



Constructing clarity in managerial competence: seven primitives for future research

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Abstract

Research on competence has yielded a panoply of definitions of managerial competence that have caused insecurity among theorists and practitioners regarding how to deal with the competence of managers. The aim of this paper is to enhance the understanding of the construct of managerial competence. While most research on managerial competence is empirical and focuses on identifying the competencies of successful managers, we applied a conceptual approach and enhanced construct clarity by investigating the fundamental components that constitute managerial competence. In order to investigate these components, we conducted a systematic literature review and identified 31 definitions from diverse sources. Utilizing semantic decomposition, we analyzed these definitions to distill them into foundational elements. Our findings culminated in the identification of seven prime primitives: role, proficiency, disposition, capability, action, context, and effectiveness. We discuss the implications of these components in relation to construct clarity, drawing on four fundamental elements: definitions, semantic relationships to other constructs, scope conditions, and theoretical coherence. Based on our findings, we propose a research agenda consisting of four theoretical and three practical areas. A set of 7 research topics, 14 new research questions, and research methods to approach them is suggested to enable scholars and practitioners study the phenomenon in the future.

Keywords Competence · Managerial competence · Construct clarity · Primitives · Systematic literature review

JEL Classification M00 · M10 · M12

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1 Introduction

In the evolving landscape of management, the concept of managerial competence has emerged as a critical determinant of organizational success. Traditionally, managers play a crucial role in driving organizational performance, fostering innovation, and steering their teams toward achieving strategic objectives. As businesses navigate increasingly complex environments characterized by rapid technological advancements, globalization, and shifting market demands, the ability of managers to effectively lead their teams and make informed decisions has become paramount in the post-digital age as well. Therefore, understanding what constitutes managerial competence is vital for both current and aspiring managers. The Oxford Learner's Dictionaries provide first insights into the nature of competence, defining it as.

- (a) The ability to do something well;
- (b) The power that a court, an organization, or a person has to deal with something.
- (c) A skill that you need in a particular job or for a particular task.

What can be learned from these definitions is that the term “competence” has several meanings: it can be a skill, power, or ability. Furthermore, the same definitions are given for the word “competency” (in plural “competencies”) and, thus, it assumes that both terms can be used synonymously. Indeed, in the management literature, many authors consistently use “competency” and “competence” as synonyms (Boam and Sparrow 1992; Brown 1993; Smith 1993), which is why the construct of managerial competence is expressed through the terms “management competencies” (Carson and Gilmore 2000), “managerial competency” (Bernardin et al. 2016), or “managerial competencies” (Debrah and Ofori 2005). Moreover, certain authors make no differentiation between managerial competence and managerial skills. For example, in their book *Assessing Management Skills*, Paul Iles and Margaret Dale (1992) use the terms “competence” and “competency” to describe managerial skills. Other concepts that can be confused with managerial competence are “managerial ability” (Angraini and Sholihin 2023) or “dynamic managerial capability” (Heubeck 2023).

Many definitions highlight the difficulties of defining “competence” as both an overarching and specific construct and, therefore, suffer from tautology. According to Hartle (1995), a single competency consists of several visible competencies (such as knowledge and skills) and underlying elements of competencies (such as traits and motives). Similarly, Dooley et al. (2004) regard competencies as “performance capabilities needed to demonstrate knowledge, skill, and ability (competency) acquisition.” These definitions imply that competency is a subset of itself, which violates construct clarity (Suddaby 2010). Nevertheless, a few attempts have been made to distinguish between “competence” and “competency.” Burgoyne (1988) considers “being competent” as meeting job criteria, and “having competencies” as “having the required characteristics to perform successfully.” Similarly, Woodruffe (1993) defines competence as “aspects of the job that have to be performed competently” and competency as a “set of behavior patterns” that underpin

competent performance. This goes back to two different approaches of competence: the US approach and the UK approach. White (1959), for example, related competence to psycho-social characteristics associated with superior performance, which became the dominant approach promoted in the US by McClelland (1973) and others. Such a conception of competence is rather different from European approaches that include cognitive, functional, and social dimensions (Winterton 2009) in which psycho-social characteristics do not feature and the emphasis is on performing to the standard required of employment rather than on superior performance.

Consequently, a considerable number of authors complain about the ambivalence of the competence construct and conclude that attempts to distinguish them are futile (e.g., Hoffmann 1999; Stoof et al. 2002; Velde 1997). For example, Weinert (1999) comments “that the many implicit (in word use) and explicit (in theoretical frames of reference) definitions of competence are so heterogeneous that only a small, vague conceptual core remains” (Weinert 1999, p. 26). Moreover, for Ashworth and Saxton (1990), it is “... not clear whether a competence is a personal attribute, an act, or an outcome of action....”

Overall, the vast number of definitions on competence and the interchangeable use of competence and competency in the literature are a key source of uncertainty and divergence in understanding. Identifying the precise meaning of this construct is essential because it involves not only how learning and development are conceptualized and fostered but also the practicality of doing so within organizational settings (Collin 1997). Having greater clarity on managerial competence is of significance and has positive organizational outcomes. Therefore, the purpose of this article is to improve the clarity of the competence construct in management literature. In general, a construct is a broad mental configuration of a given phenomenon (Bacharach 1989, p. 500), which can be presented as a statement consisting of various components of the conceptual world (Priem and Butler 2001 p. 61). In this paper, we refer to this construct as the managerial competence construct. By using the term “competence,” we adhere to Mulder’s (2007) perspective, according to which “competency” represents a part and “competence” its corresponding whole.

Specifically, our research question is “What are the conceptual components of managerial competence?” To answer this question, we conducted a systematic literature review on managerial competence studies using the Scopus database. This method has already been applied by other researchers to clarify the definition of a construct (e.g., Clark et al. 2023); it enabled us to search for studies from different disciplines and over a long period of time. From the studies found, we extracted the definitions of managerial competence and conducted semantic decomposition (Akmajian et al. 2017) on them. From this, we propose a conceptualization of managerial competence that comprises the following seven components: role, action, context, proficiency, disposition, capability, and effectiveness. Our conceptualization offers four contributions to previous calls for studies that could clarify the managerial competence construct (Boak 1991; Dai and Liang 2012; Jena and Sahoo 2014; Stone et al. 2013; Tate 1995; Winterton and Winterton 1999). First, we present all the available definitions and systematically use them to formulate an improved definition. Second, we analyze the semantic relationships to other constructs. Third, we demonstrate the scope conditions in which the construct is applicable. Fourth,

we demonstrate how the seven conceptual components form theoretical coherence (Suddaby 2010).

