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A framework for the facilitation of accelerated leadership and management capability development in the workplace

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A holistic framework for the design of leadership and management programs to accelerate leadership and management capability development in the workplace is presented. Previous models and frameworks have been primarily based on program design inputs and outcomes and have not adequately considered the mediating role of learning processes and learner preferences in the relationship between program design inputs and outcomes. Additionally, most existing models and frameworks do not offer holistic approaches. Four theoretical implications and five practical applications of the framework are presented. The three defining features of the leadership and management learning framework are the focus on the development of competencies that underpin effective leadership, the central role of learning facilitation in this development, and the workplace learning processes that enable leadership and management development, and specifically meta-learning processes. Contributions to theory involve the integration of meta-learning and facilitation in the framework and the six propositions posited. A series of practical implications for advancing leadership program design, delivery and evaluation is also presented.

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Introduction

The cost-effective development of capable organizational leaders and managers remains a mainstay of organizational learning and development investment (Holt et al. 2018; Loew and Wentworth 2013). Traditionally, much of the investment in leadership and management learning and development has focused on structured courses and programs such as MBAs and facilitated leadership courses; however, formal training programs have increasingly been criticized for not developing the leadership and management capabilities individual managers need (Mintzberg 2004; Sharma 2017) and can apply to business operations. Increasingly, organizations are adopting strategies that promote leadership and management development within the working environment, such as experiential, action or project-based learning, and executive coaching (Birkenshaw and Gudka 2022; Perusso et al. 2021; King and Smith 2020; Skinner 2020).

In the world of work where change is constant, there is a need to create flexible, holistic approaches to leadership and management learning to meet the challenges of the changing organizational environment (Holten and Brenner 2015; Porvaznik et al. 2018). In a 2014 review of the literature on leader and leadership development published over the previous 25 years, Day et al (2014, p.79) concluded that 'Leadership is something that all organizations care about. But what most interests them is not which leadership theory or model is "right" (which may never be settled definitively), but how to develop leaders and leadership as effectively and efficiently as possible. As such, this is an important area of scholarly research and application with myriad unanswered (and even undiscovered) questions to pursue'. More recently, the systematic review undertaken by Geerts et al. (2020, p.1) found that in terms of leader development in the healthcare sector 'it remains unclear which interventions are most reliably associated with positive outcomes'. We conclude that there is no integrated, robust evidence-based framework for guiding professional practice in this field.

The research aim is to present an integrated framework for HR practitioners and professionals to support the support the design, delivery, and evaluation of leadership and management programs to accelerate leadership and management capability development of individuals and groups in organizations. A secondary aim is to provide greater construct definition to support research in this area.

The leadership and management framework (hereafter typically referred to as the 'the framework') applies to intentional leadership and management program interventions, be they group-based or individual, and incorporates both formal learning and experiential workplace learning approaches. It is this focus on structured, facilitated learning interventions that distinguishes this framework from other leadership and management developmental frameworks. For example, Nesbit (2012) presents a framework for self-directed leadership development drawing on research literature relevant to the present framework. Similarly, Matsuo (2015) presents a framework for the facilitation of experiential learning based on the Kolb experiential learning cycle (Kolb 2015). The Matsuo framework attempts to address deficiencies in the Kolb model, specifically its failure to sufficiently recognize the importance of critical reflection in the process of learning from experience. Both the Nesbit (2012) self-development framework and the Matsuo (2015) facilitated experiential learning framework are relevant to the leadership and management learning framework, however they differ substantially in their purpose and focus. More recent work by Wiebe (2022) and Lukwago (2021) also draw on Kolb's experiential learning cycle however their resulting strategies and dimensions fail to advance theory or practice in any substantive way.

The framework draws on a variety of adult learning theories and integrates these as the framework's theoretical foundations. Key to this are emotional, social, and cognitive competencies (ESCs) and theories of self-directed learning (Boyatzis 2011; Bonesso et al. 2020) which are both applicable to leaders' competency development in the workplace. Additionally, the framework draws on the theory of experiential learning based on the seminal work of David Kolb (1984; 2015). It is beneficial to note that this theory is used as the sole theoretical lens for many existing leadership development models (Nesbit 2012; Matsuo 2015; Wiebe 2022). The concept of reflective practice (Boud et al. 2013; Schön 1983) is also a key theoretical element of this integrated foundation and is key to the role of facilitated and accelerated learning processes. Another main theoretical source is the ground-breaking work of John Biggs (1985; 1999) concerning meta-learning. Even though his research and theoretical advances were based in higher education contexts they are also relevant to leadership development in workplace learning contexts.

The framework focuses on the development of leadership and management competencies rather than on the longer-term development of mature leadership management mindsets that arguably result from adult development processes (Boak and Crabbe 2019; Wallace et al. 2021; Hogan and Warrenfeltz 2003). The broader question of leader maturation is an important consideration from an organizational perspective, however the leadership and management learning framework is primarily concerned with the proximal development of specific competencies.

