue.

7 Conclusions and implications

This review explores the evidence related to the effectiveness and impact of leadership development activities for the most senior leaders. Overall, the body of evidence to address the research questions was disparate, small and of mixed quality, therefore highlighting the need for further research to increase the confidence in the conclusions. However, some conclusions can be drawn about the impact of senior leader development activities and potential reasons for, and solutions to address, the gaps in the evidence.

In summary, this review provides the NLC with several areas for consideration:

- **The range of potential outcomes** associated with senior leadership development programmes – moderate evidence suggests several individual and organisational level outcomes are associated with senior leadership development that can be considered as part of future evaluations. These include:
 - Access to networks of peers that: provide ongoing personal support to improve confidence and resilience; provide opportunities for future employment; and are a source of information that may contribute to innovative behaviours.
 - The feeling of belonging to a group of leaders who share a common social identity as a 'leader', which can increase social capital and support collaborative working.
 - Opportunities for much valued 'time out' from the day job, which gives leaders the time to reflect, think more strategically, gain different perspectives to widen their viewpoint and consider the wider operating context. All of which can lead to feelings of calm and improved confidence, which influence how they operate and the decisions they make when at work.
 - Development of leadership skills, particularly relating to communication, teamworking, systems leadership, decision making and strategic thinking.
 - The formalisation of cross system networks, leading to more stable collaborative partnerships to address systemic issues.
- **Preferred development activities** – senior leaders appear to particularly value the residential development experience, that includes input from experts and activities related to 'real life' leadership challenges. A combination of activities is thought to provide most value.
- **Evaluation methodologies** – a qualitative approach is favoured in the literature to capture the complex context in which a chief executive operates and the indirect nature of the associated outcomes.
- **Measuring productivity** – productivity is not an outcome measure of interest in the literature; instead, research focuses on understanding the individual level changes that can lead to wider organisational outcomes, such as increased innovation.

- **Evidence gaps** – there are clear evidence gaps addressing the impact of senior leadership development, particularly high-quality longitudinal evidence that triangulates data from multiple sources. Furthermore, evidence isolating the outcomes and impact of specific development activities is limited.
- **Barriers for change** – senior leaders alone cannot sustain organisational or system changes. There are many other critical factors (such as internal and external stakeholders, funding sources, and the political and external context) that influence the implementation and success of change initiatives following leadership development.

7.1 Implications for the NLC

7.1.1 Considering barriers to behaviour change

This report has identified several outcomes associated with senior leadership development activities. The majority are at an individual level, such as a change in attitude, belief or behaviour as a result of the development activities. These individual changes subsequently motivate organisational level changes. However, the evidence also suggests barriers to behaviour change that may be inhibiting the effectiveness of leadership development interventions:

- **Individual readiness for change** – the extent to which individuals are motivated to change, develop, or apply learning is influenced by their feelings, attitudes, values and expectations. Development interventions should consider an individual's readiness for change and personal compatibility with the intervention (Horton, 2009).
- **Organisational receptiveness** – for change to be implemented as a result of an intervention, the employing organisation and/or wider system must also be receptive to this change and provide the opportunity to apply it.
- **Wider context and stakeholders** – in a public sector organisation, there are many influential stakeholders (both within and outside the organisation) that can enable or inhibit change. The extent of the cooperation and resources from staff, board members, partner organisations and the government will influence outcomes.

7.2 Evidence gaps and research limitations

This evidence review highlights a lack of relevant and high-quality evidence to comprehensively answer the research questions presented. Below, the specific gaps and areas for future research are discussed.

- **Proving impact and evidence quality** - Overall, there is limited evidence relating to the effectiveness of leadership interventions aimed at senior leaders. Much of the literature used weak research methodologies that relied on self-reported data, single sources and methods of data collection and omission of comparison groups. In some cases, the evidence was also limited in its detail about the evaluation methods and data that underpinned the conclusions presented, leading to questions regarding the robustness of the findings. However, there were several studies that used qualitative

methods to explore the process of change in more detail, which provide some higher-quality evidence of causal impact chains. On the whole, there is a need for better quality research to be conducted for this demographic.