The remainder of the paper is organized in the following manner. The theoretical background section provides a historical overview of competence to show the reader when the term was introduced into research and when it became established in the field of management. Thereafter, the methodology section provides an outlook of the different steps involved when conducting the systematic literature review. The findings section presents the results of the literature review and the corresponding analysis. Here, we discuss the findings in terms of the four basic elements of construct clarity by Suddaby (2010) and propose a research agenda. The concluding section presents the theoretical contribution, managerial implications, and the limitations of the study.

2 Theoretical background

2.1 Antecedents of managerial competence

As indicated by Mulder (2011), the concept of competence as knowing who is good enough to carry out particular tasks is an ancient one. The Persian (seventeenth century BCE), Greek (third century BCE), Latin, and Western European (sixteenth century AD) languages contain early accounts of this concept.

Although the term “competence” was not yet an academic construct, it was used in academic publications at the beginning of the twentieth century (e.g., Dewey 1916; Small 1914). One of the first studies in modern times to investigate what constitutes competent performance at work was that of Taylor (1911). He developed his famous time and motion study to ascertain the most efficient method of performing a task. This should help managers to understand the skills required for people to execute the work and consequently to provide the correct training to improve these skills.

White (1959), who is credited with having introduced the term, regarded competence as a motivational concept. However, defining competence as “an organism’s ability to interact effectively with its environment” is not the most illuminating and fails to adequately capture the motivational dimension in White’s work, which is itself also questionable, as most management literature clearly distinguishes competence from motivation. This is evident, for example, in the AMO model, in which abilities can be considered competences (Kellner et al. 2019). McClelland (1973) followed White’s approach, and criticized the use of aptitude and intelligence tests as tools of selection, as these tests do not have any correlation to successful job performance. As they were similar to tests in schools and universities, they would be good in predicting academic performance but not job performance. According to McClelland, successful job performance would not only consist of intelligence but also of personal variables that he called “competencies” (McClelland 1973, p. 10). With his consulting firm McBer and Company, McClelland developed tests that made it possible to predict an individual’s competence instead of intelligence. McClelland’s approach and arguments regarding the superiority of competence

have been empirically challenged by Barrett and Depinet (1991), who contributed to restoring the idea of intelligence testing.

2.2 The US approach to managerial competence

It was during the 1970s when the concept of competence became connected with the field of management for the first time. The American Management Association (AMA) wanted to find competencies that differentiated successful managers from less successful ones. In this context, they were termed “managerial competencies.” Together with McBer and Company, AMA undertook a large-scale study with over 1800 managers to create a competence model. They defined a competency as “generic knowledge, motive, trait, self-image, social role, or skill of a person that is causally related to superior performance” (Hayes 1979, p. 2). However, this definition is also a source of conceptual confusion because the inclusion of motive, self-image, and social role are rather distinct from competence, particularly social role, which by definition is a function of a position and not a characteristic of an individual or a skill one can develop.

In 1980, Patricia McLagan proposed to make competency a key topic in human resource management. According to McLagan (1980), competencies were “the knowledge and skills which underlie effective job performance” (p. 22). The significance of this competence approach is that despite being American, she defines competencies using knowledge, skills, and abilities (KSA), which are seen as underpinning effective (not superior) job performance. Therefore, it puts McLagan in the same category as European approaches to competence.

In 1982, Richard Boyatzis, a colleague of McClelland at McBer Company, wrote “the first empirically-based and fully-researched book on competency model development” (Rothwell & Lindholm 1999). This book, titled *The Competent Manager* increased the popularity of the term “competency” in the business and management sector (Cardy and Selvarajan 2006; Woodruffe 1993). Based on Hayes (1979), Boyatzis defined competency as “an underlying characteristic of a person” that could be “a motive, trait, skill, aspect of one’s self-image or social role, or a body of knowledge which he or she uses” (Boyatzis 1982, p. 21). He developed a model of effective job performance, which consisted of three components: the individual’s competencies, the job’s demands, and the organizational environment. With this model, he emphasized that competent performance does not only require individuals who possess relevant competencies but is also dependent on the characteristics of the job and the organizational context.

Building upon Boyatzis’ work, Lyle and Signe Spencer summarized 20 years of competence research by McClelland and McBer and Company. Their book *Competence at Work: Models for Superior Performance* from 1993 is one of the “most research-oriented” and “comprehensive” books on competency modelling (Rothwell and Lindholm 1999). Using the findings from 286 competency studies, the authors created a Competency Dictionary for the 21 most common competencies that lead to superior performance in managerial jobs. Despite the significance of this work, it implies that different managerial jobs require the same competencies, which has

been empirically refuted by Jacobs (1989). Nevertheless, the AMA competence model became the most influential competence model in the US and also impacted competence development in European countries.

2.3 The UK and other European approaches to managerial competence

The Management Charter Initiative (MCI) and National Council for Vocational Qualifications (NCVQ) represent the UK's competence-based approach, which is centered on job performance in particular functions and aimed at certification and accreditation (Iles 1993). In accordance with this approach, competence has been defined as "the ability to perform the activities within an occupational area to the levels of performance expected within employment" (Training Agency 1988). Instead of focusing on the individual characteristics of successful job holders, the prevalent method in the UK was to identify the essential roles, tasks, and duties of the occupation using a tasks-oriented job analysis technique called "functional analysis" (Cheetham and Chivers 1996). This analysis enabled the creation of competence lists for each functional job as well as performance criteria that indicates the appropriate competence level. Competence defined in terms of outcomes had the benefit to improve access, recognize prior learning, and enable candidates to choose their preferred learning mode (Mulder et al. 2007). Thus, in contrast to the US, where managerial competence is based on superior performance of managers, the UK framework emphasizes outcomes from managers performing at what is considered an average level of performance. This is why Hyland (1997, p. 493) considers competence to be "a basic minimum or lowest common denominator sort of concept ... which does not signify high levels of achievement." Additional problems arising from this approach is that people are competent when they have completed a defined activity. Consequently, Cheng et al. (2003) question whether people who fail to complete this activity are regarded as "incompetent" or "not competent." As indicated by Burgoyne (1989), being competent is different from having competencies. Simply having competencies begs the question of how they are used, who is the person using them, and how this person developed them. In this regard, personal behavior that underpins competent performance is not considered. A study by Winterton and Winterton (1999) found that even though the functional competence approach remained dominant in the UK, employers increasingly adopted hybrid models comprising the AMA model and the UK model. The tendency was to go toward more holistic competence models that complement functional competence with basic knowledge and other elements derived from reality, such as ethics. The model by Cheetham and Chivers (1996) consists of five components of professional competence: cognitive competence (knowledge), functional competence (skills), personal competence (behavior), ethical competence (values), and meta-competence. This approach aligns well with the KSA approach employed extensively in training, although, arguably, it is behavior rather than the underpinning attitudes that should be emphasized. The approach also reflects the French "tryptique" competence model described by Le Deist (2009) that consists of knowledge (*savoir*), functional competences (*savoir-faire*), and behavioral competences (*savoir-être*).