The leadership and management learning framework comprises a series of propositions defining the relationships between learning inputs, learning processes, and learning outcomes at the individual and the group level. The framework details the nature of the relationships between these core elements. From the propositions, practical implications for the facilitation of accelerated leadership and management capability learning and development are considered.

Before presenting the framework and propositions, the following section reviews the literature relating to the three defining and distinguishing features of the framework, specifically:

- The development of competencies that underpin effective leadership and management capability;
- Facilitation of workplace learning, and the role of external support processes for the development of leadership and management capability; and
- Workplace learning processes that enable leadership and management development, and specifically meta-learning processes.

Theoretical foundations

The framework integrates relevant theories and concepts from a variety of adult learning theories most relevant to workplace learning contexts and to leader development in particular. We draw on adult learning theorists (many are seminal authors), and their associated works, in Fig. 1 below. The following discussion and review details these theoretical underpinnings which have informed the development of the leadership and management learning framework and its key elements.

Development of leadership and management competencies. The framework provides guidelines for the design of facilitated learning interventions to accelerate leadership and management capability development. The outcomes from such program interventions are ultimately measured by the individual

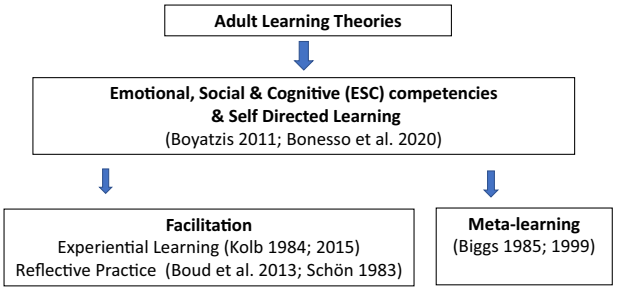

Fig. 1 Integrated Theoretical Foundational of the Framework. This figure describes the high-level adult learning theories that inform the framework.

participant's leadership and management performance in the workplace. Optimal performance in a work role occurs when 'the person's capability or talent is consistent with the needs of the job demands and the organizational environment' (Boyatzis 2011, p. 92). Boyatzis (2011) contends the intentional development of leadership and management capability necessitates a focus on the development of three clusters of leadership and management competencies: Emotional Intelligence, Social Intelligence and Cognitive (ESC) competencies.

Several recent studies have underscored the positive influence of ESC competencies on leadership and management performance. Edelman and van Knippenberg (2018) provide evidence that leaders with elevated levels of Emotional Intelligence (EI) are better able to respond to the emotional needs of their staff, a critical enabler of leadership effectiveness. Rosete and Ciarrochi (2005) studied Australian public service leaders and found that higher levels of EI correlated with higher leadership effectiveness. Research undertaken by Boyatzis et al. (2023) assessed the behavioral emotional and social intelligence competencies of coaches over a 2-year period and found the most effective coaches utilized the following competences: achievement orientated; adaptability, emotional self-control, empathy, organizational assessment, and influence.

These ESC competencies are not only predictive of performance, they can also be developed through formal learning and development programs. Bonesso et al. (2020) report on the outcomes of a systematic review of multiple academic studies that have demonstrated that leadership and management competencies, and specifically the ESC competencies, can be developed through a range of different learning interventions and techniques including experiential approaches, reflective practice, role plays, coaching, and simulation.

Notwithstanding this demonstrated capacity to develop ESC competencies that underpin effective leadership and management performance, much of the academic leadership and management development literature is critical of competency approaches. For example, in a review of twenty-nine competency frameworks internationally, and an analysis of reflective participant reports, Bolden and Gosling (2006) concluded the competency approach is overly reductionist and fails to encapsulate the complexity of leadership roles and performance. Such criticisms may apply fairly to some competency-based approaches to leadership and management development, but they do not apply to all. Much of the competency-based literature does not contend that possession of leadership and management competencies means that a person will be an effective manager or leader (Bonesso et al. 2020; Boyatzis 2011). Similarly, the literature does not support the view that effective managers have the same skillset executed the same way – rather, the evidence suggests that capable leaders and managers possess a range of competencies such as the ESC competencies discussed above, and further that these can be developed (Boyatzis 2011).

Competencies and competency standards provide a language to discuss leadership and management performance. They are not the performance, nor are they the knowledge, skills, behaviors, or attitudes that underpin the performance. Rather, we contend that competency is the demonstrated ability (measurability) to perform a function reliably to a defined standard. Competency standards provide the language to describe the required performance. Thus, there is no one 'correct' or definitive competency framework, as suggested by Bolden and Gosling (2006), any more than there is one 'correct' description of an artistic work. There are, however, generally-accepted, and useful frameworks, such as the ESC competencies, which provide a language to describe competent performance.