- **Generating a consistent body of research** - a further challenge is the lack of consistency in the outcomes measured. The purpose, design and implementation of the interventions included in this review varied considerably, and therefore prevented the comparison of “like for like” programmes. Furthermore, the outcomes assessed tended to be directly related to the intended objectives of the programme, leading to a wide variety of different outcomes across this body of research. This results in only a small number of studies providing evidence for the same outcome, thus restricting the evidence base. However, due to the differing contexts, senior leader needs and programme objectives it is unsurprising that outcomes vary considerably. To contribute to building the body of evidence, evaluations could consider how to capture unexpected outcomes as well as those related to their original aims.
- **Lack of focus on senior leaders** - senior leaders are less well researched compared to their more junior counterparts. While in some cases, the findings from junior level leaders may be applicable to senior leadership, this cannot be certain, particularly as the senior leader was identified as a barrier to change for some junior level leaders. Additionally, the responsibilities, potential isolation, capabilities, and past experience that come with being a chief executive are unique to that role, which means their development needs are likely to be distinctly different (Blackler and Kennedy, 2004). Due to the unique nature of the chief executive role, further research must be conducted to understand the outcomes associated with high level development programmes.
- **Organisational outcomes, productivity and trickle-down** - increasing productivity was not an aim of the leadership programmes, and therefore none measured changes in productivity. There are likely to be many reasons programme designers and evaluators chose to omit productivity as an outcome; based on the insights gained from this review, these could include:
 - **Measurement challenges** - productivity in the public sector is difficult to measure, and each service area within the public sector would require different output measures.
 - **Methodological issues** - many of the studies found for this review had a short time frame, and it is likely that a longer time frame is required for any impact on productivity to be observed.
 - **The indirect nature of leadership development impact** – the organisational outcomes associated with leadership development are not considered to be linear where a ‘cause and effect’ could be easily observed. Senior leadership development activities can alter leadership behaviours, and the change in leader behaviour can subsequently have a wider organisational influence. However, many other organisational and external factors will play a role in shaping outcomes.
 - **Lack of evidence related to senior leader development** - many studies were found that were aimed at those in the next level below and were about preparing for the most senior level rather than improving productivity.

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9 Annex

Table 9.1: Quality and relevance assessment overview

Reference	Research question	Country	Population	Sector	Relevance assessment	Overall quality assessment
Avolio B J, Reichard R J, Hannah ST, Walumbwa F O, Chan A (2009), 'A meta-analytic review of leadership impact research: Experimental and quasi-experimental studies', The Leadership Quarterly, Vol 20, No. 5.	4 - Productivity	NA	NA	NA	NA	NA - used for context
Blackler F, Kennedy A (2004), 'The design and evaluation of a leadership programme for experienced chief executives from the public sector', Management Learning, Vol 35, No. 2.	2 - Peer	UK	CEOs	Public	High	Moderate
Boaden R J, (2006), 'Leadership development: Does it make a difference?' Leadership and Organization Development, Vol 27, No. 1.	1 - Networks	UK	Senior leaders	HE	High	Moderate

Boyd A, Nelson A, Shawhan, K, (2017), 'Evaluation of the NHS Leadership Academy Intersect systems leadership programme: Part 2 - Longer term impacts', Alliance Manchester Business School, University of Manchester [Online].	3 - Method	UK	Directors	Public	Moderate	High
Boyd A, Nelson A, Shawhan K, (2016), 'Evaluation of the NHS Leadership Academy Intersect systems leadership programme: Post-programme Evaluation Report', Alliance Manchester Business School, University of Manchester [Online].	1 - Networks & 3 - Method	UK	Directors	Public	Moderate	High
Campbell I, Stewart F, Kodz J, (2011), 'Preparing for ACPO: Exploratory interview research on developing skills for chief police officer roles', National Policing Improvement Agency [Online].	3 - Method	UK	Senior officers	Public	Moderate	Moderate
Chung Y, Jiang Y, Blasi J R, Kruse D L, (2020), 'Effects of Leader Networking Behaviors and Vertical Faultlines on Support for Innovation', Small Group Research, Vol 51, No. 5.	1 - Networks	USA	Various levels of leader/manager	Private	Low	Low
Dexter B, Prince C, (2007). 'Turning managers into leaders: assessing the organizational impact of leadership development', Strategic Change, Vol 16, No. 5	4 - Trickle-down	UK	Middle managers	Public	Moderate	Moderate

Faleye O, Kovacs T, Venkateswaran A, (2014), 'Do Better-Connected CEOs Innovate More?' Journal of Financial and Quantitative Analysis. Vol 49, No. 5-6.	1 - Networks	USA	CEOs	Private	Low	Low
Gentle P, Clifton L, (2017), 'How does leadership development help universities become learning organisations?', The Learning Organization, Vol. 24 No. 5.	2 - Peer	UK	Senior leaders	HE	High	Low
Goldman E F, Wesner M, Plack M M, Manikoth N N, Haywood Y, (2014), 'Secondhand learning from graduates of leadership development programs'. Journal of Workplace Learning, Vol 26, No. 6.	4 - Trickle-down	USA	Managers	HE	Moderate	High
Goldman E, Cahill T, Filho R P, (2009), 'Experiences That Develop the Ability to Think Strategically', Journal of Healthcare Management, Vol 54, No. 6.	3 - Method	USA	CEOs and other senior leaders	Healthcare	Moderate	Moderate
Gordon I, (2013), 'SME Non-Executive Directors: Having One and Being One', Industry and Higher Education, Vol 27, No. 6.	3 - Method	UK	CEOs	Private	Low	Low
Ham C, Clark J, Spurgeon P, Dickinson H, Armit K, 2011, 'Doctors who become chief executives in the NHS: from keen amateurs to skilled professionals', Journal of the Royal Society of Medicine, Vol 104, No. 3.	3 - Method	UK	CEOs	Public	High	Moderate

Hassan S, Prussia G, Mahsud R, Yuki G, (2018), 'How leader networking, external monitoring, and representing are relevant for effective leadership', Leadership and Organization Development Journal, Vol 39, No. 4.