Similar differentiations can be found in the German-speaking countries, where the overarching concept of vocational action competence (*handlungskompetenz*) is specified in domain or subject competence (*fachkompetenz*), personal competence (*personalkompetenz*), social competence (*sozialkompetenz*), and method competence (*methodenkompetenz*) (Le Deist and Winterton 2005).

2.4 Empirical research on managerial competence

Empirical research on managerial competence often employs a variety of methodologies, ranging from qualitative (Cheng et al. 2005; Ekaterini 2011; Harison and Boonstra 2009; Sudirman et al. 2019) and quantitative (e.g., Gentry et al. 2008; Veliu and Manxhari 2017) to mixed methods (Abdullah et al. 2018; Qiao and Wang 2009). These studies typically focus on identifying competencies, assessing perceived competency levels, and analyzing gaps between current and necessary competencies to enhance managerial effectiveness across different contexts.

Qualitative approaches to measuring managerial competencies often involve collecting detailed insights through various types of interviews. These methods provide rich, contextual data about the competencies that managers deem essential for effectiveness. Ekaterini's (2011) study exemplifies this approach by collecting critical incidents from middle managers during structured interviews. The focus on ethical dilemmas and fairness allows researchers to glean insights into the competencies that contribute to managerial effectiveness in real-world scenarios. Studies such as those by Sudirman et al. (2019) and Cheng et al. (2005) utilize behavioral-event interviews to explore both micro and macro competencies. These interviews involve asking managers to describe specific situations where they demonstrated competencies, thus highlighting their practical applications. Harison and Boonstra (2009) employed expert interviews to refine their competency framework for managing technochange projects.

Quantitative methods typically involve structured surveys and questionnaires that allow for the systematic assessment of competencies across larger samples. The SKILLSCOPE instrument used by Gentry et al. (2008) is a prime example of a 360-degree assessment tool. This method evaluates managerial competencies from multiple perspectives, including self-assessments and feedback from peers and supervisors, thereby providing a comprehensive view of an individual's competencies. The study by Veliu and Manxhari (2017) utilized a self-administered questionnaire to gather perceptions of competencies among managerial employees. Various studies (Qiao and Wang 2009; Liang et al. 2018; Viitala 2005; Wickramasinghe and De Zoyza 2009) employ five-point or seven-point Likert scales to quantify managers' perceptions of the importance and frequency of competencies. These scales facilitate the identification of competency gaps and the prioritization of skill development areas.

Some studies adopt mixed methods, combining qualitative and quantitative techniques to provide a more nuanced understanding of managerial competencies. Abdullah et al. (2018) employed a multi-layered thematic analysis of literature alongside structured interviews and a survey to validate and generalize technical

competencies in construction management. This combination enhances the robustness of findings by triangulating data sources. In Qiao and Wang's (2009) research, a combination of qualitative peer nominations and quantitative questionnaires was used to identify and validate core competencies, showcasing the benefits of integrating multiple methodologies.

The studies presented in this section demonstrate that empirical research on managerial competence employs a diverse array of measurement techniques. While qualitative methods, such as critical incident interviews and behavioral-event interviews, provide in-depth insights, quantitative approaches, such as 360-degree assessments and Likert-scale surveys, facilitate systematic evaluations across populations. Mixed-methods approaches combine the strengths of both qualitative and quantitative techniques, enhancing the overall validity and applicability of findings.

2.5 Conceptual ambiguities and the need for clarity in managerial competence

To sum up, it is evident that since the introduction of the construct of competence and management competence, various conceptual analyses, reviews, and research papers have been published (Boak 1991; Burgoyne 1989; Le Deist and Winterton 2005; Mulder and Winterton 2017; Spencer and Spencer 1993; Tate 1995). As with many new concepts in social science, numerous authors have provided alternative definitions of "competence" and "competency," and reviewers have highlighted the various features reflected in these definitions. We have already pointed out in the introduction that there is a lack of clarity for the concepts of competence and management competence, which is why various authors have criticized the concept. For example, Westera (2001) regards competence as an "unclear label, that does not augment our knowledge and understanding of the world." Van der Klink and Boon (2003) describe competence as a "fuzzy concept," but acknowledge it as a "useful term" to bridge the gap between education levels and requirements for employment.

To enhance construct clarity, this paper examines the conceptual components of the managerial competence construct by comparing several definitions of management competence, management competencies, managerial competence, and managerial competencies. The most suitable method to find these definitions is a systematic literature review, which is presented in the next section.

3 Methodology

3.1 Research method

Based on Tranfield et al. (2003), the current study uses a systematic literature review to answer the research question proposed in the introduction. A systematic literature review methodology enabled us to critically analyze and synthesize the existing research in order to identify papers with definitions of managerial competence. The search was conducted in the Scopus database up until the end of the year 2024. Several keywords related to competencies such as skills, capabilities, and expertise

were combined with the Boolean operator OR. Consequently, the following search string was used: “competent manager*” OR “managerial competenc*” OR “manage* competenc*” OR “managerial skills” OR “management skills” OR “managerial expertise” OR “management expertise” OR “managerial capability*” OR “management capability*”. In order to guarantee that the information collected is useful and connected with the research question being examined, we applied a filtering process in the research database. The following limitation criteria were applied by the filtering mechanism:

- (1) The subject area was limited to business, management, and accounting; other disciplines such as mathematics or arts and humanities were not considered.
- (2) The document-type was limited to peer-reviewed journal articles to ensure scientific rigor; conference proceedings, book chapters, editorials, and reviews were not considered.
- (3) The language was limited to articles published in English to ease natural language text analytics processing; articles in other languages were not considered.
- (4) The publication stage was limited to articles that have been finalized; unpublished articles or developmental papers were not considered.