The framework is most relevant to situations where an organization wants to develop the capability of the group of individuals. For example, the organization might want to implement new agile project management practices. To do so it requires managers to lead the organizational change and to facilitate the development of agile work practices in the organization. Such a capability requires several core competencies for managers including mastery of the agile process itself, change management, leading and facilitating agile project groups, and coaching for performance. Such a program of development might be undertaken over a period of time such as 6 to 12 months. Facilitating the design, development, and implementation of such a program is a critical role of the facilitator and central to the leadership and management learning framework.

Facilitation. The second key element of the frameworkis facilitation which Burrows (1997) describes as a partnership between the learner and the facilitator. There is a close connection between the partners in learning that involves the practice of critical reflection (Raelin 2006). In this learning partnership the facilitator often takes a leading role, however, there is a shared responsibility through the respectful negotiation of learning goals and strategies. An essential role of the facilitator is to guide the learner through critical reflection by questioning, probing, and challenging assumptions (Burrows 1997). The facilitator is not a passive partner in the learning process. Facilitation is an intentional, dynamic concept with clearly defined goals and planned development interventions.

The intention of this framework is principally to guide the role of external facilitators engaged specifically to plan, design, develop, deliver, and evaluate a program or intervention to accelerate leadership and management capability learning. The facilitator might be a leader responsible for supporting (facilitating) leadership and management capability development of a group or individuals. Identifying, agreeing to, and achieving the learning goals is a shared responsibility of the learner, facilitator, and the organizational sponsor. The facilitator is an active partner in the learning process and may fulfill a number of different roles, depending on the context and needs, including, for example: guiding the learner through critical reflection by questioning, probing, and challenging assumptions (Burrows 1997); guiding group learning and interaction; explaining and communicating information, concepts and tools that can be used to develop leadership and management competence; and inspiring participants to want to learn and to feel confident in their own ability to do so.

The role of the skilled facilitator of leadership and management learning and capability development is to support an iterative, continuous learning process as described in Fig. 2. This continuous learning process reflects the learning phases of several self-development models including Nesbit's SLDL framework (Nesbit 2012), Boyatzis' model of self-directed learning (Boyatzis

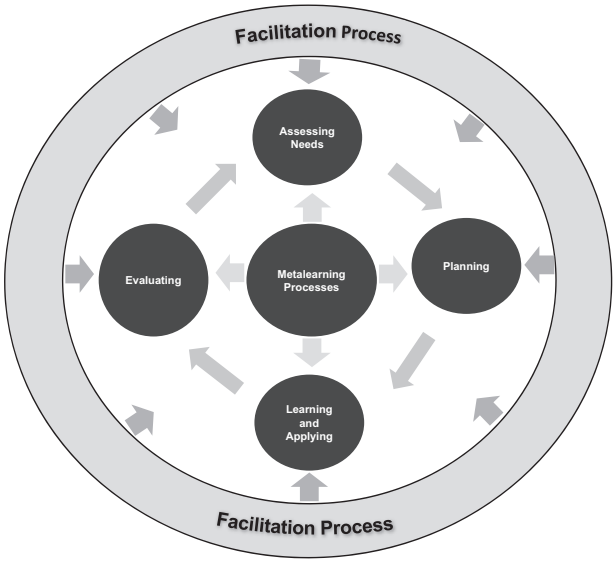

Fig. 2 Facilitated continuous learning process. This figure describes the role of the skilled facilitator of LEADERSHIP AND MANAGEMENT learning and capability development to support iterative, continuous learning and mastering competency.

et al. 2002) and other models of self-managed learning (for example, Panadero et al. 2015). Unlike those models however, the framework adds the role of the facilitator, shown in the outer circle of the diagram (see Fig. 2), to support all phases of the learning process from needs assessment through planning, learning, applying, and evaluating.

Facilitated continuous learning process. This facilitated continuous learning process is a general learning process applicable to learning and mastering competency. This focus on competency development distinguishes it from the seminal work of Kolb and the learning cycle which involves four phases or stages of learning focused on the creation of knowledge through the transformation of experience (Kolb 1984). Not all learning requires abstract conceptualization. For example, mastering a skill may require incremental practice to improve proficiency. This application coupled with feedback and reflection helps the individual to understand gaps in performance and to rectify these accordingly.

The continuous learning process starts with the learner, with the support of a facilitator, analyzing and understanding learning needs. For example, to learn how to effectively supervise staff, an important skill or competency would be the ability to provide coaching or timely and constructive feedback. To achieve competency the learner needs firstly to understand what skills or capabilities need to be developed. Next, together, the learner and facilitator plan how best to build upon the identified areas for development and agree on learning goals. Finally, the learner implements the plan (with the guidance of the facilitator), undertaking agreed learning strategies and applying and practicing the learning in context. So, to learn how to coach staff, the learner may undertake some structured learning that provides the learner with an understanding of the coaching process, then take on opportunities to practice their skills in a safe environment and receive feedback on their performance.