1 - Networks USA Various Various Low Low

Hawkins B, Harvey W S, Bailey A R, Tourky M, Waters H, (2018), 'Leadership Development in Public Service Mutuals: A Practical Guide', University of Exeter, Business School [Online].

1 - Networks UK Senior leaders Public High NA

Her Majesty's Inspectorate of Constabulary and Fire and Rescue Services (HMICFRS), 2019, 'Leading Lights: An Inspection of the Police Service's Arrangements for the Selection and Development of Chief Officers', Her Majesty's Inspectorate of Constabulary and Fire and Rescue Services [Online].

3 - Method UK Senior officers Public Moderate Low

Horton, S. (2009). Evaluation of leadership development and training in the UK senior civil service: the search for the holy grail? In J. Raffel, P. Leisink, & A. Middlebrooks (Eds.), Public sector leadership: international challenges and perspectives (pp. 360-376). Edward Elgar Publishing.

4 - Productivity NA NA NA NA NA - used for context

Iles P, Preece D, (2006), 'Developing leaders or developing leadership?' The Academy of Chief Executive's programmes in the North East of England, Leadership, Vol 2, No. 3.	1 - Networks	UK	CEOs	Various	Moderate	High
Jarvis C, Gulati A, McCririck V, Simpson P, (2012), 'Leadership Matters: Tensions in Evaluating Leadership Development, Advances in Developing Human Resources, Vol 15, No. 1.	2 - Peer & 3 - Method	UK	Senior managers	Public	Moderate	High
Lewis M, Davis M, (2016), 'Cascading Leadership: Evaluation report Summary', M2 Real Change Consultants [Online].	2 - Peer	UK	CEOs	Third	Moderate	Low
Lewis J M, Ricard L M, Klijn E H, (2018), 'How innovation drivers, networking and leadership shape public sector innovation capacity', International Review of Administrative Sciences, Vol 84, No. 2.	1 - Networks	European	Various levels of leader/manager	Public	Moderate	Low
McCracken M, McCrory M, Farley H, McHugh M, (2019), 'Leadership Journeys: Tracking the Challenge and Impact of the Top Management Programme. Leadership Insights: Year Two Report', Ulster University [Online]	3 - Method	UK	Senior leaders	HE	High	Moderate
Meaklim T, Sims J, (2011), 'Leading Powerful Partnerships - a new model of public sector leadership development', International Journal of Leadership in Public Services, Vol 7, No. 1.	3 - Method	UK	Senior leaders	Public	Moderate	Moderate

Miller D L, Umble K E, Frederick S L, Dinkin D R, (2007), 'Linking learning methods to outcomes in public health leadership development', Leadership in health services, Vol 20, No. 2.	2 - Peer & 3 - Method	USA	Directors	Public	Moderate	Moderate
Myers S R, (2008), 'Senior Leader Cognitive Development through Distance Education', American Journal of Distance Education, Vol 22, No 2.	3 - Method	USA	Senior leaders	Public	Moderate	High
Myrsiades L, (2001), 'Looking to lead: a case in designing executive education from the inside', Journal of Management Development, Vol 20, No. 9.	3 - Method	USA	Faculty leaders	HE	Low	Low
Performance and Innovation Unit, date unknown, Strengthening leadership in the public sector A research study by the PIU	1 - Networks	UK	Leaders	Public	High	Moderate
Preece D, Iles P, (2009), 'Executive development: Assuaging uncertainties through joining a leadership academy', Personnel Review, Vol 38, No. 3.	3 - Method	UK	CEOs	Various	Moderate	High
Robinson D, Tamkin P, Carter A, Garrow V, Varney S, (2016). 'The Nye Bevan Programme: Final Full Evaluation Report for the NHS Leadership Academy', Leadership Academy [Online].	2 - Peer	UK	Aspiring directors	Public	Moderate	High

Shawhan K, Boyd A, Nelson A, (2018), 'Evaluation of the NHS Leadership Academy Intersect Systems Leadership programme – Findings Across Cohorts 1 and 3', Alliance Manchester Business School, University of Manchester [Online].	4 - Trickle-down	UK	Directors	Public	Moderate	Moderate
Stead V, (2005), 'One-to-one peer support: a model for leadership development?', International Journal of Training and Development, Vol 9, No. 3.	2 - Peer	UK	Directors	Public	Moderate	Moderate
Vidovich L, Currie J, (2012), 'Governance Networks Interlocking Directorships of Corporate and Nonprofit Boards', Nonprofit Management and Leadership, Vol 22, No. 4.	1 - Networks	Aus	CEOs	Private & public	Moderate	Moderate
Watkins K E, Lysø I H, deMarrais K, (2011), 'Evaluating executive leadership programs: A theory of change approach', Advances in Developing Human Resources, Vol 13, No. 2.	2 - Peer	USA and Europe	Senior Executives	Private	Low	Low