3.2 Sample of articles

The adoption of these limitation criteria resulted in an initial sample of 1036 articles. In order to ensure the high quality of papers, we only included articles from journals ranked 3, 4, and 4* in the Academic Journal Guide 2021. By doing this, we narrowed down the initial sample of 980 articles to 174. In the next step, all 174 articles were read for unique definitions of managerial competence—that is, definitions that the authors of the article formulated. During this process, 143 articles were excluded, because they a) focused on the capabilities of the organization rather than the competencies of the individual manager (N=101), and b) defined competencies in general by citing other authors (N=42). The final sample consisted of 31 articles with unique definitions of managerial competence. Figure 1 summarizes and illustrates the systematic review flow used to finalize the dataset of 31 articles.

The sampled articles have been published in a diverse set of academic journals from various fields of study. The highest concentration of articles (five articles) was found in *The International Journal of Human Resource Management*. Two articles each were published in the *International Journal of Hospitality Management*, *Journal of International Management*, *Journal of Management*, *Journal of Management Studies*, *Management Education and Development*, *Personnel Review*, and *Technological Forecasting and Social Change*. The remaining 12 articles were spread over 12 journals. A closer look at the finding indicates that most articles were published in journals in the fields of human resource management (eight articles), general management and ethics/CSR (five articles), and innovation (four articles). Nine articles have been published before 2000, with the oldest dating from 1976. Further, 17 articles were published between 2000 and 2020; 5 articles were published after

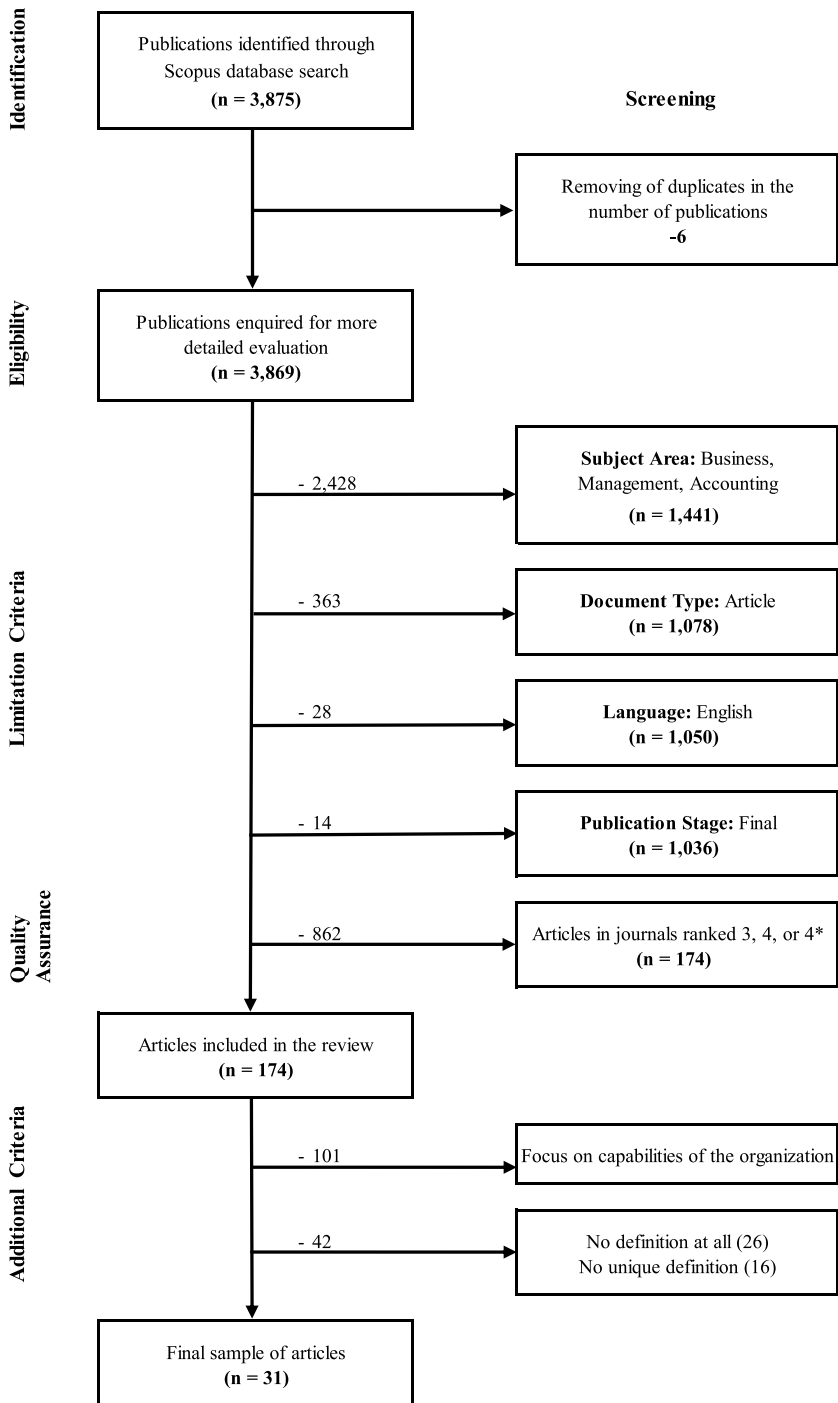


Fig. 1 Overview of the systematic literature review

2020, with the newest ones being published in 2023. The final sample of articles is illustrated in Table 1.

3.3 Method of analysis

We analyzed these articles by conducting a semantic decomposition, in which lexical content, such as sentences and groups of words, is inductively decomposed into smaller parts, called “primitives,” that define the content (Akmajian et al. 2017). Each primitive is then analyzed within the context of the respective definition in order to identify overarching features of the extant definitions, which are then used for improving construct clarity (Suddaby 2010). We followed the semantic decomposition process described by Vial (2019) and Hund et al. (2021). For example, Vial (2019) used semantic decomposition to improve the construct clarity of “digital transformation.” Based on 23 definitions, the author identified four primitives: target entity, scope, means, and expected outcome. Similarly, Hund et al. (2021) conducted semantic decomposition to ascertain what constitutes digital innovation. Their analysis of 29 definitions resulted in 6 primitives: input, involvement, properties, scope, implications, and creation.