Finally, in the evaluation stage of the facilitated continuous learning process, the learner, with the facilitator, reflects upon their learnings and practice, seeking and receiving feedback on their performance to evaluate how the learner is progressing towards their learning goals to again determine their learning needs and repeat the entire process. Each of these phases in the facilitated continuous learning process necessitate external input from a skilled facilitator to provide guidance and direction as to the learning needs, provide advice about the progress the learner is making towards their goals, ensure access to learning resources, and provide feedback about performance.

Workplace learning processes and metalearning. The third defining feature of the framework is the workplace learning processes that enable leadership and management competency development, and specifically meta-learning processes. Concerned with the learner's understanding of the phenomenon of learning itself, rather than the subject matter, meta-learning refers to the metacognitive process that connects the individual's learning motives with strategies. It involves self-knowledge about how one learns, specifically an awareness of the learning strategies and behaviours applicable to a learning context (Boström and Lassen 2006; Jackson 2004).

We now provide definitions for these related concepts of metacognition, meta-learning, and meta-skills. John Flavell a developmental psychologist first coined the term metacognition in the 1970s and defines it as 'one's knowledge concerning one's own cognitive processes and products or anything related to them' (Flavell 1979, p. 232 in Mahdavi 2014, p530). In other words, metacognition refers to one's awareness and understanding of their cognitive processes, sometimes referred to as thinking about thinking. It also involves monitoring, controlling, and regulating one's own thinking. Secondly, meta-learning refers to the meta-cognitive processes specifically involved with the learner's choice of learning processes or strategies (Biggs 1985). Put more specifically, meta-learning involves understanding one's learning preferences, strengths, and weaknesses, and more highly developed meta-learning capability involves more sophisticated choice and application of learning strategies appropriate to the learning goals and context. Lastly, meta-skills, in a workplace context, are the higher order skills that facilitate effective learning in the workplace. Effective workplace learners need to be very open, able to seek feedback, and able to accept negative feedback and manage their emotional responses to it (Nesbit 2012; Spreitzer et al. 1997).

In a higher education learning context, to achieve a motive of mastering a topic, a learner might decide to use a strategy such as summarizing the main ideas of an article (Hogan et al. 2015; Huntley-Moore and O'Connor 2014). Such an approach is referred to as a deep approach to learning, whereas a surface approach involves the learner rote learning the content of the subject in order to reproduce it, such as for a test or exam, rather than to understand content (Biggs 1979; Marton and Säljö 1976; Stover and Seemiller 2017). Supporting the meta-learning helps learners to become more aware of their self-regulatory behaviours and to recognize the effectiveness of learning strategies they use, and how to apply their learnings in their context (Jackson 2004; Cook 2022).

While the concepts of learning motive and learning strategies are well documented in the higher education literature (Asikainen and Gijbels 2017; Huntley-Moore and O'Connor 2014), these concepts are also applicable in the workplace leadership and management development context. The selection of a deep learning approach in the higher education context is similar to reflecting deeply on an experience in the workplace, learning from the experience and seeking a different approach next time, consistent with the reflective practice guidelines outlined by Schön (1983).

To be effective workplace learners, Nesbit (2012, p. 203) contends that effective self-development is underpinned by 'the integrated operation of three meta-skills – skills that are required

for the development of other skills relating to one's ability – relating to one's ability to manage emotional reactions to feedback, to carry out effectively the practice of self-reflection, and to enact self-regulatory processes for development'.

The acquisition of meta-skills is likely to improve the quality of ongoing learning, practice, and application of learning in work-based settings. Indeed, the identified linkages and parallels between meta-learning, reflective practice, and action learning or work-based learning indicate this to be the case (Dehler and Edmonds 2006; Tarrant 2013). Boud et al. (2013) draw the link between deep approaches to learning and reflective practice in 'intentional' leadership learning development programs. Reflective practice has been shown to enhance the development of meta-cognitive skills (and implicitly meta-learning) in a range of professional contexts. For example, in the pre-service teacher training context, Arrastia-Chisholm et al. (2017) demonstrate that self-regulation of learning can be enhanced by formal teaching and modelling of reflective practice.

Various reflective practice methodologies have been developed applicable to different contexts and needs. For example, London et al. (2012) provide guidance for leaders (and facilitators) of groups or teams who have responsibility for developing innovative solutions to complex, unstructured problems referred to as generative challenges. Gibbs (1988) introduces the important dimension of feeling into the reflection process. Immunity to change (Kegan and Lahey 2009) is particularly relevant in situations where the learner has difficulty changing established behaviour. There are then various reflective practice methods that may be used depending on the individual need and context.

While reflection is a critical practice, and arguably an essential element of the continuous learning process (see Fig. 2), there are other learning practices that can support capability development. For example, deliberate practice (Ericsson and Harwell 2019) is a highly structured application and practice of skills in a work context that focuses on improving targeted opportunities for improvement. It is particularly relevant to the mastery of social competencies. Ericsson et al. (2007) give a good example of the application of deliberate practice to leadership, and specifically, to a capability that many assume cannot be readily developed, that is, charisma. They demonstrated that learners could be taught to behave, and to present with charm and persuasiveness using deliberate practice. Similarly, other social skills can be developed using deliberate practice supported by good modelling of skilled behaviour (instruction), combined with timely feedback, support, and reflection on performance.

Other researchers highlight the effect of action learning on the adoption of deep reflexive approaches (McLay et al. 2023; Robertson et al. 2021; Wilson and Fowler 2005). In addition, the metacognitive concept of 'knowledge of completion' – or the learner's understanding of how to apply newly acquired knowledge in practice – is critical to the successful integration and mastery of individual learning in the workplace and the ongoing development of leadership and management capabilities (Boström and Lassen 2006).

Leadership and management learning interventions in the workplace can be intentionally designed to incorporate the building of meta-learning skills and capability to support the capacity to self-reflect, to skillfully seek feedback, to reflect in and on action, to challenge and revise assumptions as necessary, to actively apply skills, and to identify new solutions and seek new ways to perform. Embedding meta-learning in workplace leadership and management development interventions can accelerate learning processes in the development of individual capabilities. Building meta-learning capability, as an integral part of any planned leadership and management learning intervention, is an influential strategy that meets the diverse needs of developing leaders to enable individual learners to take control of the way they learn and to apply a deeper understanding of their learning experiences in their ever-changing work context.

Leadership and management learning framework. The Leadership and Management Learning Framework is offered as a guide for the design and implementation of workplace leadership and management learning interventions to accelerate development. The framework includes ways to facilitate learning directly through supported developmental interventions (Beattie et al. 2014) and indirectly through creating conditions within work environments that are complementary to workplace learning processes (Ellinger 2005; Coetzer et al. 2019).

At the highest level, the framework has three principal elements: learning inputs, learning processes, and learning outcomes, each at an individual micro-level and an organizational (or group) meso-level, thereby creating six framework elements. In general terms, inputs influence the learning process that in turn determines subsequent learning outcomes. These six key elements are: Organizational Learning Environment (OLE); Individual Learning Capabilities (ILC); Group Learning Processes (GLP); Individual Learning Processes (ILP); Organizational Learning Outcomes (OLO) and Individual Learning Outcomes (ILO). The framework represents the key elements that determine the effectiveness of intentional planned leadership and management learning interventions. The relationships between inputs, process, and outcomes are depicted by the arrows (see Fig. 3).

Leadership and management learning framework for accelerated development. Figure 3 provides an overall visual depiction of the leadership and management learning framework. We provide an explanation of each of the six key elements of the framework and the role of facilitation and meta-learning in the framework. We then provide an evidence-based discussion of the relationships between the elements including a discussion of the implications for the facilitation of the leadership and management learning framework.

Inputs. The Organizational Learning Environment (OLE) is a broad, complex set of dynamic organizational characteristics that influence both the organizational and individual learning processes. These characteristics include organizational culture, leadership, opportunities for learning, business learning systems, and decision-making processes. It also includes organizational learning needs or organizationally required capabilities that may be the focus of leadership and management learning interventions.

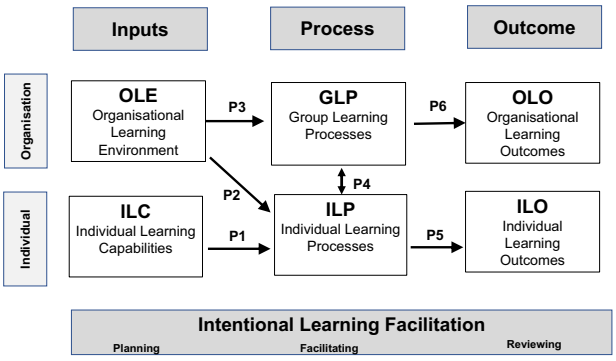

Fig. 3 Leadership and Management Learning Framework for accelerated development.

Individual Learning Characteristics (ILC) are also inputs and include the learning characteristics of each learner such as learning orientation, learning goals, willingness to learn (for example, motivation, and openness), and capacity to learn (intelligence and relevant prior knowledge).

Process. Group Learning Processes (GLP) may be defined as group or organizational processes and practices, to support learners to develop leadership and management capability. Such processes may include action learning projects that address organizational priorities, group reflective practices, or formal group learning activities.

Individual Learning Processes (ILP) are the learning strategy processes that individuals apply to develop competency, solve problems, create solutions, master skills, or develop capability in a workplace context. Critical to the effectiveness of ILP and GLP is the support of a learning facilitator (discussed in detail later in the paper).