For this article, we extracted the 31 definitions of managerial competence into an Excel sheet, broke them down into their constituting parts, and assessed them based on the semantic purpose of each definition. For example, Bücken and Poutsma (2010) defined management competence as “the potential capacity of a manager to successfully handle certain situations or complete a certain task or job.” This definition included the following constituting parts: (1) potential capacity, (2) manager, (3) successfully handle, (4) certain situations, (5) complete, (6) a certain task or job. Overall, the 31 definitions of managerial competence resulted in 172 decomposed items. After this, we compared all decomposed items to identify overarching features, which resulted in seven primitives. We present our findings in more detail in the next section.

4 Findings

4.1 Competence constructs and their definitions

Table 2 represents the competence constructs and their definitions in the 31 articles we used for semantic analysis. Overall, eight formulations of the managerial competence construct were adopted: management competence (Bücken and Poutsma 2010; Du Gay et al. 1996; Ngai et al. 2011; Pedraza-Rodríguez et al. 2023), managerial competence (Avkiran 1999; Burgoyne 1989; Collin 1989), managerial competences (Hay 1990; Whitely 1989), management competency (Tett et al. 2000), managerial competency (Bernardin et al. 2016; Hogan and Warrenfeltz 2003; Wickramasinghe and De Zoyza 2011), management competencias (Carson and Gilmore 2000; Carstens and De Kock 2017; Chen and Wu 2011; Daouk-Öyry et al. 2021; Fjelstul and Tesone 2008; Muzzi and Albertini 2015; Sambasivan et al. 2009), managerial

Table 1 Articles selected for analysis

Authors	Year	Title	Journal
Avkiran	1999	An improved subordinate appraisal of bank manager's competence	The International Journal of Human Resource Management
Bernardin et al	2016	Rater rating-level bias and accuracy in performance appraisals: The impact of rater personality, performance management competence, and rater accountability	Human Resource Management
Bücker and Poutsma	2010	Global management competencies: A theoretical foundation	Journal of Managerial Psychology
Burgoyne	1989	Creating the managerial portfolio: Building on competency approaches to management development	Management Education and Development
Burgoyne and Stuart	1976	The nature, use and acquisition of managerial skills and other attributes	Personnel Review
Busulwa, Pickering, and Mao	2022	Digital transformation and hospitality management competencies: Toward an integrative framework	International Journal of Hospitality Management
Carson and Gilmore	2000	SME marketing management competencies	International Business Review
Carstens and De Kock	2017	Firm-level diversity management competencies: Development and initial validation of a measure	The International Journal of Human Resource Management
Chen and Wu	2011	IT management capability and its impact on the performance of a CIO	Information & Management
Collin	1989	Managers' competence: Rhetoric, reality and research	Personnel Review
Daouk-Öyry, Sahakian, and van de Vijver	2021	Evidence-based management competency model for managers in hospital settings	British Journal of Management
Debrah and Ofori	2005	Emerging managerial competencies of professionals in the Tanzanian construction industry	The International Journal of Human Resource Management
Donbesuur et al	2023	On the performance of platform-based international new ventures: The roles of non-market strategies and managerial competencies	Journal of International Management
Du Gay, Salaman, and Rees	1996	The conduct of management and the management of conduct: Contemporary managerial discourse and the constitution of the 'competent' manager	Journal of Management Studies

Table 1 (continued)

Authors	Year	Title	Journal
Fjelstul and Tesone	2008	Golf and club entry level management competencies	International Journal of Contemporary Hospitality Management
Harvey and Richey	2001	Global supply chain management: The selection of globally competent managers	Journal of International Management
Hay	1990	Managerial competences or managerial characteristics?	Management Education and Development
Hogan and Warrenfeltz	2003	Educating the modern manager	Academy of Management Learning & Education
Kanungo and Misra	1992	Managerial resourcefulness: A reconceptualization of management skills	Human Relations
Levenson, Van der Stede, and Cohen	2006	Measuring the relationship between managerial competencies and performance	Journal of Management
Muzzi and Albertini	2015	Communities and managerial competencies supporting SME's innovation networking: A longitudinal case study	R&D Management
Ngai, Chau, and Chan	2011	Information technology, operational, and management competencies for supply chain agility: Findings from case studies	The Journal of Strategic Information Systems
Pedraza-Rodríguez et al	2023	Management skills and organizational culture as sources of innovation for firms in peripheral regions	Technological Forecasting and Social Change
Sambasivan, Abdul, and Yusop	2009	Impact of personal qualities and management skills of entrepreneurs on venture performance in Malaysia: Opportunity recognition skills as a mediating factor	Technovation
Shet and Pereira	2021	Proposed managerial competencies for Industry 4.0 – Implications for social sustainability	Technological Forecasting and Social Change
Siu	1998	Managing by competencies – a study on the managerial competencies of hotel middle managers in Hong Kong	International Journal of Hospitality Management
Tett et al	2000	Development and content validation of a 'hyperdimensional' taxonomy of managerial competence	Human Performance

Table 1 (continued)

Authors	Year	Title	Journal
Veliu and Manxhari	2017	The impact of managerial competencies on business performance: SME's in Kosovo	Journal of Management
Whitley	1989	On the nature of managerial tasks and skills: Their distinguishing characteristics and organization	Journal of Management Studies
Wickramasinghe and De Zoysa	2009	An assessment of managerial competency needs: Empirical evidence from a Sri Lankan telecommunication service provider	The International Journal of Human Resource Management
Wickramasinghe and De Zoysa	2011	Managerial competency requirements that enhance organisational competences: A study of a Sri Lankan telecom organisation	The International Journal of Human Resource Management