Outcomes. Argote (2011) defines organizational learning (OL) as a change in the organization's knowledge, shared understandings, routines, and behaviours that occurs as a function of experience. This knowledge can be explicit or tacit. Others define OL as the process of learning in an organizational context (Shahriari and Allameh, 2020). For current purposes, the distinction is made between the OL processes and the products or outcomes of that process. Organizational Learning Outcomes (OLO) may be defined more broadly as the change in the organization's capability, know how, and business processes that result from organizational learning processes (OLP). These enhanced practices and know how, may in turn impact other organizational outcomes such as profitability, sales, or customer satisfaction.

Finally, Individual Learning Outcomes (ILO) describe what a learner knows or is able to do as a result of the learning program or intervention. In terms of leadership and management development, these outcomes may be defined in terms of achieved competencies, which are descriptors of performance. Competencies (competency standards and descriptors) provide a language to discuss and measure management and leadership performance. They are not the performance, nor are they the knowledge, skills, or attitudes that underpin the performance. They provide a reference point to which managers can compare their performance and receive feedback about it.

Theoretical propositions. A series of propositions drawn from the literature are now presented to support the theoretical foundations of the leadership and management learning framework and are summarized in Table 1 below.

Contributions and implications

Theoretical contributions. The leadership and management learning framework contributes to theory in four ways. Firstly, the primary contribution of this paper is to present a framework, building on and integrating the work of Richard Boyatzis and others (as depicted in Fig. 1), to support the design, delivery, and evaluation of programs and interventions that facilitate the accelerated development of ESC competencies that are known to underpin leadership and management capability and performance. This distinguishes the framework from other models and frameworks that support self-development (Boyatzis 1994; Nesbitt 2012) or the facilitation of leadership and management development through experiential learning (Matsuo 2015).

Secondly, the role of facilitation is an essential and defining feature of the leadership and management learning framework. It presents a general process to support and guide facilitation of learning through understanding of the learning processes most appropriate to the competency to be developed. Further research may investigate which learning strategies and modalities are most appropriate for specific competencies.

Thirdly, the framework highlights the central role that meta-learning can play in supporting the success of learner-centred leadership and management learning programs. Meta-learning may be a suitable theoretical construct to explain how and why facilitation methods, such as coaching, works. In a meta-analysis conducted by Theeboom et al. (2014, p.9), the authors concluded that the efficacy of coaching in a general leadership development context has been well demonstrated, however the 'biggest overall limitation of the coaching literature is the lack of rigorous examination showing the causal mechanisms by which coaching interventions are effective'. In addition, further research might explore the 'teachability' of meta-learning skills in the workplace context and the role of coaching, action learning, and reflective practice methods in their development, to build on the work of Gregory et al. (2011).

Finally, a set of six testable propositions are presented which form the basis for future research. Framework elements (constructs) are defined and relationships between them are posited. Empirical research that tests all the propositions or a subset of them could be undertaken. Qualitative, quantitative, and mixed methods research designs could be employed in this testing of the framework, its propositions, and the implications for the design, development, and evaluation of programs than can accelerate leadership and management capability development.

Practical implications. The framework provides guidance for learning and development professionals and practitioners to assist them in designing effective programs to accelerate leadership and management development, and a structure to guide the evaluation of leadership and management competency development programs. Key practical implications and considerations for HR development practitioners are summarized as follows:

- The importance of intrinsically-motivated learners and self-nomination for program leadership and management learning interventions (Proposition 1)
- The necessity of organizational commitment to resourcing and empowering learners to experiment and learn (e.g., with high quality applied learning projects) and a strong commitment to psychological safety in group learning contexts (Propositions 2 and 3)
- Effective meta-learning skills and techniques such as reflective practice is critical to successful workplace learning and development for leadership and management learning interventions, and the critical role of the facilitator in supporting the learner to achieve their learning goals (Proposition 4)
- A crucial feature of leadership and management learning interventions is high-quality facilitation, appropriate applied learning projects and opportunities, combined with facilitated reflection, coaching and feedback through cycles of continuous feedback (Proposition 5)
- The importance of the role and skill of the facilitator in supporting individual and group learning self-reflective practices cannot be underestimated for leadership and management learning interventions (Proposition 6)

Limitations and future research. The paper has limitations in terms of being conceptual and therefore does not present empirical data. The framework presented is yet to be tested in the field and therefore needs to be validated empirically.

Table 1 . Theoretical propositions.

Proposition 1. *Individual Learning Characteristics (ILC) strongly influence Individual Learning Processes (ILP)*
A wide range of learner characteristics are known to influence the learning process and strategy, and outcome, including general cognitive ability (reference), personality traits (Ackerman et al. 1995; Feher and Vernon. 2021), culture (Roessger et al. 2022), metacognitive self-regulatory ability (Flavell 1979), and emotional intelligence (Goleman 1998).
In a work-based context, self-concept (Judge and Bono, 2001) has been shown to affect the likelihood of an individual benefiting from a leadership learning experience. Learning goal orientation has been identified as an important indicator of how well a manager develops (Heslin and Keating 2017). Ownership of learning goals (Dragoni et al. 2009) and having specific competencies in mind that the individual is committed to developing is an important predictor of competency development. Managers develop significantly higher levels of self-reported mastery of competencies for which they have set clear development goals than they did for other competencies (Leonard 2008). Managers who are open to other points of view, to feedback and criticism from others, and are willing to change their perspective and direction are more likely to learn from developmental experiences (Hezlett 2016; Seibert et al. 2017).
Proposition 2 *Organizational Learning Environment (OLE) strongly influences Individual Learning Process (ILP).*
Proposition 3: *Organizational Learning Environment (OLE) strongly influences the quality of Group Learning Processes (GLP)*
The influence of OLE on ILP is likely to be through the effect of organizational culture on the individual's meta-learning processes and particular learning motives. In a higher education context, studies have shown that learning environment influences motivation (Hanrahan 1998) and the approach to learning (Kember et al. 2008). Various studies have explored the relationship between organizational learning culture and individual employee learning. For example, Egan et al. (2004) found that learning organizational culture is positively associated with employees' intention to transfer learning. Consequently, culture and leadership have such a critical influence on the organizational and individual learning process and outcomes. Cultural assumptions about how decisions are made and who makes them have a direct influence on group decision-making processes (Berthon et al. 2001;) and individual decisions about engagement in group learning or decision-making processes. If an individual feels they have no agency then they will not try to conceptualize and articulate a course of action (Karsh and Eitam 2015). An individual may not even reflect on experience, let alone conceptualize and actively experiment if the individual lacks the commitment. Learning committed leadership and management is required to ensure staff are empowered to learn (Ashton 2004; Ellinger, 2005).
Several studies in the organizational learning literature have demonstrated the positive relationship between innovative, supportive types of cultures and positive organizational learning processes and outcomes. For instance, in the Korean banking system, Liao et al. (2012) showed that in knowledge-intensive industries, innovative cultures are associated with high levels of organizational learning and organizational innovation. Kirby et al. (2003) found that positive cultures (good supervision) is positively associated with learners' adoption of deep approaches. Hung et al. (2011) demonstrated that TQM has significant and positive effects on organizational learning. Shahriari and Allameh (2020) studied the impact of organizational culture on organizational learning, concluding that it is the most significant input to organizational learning. Group cultures and developmental cultures, cultures that are inclusive, flexible, and open to change are positively associated with organizational learning however hierarchical cultures are negatively associated.
Organizations whose cultures are characterized by mistrust, for example, have a negative effect on organizational learning (Lucas and Kline 2008). One of the elements of OLE, which operates at a group level principally, is psychological safety which has a critical influence on the quality of group learning (Edmondson 2002). Team members are more likely to act, for example, to suggest ideas or raise concerns about a process, if they think the risk of being ridiculed or criticized is low. Conversely, they are less likely to act if that risk is perceived as high. Moreover, psychological safety is necessary to enable team members to engage in challenging the status quo (Kostopoulos and Bozionelos 2011).
Proposition 4. *Group Learning Processes (GLP) influence the Individual's Learning Processes and strategies (ILP) and ILP also influences GLP.*
In the leadership and management learning framework facilitated individual learning processes are the central focus by virtue of the fact that the purpose of learning is the development of individual capability. However, learning occurs in a workplace context and so group learning processes will influence the individual learning process and hence the quality of learning outcomes. Conversely, the quality of ILP influences the quality of GLP because of the individual's contribution to the group learning process.
Depending on the organizational context and need, individual managers may participate in learning groups with other managers undertaking the same program, or learn as individuals, potentially working both in groups as a peer or as a supervisor or manager. Consequently, the level of interaction between ILP and GLP will depend on the context.
The quality of individual learning in a group setting is influenced by the quality of group learning processes. For example, if a participant cannot speak freely about their experiences in the group situation, their capacity to learn in that context is likely to be impaired. Similarly, group learning processes are strongly influenced by the meta-learning skills and processes of individual members. Processes such as emotional self-control of individuals can significantly impact the experience and engagement of group members (Nesbit 2012; Ions and Sutcliffe 2020).
Groups develop their own learning processes, orientations, shared mental models, and meta-learning capabilities (London et al. 2012; Volet et al. 2009). In this process, leaders play a particularly important role. Leaders can strongly influence the meta-learning processes of the group due to their ability to influence such key decisions as what problems the group addresses, what the group learns, and how the group learns. Lucas and Kline (2008) used a case study methodology to investigate the influence of culture and leadership on organizational learning and change. They found that these factors have a significant influence on group members' responses to change and their capacity to learn. They contend that some organizations display learning disabilities that limit the capacity for the organization to learn.
For peer group learning situations where the primary focus is individual capability development, facilitators have a critical role in developing and guiding IL and GL processes; for example, by supporting and promoting effective reflective practices appropriate to the learning goals of the group and individuals comprising it.
Proposition 5 *The Individual's Learning Processes (ILP) determine the quality of Individual Learning Outcomes (ILO).*
Proposition 6. *The quality of the Group Learning Process (GLP) determines the quality of Organizational Learning Outcomes (OLO).*
Individual Learning Outcomes describe what a learner knows or is able to do as a result of the learning program or intervention. These individual outcomes are best measured by the achievement of competencies. The relationship between ILP and ILO is well-established in the higher education literature: it consistently demonstrates an individual's approach to learning and learning processes has a determining influence on the quality of learning outcomes (Backhaus and Liff 2007; Biggs, 1999; Biggs et al. 2019). Learners who adopt deep and strategic approaches are likely to achieve higher quality learning outcomes.
There don't appear to be any direct studies measuring how ILP influence ILO a workplace context; however, a learner who reflects on their experience, responds positively to feedback, and is purposeful in their effort to develop leadership and management capabilities, is likely to be able to develop and demonstrate a level of proficiency that meets required standards. Conversely, a learner who adopts a superficial approach, who does not reflect on their