Table 2 Definitions of managerial competence

Author(s)	Competence construct	Definition (constituting primitives)
Bücker and Poutsma (2010)	Management competence	The potential capacity (p1) of a manager (p2) to successfully handle (p3) certain situations (p4) or complete (p5) a certain task or job (p6)
Du Gay et al. (1996)		The attributes (p1), skills (p2) and capacities (p3) managers (p4) need to operate competently (p5) within organizations (p6)
Ngai et al. (2011)		The ability (p1) of an organization's management (p2) to value (p3) and directly appropriate (p4) organizational response (p5) to market change (p6)
Pedraza-Rodríguez et al. (2023)		Personal skills (p1), characteristics (p2), attitudes (p3), and behaviors (p4) in the executives (p5) to achieve to be effective in their managerial processes (p6)
Avkiran (1999)	Managerial competence	An underlying characteristic (p1) of a manager (p2) that results in (p3) effective (p4) and/or superior performance (p5) in a managerial job (p6)
Burgoyne (1989)		A managers' (p1) ability (p2) and willingness (p3) to perform a task (p4)
Collin (1989)		The possession (p1) of specific skills and abilities (p2), [...] attitudes (p3), values (p4), and mindsets (p5) that allow managers (p6) to confront, understand, and deal with (p7) a wide range of forces within and outside their organisations (p8)
Hay (1990)	Managerial competences	The characteristics (p1) of managers (p2) for being effective (p3) within increasingly complex environments (p4)
Whitley (1989)		The capacities (p1) needed to perform (p2) managerial tasks (p3) and problems (p4)
Tett et al. (2000)	Management competence	An identifiable aspect (p1) of prospective work behavior (p2) attributable to the manager (p3) that is expected to contribute positively and/or negatively (p4) to organizational effectiveness (p5)
Bernardin et al. (2016)	Managerial competence	An underlying competency (p1) made up of knowledge (p2), skills (p3), abilities (p4), and motivations (p5)
Hogan and Warrenfeltz (2003)		Performance capability (p1) that distinguishes (p2) effective [managers] (p3) from ineffective managers (p4) in a particular organization (p5)
Wickramasinghe and De Zoyza (2011)		A measurable characteristic (p1) of a person (p2) which is related to effective performance (p3) in a specific job (p4), organisation (p5), or culture (p6)

Table 2 (continued)

Author(s)	Competence construct	Definition (constituting primitives)
Carson and Gilmore (2000)	Management competencies	Management process (p1), roles (p2), skills (p3), attributes (p4), personal characteristics (p5), and demands (p6)
Carstens and De Kock (2017)		The range of knowledge (p1), skills (p2), abilities (p3), and perspectives (p4) of managers (p5) that are instrumental (p5) in the attainment of preferred results (p6)
Chen and Wu (2011)		The level of skills/knowledge (p1) that enable managers (p2) to understand the domain-specific knowledge of business (p3), speak the language of business (p4) and interact (p5) with their business partners in other divisions (p6)
Daouk-Öyry et al. (2021)		The personal knowledge (p1), skills (p2), abilities (p3) and other characteristics (p4) of managers (p5)
Fjelstul and Tesone (2008)		Knowledge (p1), skills (p2), attitudes (p3), motives (p4), traits (p5), and self-concept (p6) required for (p7) current effectiveness (p8) and future success (p9) of [...] managers (p10)
Muzzi and Albertini (2015)		The behavioral characteristics (p1) underlying (p2) the activities, tasks, or challenges (p3) in management jobs (p4)
Sambasivan et al. (2009)		Knowledge (p1), skills (p2), and/or abilities (p3) required to manage a venture (p4)
Busulwa et al. (2022)	Managerial competencies	The knowledge (p1), skills (p2), abilities (p3), and other characteristics (p4) that managers (p5) require to effectively do their managerial work (p6)
Debrah and Ofori (2005)		The individual behaviours (p1), such as goal setting (p2), action management (p3) and leadership skills (p4), in addition to organizational skills (p5), such as HRM (p6) and performance (p7), in order to operate effectively (p8)
Donbesurr et al. (2023)		The individual-level skills (p1) and personal capacity (p2) of top managers (p3)
Harvey and Richey (2001)		Top management team capabilities (p1), managerial social knowledge (p2), informal internal/external business networks (p3) [...] and personal social capital (p4) of managers (p5) that can be used to accomplish the mission of the organization (p6)
Kanugo and Misra (1992)		The ability (p1) to engage in (p2) identifiable patterns (p3) of cognitive mediations (p4) in managerial jobs (p5)
Levenson et al. (2006)		The managerial actions and behaviours (p1), expressed in technical skills (p2), basic management skills (p3), and leadership skills (p4) necessary for improved unit-level performance (p5)

Table 2 (continued)

Author(s)	Competence construct	Definition (constituting primitives)
Shet and Pereira (2021)		Demonstrable behaviors (p1) stemming from combinations of knowledge (p2), skills (p3), and attitudes (p4) (KSAs), and leading to overall superior job performance (p5)
Siu (1998)		Managers (p1) having the ability (p2), being capable (p3), possessing certain skills (p4) and the knowledge (p5) to do their job effectively (p6)
Velju and Manxhari (2017)		Knowledge (p1), abilities (p2), skills (p3) and behaviors (p4) required for effective job performance (p5) in managerial occupations (p6)
Wickramasinghe and De Zoyza (2009)		The knowledge (p1) and skills (p2) that enable the manager (p3) to give an effective performance (p4) in specific areas of management (p5)
Burgoyne and Stuart (1976)	Managerial qualities	The kinds of skills (p1) and other qualities (p2) in managers (p3) that contribute to (p4) managerial success (p5) and performance in various forms (p6)

competencies (Busulwa et al. 2022; Debrah and Ofori 2005; Donbesuur et al. 2023; Harvey and Richey 2001; Kanugo and Misra 1992; Levenson et al. 2006; Shet and Pereira 2021; Siu 1998; Velu and Manxhari 2017; Wickramasinghe and De Zoyza 2009), and managerial qualities (Burgoyne and Stuart 1976). Not assuming any difference between the words “management” and “managerial,” it is evident that the most definitions are for management/managerial competencies (17), seven are for management/managerial competence, three for management/managerial competency, two for managerial (without management) competences, and one for managerial qualities.

4.2 Semantic decomposition

To answer our research question “What are the conceptual components of managerial competence?”, we applied semantic decomposition to the 31 definitions that we identified from our systematic literature review. As outlined in the methodology section, we systematically decomposed each definition into a series of constituting primitives, which are marked in grey font and number (p1–p8) in Table 2. After this, we counted the frequency of each constituting primitive. For those constituting primitives that occurred with a frequency greater than one, we checked their definitions in the Oxford Dictionary of English (ODE 2010). The definitions aided us in comparing the constituting primitives with each other and identify seven prime primitives that represent the key conceptual components of managerial competence (Table 3): role, proficiency, disposition, capability, action, context, and effectiveness.

4.2.1 Primitive 1: role

The first primitive that becomes apparent from the definitions is “role”; 19 out of 31 definitions included 1 constituting primitive related to role and 2 out of 31 definitions included 2 constituting primitives related to role. The most frequently mentioned constituting primitives were “manager” (Avkiran 1999; Bucker and Poutsma 2010; Burgoyne 1989; Du Gay et al. 1996) and “managers” (Burgoyne and Stuart 1976; Busulwa et al. 2022; Carstens and De Kock 2017; Daouk-Öyry et al. 2021; Fjelstul and Tesone 2008; Harvey and Richey 2001; Hay 1990; Siu 1998). Overall, this primitive emerged from 23 constituting primitives.

4.2.2 Primitive 2: proficiency

In this primitive, 6 out of 31 definitions included one constituting primitive, 12 out of 31 definitions included 2 constituting primitives and 2 out of 31 had 3 constituting primitives. The most frequently mentioned constituting primitives were “skills” and “knowledge” and many authors used both of them in their definitions (Bernardin et al. 2016; Busulwa et al. 2022; Carstens and De Kock 2017; Chen and Wu 2011; Daouk-Öyry et al. 2021; Fjelstul and Tesone 2008; Sambasivan et al. 2009; Shet and Pereira 2021; Siu 1998; Velu and Manxhari 2017; Wickramasinghe and De Zoyza 2009). Overall, this primitive emerged from 36 constituting primitives.

Table 3 Comparison of the seven primitives from definitions on managerial competence

Primitive 1: Role	23	Primitive 2: Proficiency	36	Primitive 3:Disposition	24	Primitive 4: Capability	24
Constituting primitives	Freq	Constituting primitives	Freq	Constituting primitives	Freq	Constituting primitives	Freq
Manager/managers	12	Skills	11	Attitudes	4	Ability/Abilities	10
Managerial job/Managerial jobs	1	Knowledge	9	Attributes	2	Capacities	2
Demands	1	Leadership skills	2	Other characteristics	2	Enable the manager/managers	2
Executives	1	Basic management skills	1	Characteristics	2	Allow managers	1
Organization's management	1	Individual-level skills	1	Value/Values	2	Being capable	1
Management jobs	1	Kinds of skills	1	Cognitive mediations	1	Being effective	1
Managerial occupations	1	Level of skills/knowledge	1	Measurable characteristics	1	Personal capacity	1
Person	1	Managerial social knowledge	1	Mindsets	1	Personal capability	1
Roles	1	Organizational skills	1	Motivations	1	Possession	1
Specific areas of management	1	Personal knowledge	1	Motives	1	Potential capacity	1
Top managers	1	Personal skills	1	Other qualities	1	Required for	1
		Personal social capital	1	Personal characteristics	1	Top management team capabilities	1
		Perspectives	1	Self-concept	1	Underlying competency	1
		Possessing certain skills	1	Traits	1		
		Specific skills and abilities	1	Underlying	1		
		Technical skills	1	Underlying characteristics	1		
		Understand the domain-specific knowledge	1	Willingness	1		
Primitive 5: Action	26	Primitive 6: Context	14	Primitive 7: Effectiveness	27		
Constituting primitives	Freq	Constituting primitives	Freq	Constituting primitives	Freq		
Behaviors	2	A certain task or job	1	Effective performance	2		
Action management	1	A wide range of forces within and outside their organisations	1	Accomplish the mission of the organization	1		

Table 3 (continued)

Primitive 5: Action	26	Primitive 6: Context	14	Primitive 7: Effectiveness	27
Activities, tasks, or challenges	1	Business partners in other divisions	1	Attainment of preferred results	1
Attributable to the manager	1	Certain situations	1	Contribute to	1
Behavioral characteristics	1	Culture	1	Current effectiveness	1
Complete	1	HRM (Human resource management)	1	Directly appropriate	1
Confront, understand, and deal with	1	In a particular organization	1	Effective in their managerial processes	1
Demonstrable behaviors	1	Increasingly complex environments	1	Effective job performance	1
Distinguishes	1	Informal internal/external business networks	1	Effective managers	1
Engage in	1	Market change	1	Effectively do their managerial work	1
Goal setting	1	Organisation	1	Expected to contribute positively and/or negatively	1
Identifiable aspect	1	Organizational response	1	Future success	1
Identifiable patterns	1	Specific job	1	Improved unit-level performance	1
Individual behaviors	1	Within organizations	1	Ineffective managers	1
Interact	1			Instrumental	1
Manage a venture	1			Leading to overall superior job performance	1
Managerial tasks	1			Managerial success	1
Management process	1			Operate competently	1
Managerial actions and behaviors	1			Operate effectively	1
Perform	1			Organizational effectiveness	1
Perform a task	1			Performance in various forms	1
Performance	1			Related to effective performance	1
Prospective work behavior	1			Speak the language of business	1
Problems	1			Successfully handle	1
Result in	1			Superior performance	1
	1			To do their job effectively	1

4.2.3 Primitive 3: disposition

In this primitive, 13 out of 31 definitions included 1 constituting primitive, 2 out of 31 definitions included 2 constituting primitives, 1 out of 31 had 3 constituting primitives, and 1 out of 31 had 4 constituting primitives. The most frequently mentioned constituting primitives were “attitudes” (Collin 1989; Fjelstul and Tesone 2008; Pedraza-Rodríguez et al. 2023; Shet and Pereira 2021), “attributes” (Carson and Gilmore 2000; Du Gay et al. 1996), various forms of “characteristics” (Avkiran 1999; Busulwa et al. 2022; Carson and Gilmore 2000; Daouk-Öyry et al. 2021; Hay 1990; Pedraza-Rodríguez et al. 2023; Wickramasinghe and De Zoyza 2011), and “values” (Collin 1989; Ngai et al. 2011). Overall, this primitive emerged from 24 constituting primitives.

4.2.4 Primitive 4: capability

In this primitive, 18 out of 31 definitions included 1 constituting primitive and 3 out of 31 definitions included 2 constituting primitives. The most frequently mentioned constituting primitives were “ability” (Burgoyne 1989; Kanugo and Misra 1992; Ngai et al. 2011; Siu 1998), “abilities” (Bernardin et al. 2016; Busulwa et al. 2022; Carstens and De Kock 2017; Daouk-Öyry et al. 2021; Sambasivan et al. 2009; Veliu and Manxhari 2017), and variations of “capacities” (Bücker and Poutsma 2010; Donbesuur et al. 2023; Du Gay et al. 1996; Whitely 1989). Overall, this primitive emerged from 24 constituting primitives.