Table 1 (continued)

practice will not develop capability and perform effectively. Multiple studies provide indirect support for the proposition. For have demonstrated that workplace learning methods such as reflective practice has a positive effect on the development of leadership and management competencies. Bonesso et al. (2020) undertook a systematic review of research literature evaluating the effectiveness of formal training and educational programs on the development of ESC competencies highlighting a range of experientially oriented pedagogical approaches that support competency development in both institutional and workplace contexts. For example, Sheehan et al. (2009) demonstrated that an experiential learning methodology including explicit reflective practice methods had a positive effect on the development of ESC competencies in a sports management events course. Similarly, Contreras et al. (2020) found that self-reflective practices have positive effects on learning, competency, and self-awareness in nursing practice.

Organizational, as distinct from Individual, Learning Outcomes as from a leadership and management program are concerned with the collective capability developed by the program. In addition, a by-product of the OLP may be, for example, the improvement in the organization's know how, or business processes and practices such as the way teams communicate and make decisions. These enhanced practices and know how, may in turn impact other organizational outcomes such as staff engagement or morale, culture, profitability, or customer satisfaction. Wallace et al. (2021) suggest that an important outcome from a leadership and management program may be the development of "new collective states (e.g., collective knowledge, mutual respect, trust, social bonds) and processes that improve the collective's capacity to lead itself or others". They advocate for these "first-order learning outcomes" to be measured (p. 3).

There are multiple organizational learning processes and practices that are likely to have a positive effect on organizational learning. Jerez-Gómez et al. (2019) explored the role of organizational learning capability as a mediating variable between high-performance human resource practices and organizational outcomes. They found that the application of high-performance human resource practices, such as knowledge management capacity, is positively associated with the development of organizational learning capability, which in turn is positively correlated with firms' financial and non-financial performance.

The paper presents six propositions that need to be tested through empirical research aimed at validating the framework or aspects of it. This research could be undertaken through a variety of research designs such as action learning, mixed methods research designs and/or quasi-experimental designs. Further research could focus primarily on learning processes in the workplace context and on how these processes are influenced by other factors such as organizational culture. In turn, these processes will then influence the quality of learning outcomes, particularly development of leadership and management competencies.

Conclusion

The central purpose of this paper is to present a holistic framework for the planning, facilitation, and review of accelerated leadership and management capability development interventions in the workplace. Unlike previous models, which primarily focused on program inputs and outcomes, this framework considers the mediating role of learning processes and learner preferences in the relationship between design inputs and outcomes. It emphasizes the development of competencies essential for effective leadership, underscores the crucial role of learning facilitation, and highlights workplace learning processes, especially meta-learning processes This paper advances four theoretical implications and five practical applications. The Leadership and Management Learning Framework presents six propositions that need to be tested through empirical research.

Data availability

Data sharing is not applicable to this research as no data were generated or analysed.

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Author contributions

GH conceived the conceptual framework, designed the review, structured the article, drafted sections of the article and contributed to analysis and writing. RC contributed to the structure of the article, analysis, writing and editing. CE carried out the review searches, drafted sections of the article, and contributed to analysis, writing and editing.

Competing interests

One of the authors, Roslyn Cameron, was a member of this journal's Editorial Board at the time of acceptance for publication. The article was processed in accordance with the journal's standard editorial policies. The author(s) declare no competing interests.

Ethical approval

No ethical approval was needed for this study as it did not involve human subjects.

Informed consent

No informed consent was needed for this study as it did not involve human subjects.

Additional information

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