4.2.5 Primitive 5: action

In this primitive, 12 out of 31 definitions included 1 constituting primitive, 2 out of 31 definitions included 2 constituting primitives, 2 out of 31 had 3 constituting primitives, and 1 out of 31 had 4 constituting primitives. The most frequently mentioned constituting primitives were various types of “behavior” (Muzzi and Albertini 2015; Pedraza-Rodríguez et al. 2023; Shet and Pereira 2021; Tett et al. 2000; Veliu and Manxhari 2017), and “managerial actions” (Carson and Gilmore 2000; Debrah and Ofori 2005; Levenson et al. 2006; Muzzi and Albertini 2015; Sambasivan et al. 2009; Whitely 1989). In total, this primitive emerged from 26 constituting primitives.

4.2.6 Primitive 6: context

In this primitive, 7 out of 31 definitions included 1 constituting primitive, 2 out of 31 definitions included 2 constituting primitives, and 1 out of 31 had 3 constituting primitives. The most frequently mentioned constituting primitives were related to aspects within the organization (Chen and Wu 2011; Collin 1989; Debrah and Ofori 2005; Du Gay et al. 1996; Hogan and Warrenfeltz 2003; Ngai et al. 2011; Wickramasinghe and De Zoyza 2011); however, “a wide range of forces outside their organization” (Collin 1989), “informal external business networks” (Harvey and Richey 2001), “increasingly complex environments” (Hay 1990), and “market

change” (Ngai et al. 2011) were also mentioned. Overall, this primitive emerged from 14 constituting primitives.

4.2.7 Primitive 7: effectiveness

In this primitive, 14 out of 31 definitions included 1 constituting primitive, 5 out of 31 definitions included 2 constituting primitives, and 1 out of 31 had 3 constituting primitives. The most frequently mentioned constituting primitives were related to being effective (Avkiran 1999; Busulwa et al. 2022; Debrah and Ofori 2005; Fjelstul and Tesone 2008; Hogan and Warrenfeltz 2003; Pedraza-Rodríguez et al. 2023; Siu 1998; Tett et al. 2000; Velu and Manxhari 2017; Wickramasinghe and De Zoyza 2009, 2011), achieving goals (Carstens and De Kock 2017; Harvey and Richey 2001) and improved performance (Avkiran 1999; Burgoyne and Stuart 1976; Fjelstul and Tesone 2008; Levenson et al. 2006; Shet and Pereira 2021). In total, this primitive emerged from 27 constituting primitives.

5 Discussion of the findings and research agenda

In this section, we first discuss our findings considering four basic elements of construct clarity: definitions, semantic relationships to other constructs, scope conditions, and theoretical coherence (Suddaby 2010). Second, we propose a research agenda for the study of managerial competence related to Suddaby’s (2010) four elements of construct clarity as well as three more practical areas.

5.1 Definitions of managerial competence

According to Suddaby (2010, p. 347), arguably the most common problem with definitions is that authors simply fail to define their constructs. In our findings, 26 out of 73 articles failed to define the construct of managerial competence. Contrary to these articles without definitions, 47 articles provided definitions, 31 of which were unique and used in our semantic decomposition. Based on the semantic decomposition of these 31 definitions, our findings indicate that managerial competence consist of seven components: role, proficiency, disposition, capability, action, context, and effectiveness. Using these seven components, we propose the following working definition of managerial competence: *A combination of skills, knowledge, and characteristics that provides managers the ability to perform in a manner that positively impacts their organization.* By basing our definition on a systematic literature review and semantic decomposition, we contribute to previous studies that have requested a clarification of the construct of managerial competence (Dai and Liang 2012; Jena and Sahoo 2014; Stone et al. 2013). However, we aim to recalibrate this working definition after our discussion of the other three basic elements of construct clarity.

5.2 Semantic relationships to other constructs

In addition to definitions, construct clarity requires the author to scrutinize the semantic relationship of the focal construct to other constructs. As our seven primitives indicate, constructs exist in referential relationships with other constructs and the phenomena they are designed to represent (Suddaby 2010, p. 347). The first primitive, “role” includes constructs that refer to an individual-level actor, with the most frequent ones being a manager or managers. Interestingly, all these constructs—except for “person”—refer to structural forms, which imply roles and positions tied to an organization’s goals and values, rather than to the agency, which we define as the voluntaristic actions of people that could restructure these roles and positions (see Poole and van de Ven 1989, p. 570).

Conversely, the second primitive “proficiency” and the third primitive “disposition” include constructs that relate to a person and not to a role. In the second primitive, the constructs “skills” and “knowledge” are aspects that a person has learned. Previous studies have empirically measured the relationship of managerial competence and other constructs such as skills (Asumeng 2014; Gaál et al. 2013) and performance (Levenson et al. 2006; Veliu and Manxhari 2017; Qiao and Wang 2009). We note that in a few of these articles, managerial competence and managerial skills are used synonymously (Asumeng 2014; Levenson et al. 2006; Qiao and Wang 2009), which decreases the clarity of the construct of managerial competence. In the third primitive, constructs such as attitudes, personal characteristics, and traits are rooted deeply in an individual’s personality. They are more inherent than skills and knowledge in the second primitive. For Boyatzis (1982), the constructs from our second and third primitives form competence levels that “affect different aspects of the individual’s application of a particular competency” (p. 28). He identified skills, self-image, social role, motives, and traits. Spencer and Spencer (1993) termed them “underlying characteristics,” which they classified as knowledge, skills, self-concept, traits, and motives. When we compare the constructs that relate to a person in classical studies on managerial competence by Boyatzis (1982) and Spencer and Spencer (1993) with the ones included in the literature review, it becomes evident that contemporary researchers regard other constructs as more relevant. While knowledge and skills are still included, only one article (Fjelstul and Tesone 2008) mentions traits, motives, and self-concept. Since the term “characteristic” appears as well in the definitions, one can assume it includes constructs such as traits, motives, and self-concept. However, such assumptions decrease the clarity of the construct of managerial competence.

The fourth primitive, “capability” includes the constructs of “ability,” “capability,” and variations of “capacity.” These constructs possess a different theoretical dimension than constructs in other primitives. Constructs under “capability” describe potentiality instead of actuality, which are two different ontological entities (Modrak 1979). They describe manager’s knowledge, skills, and dispositions that have the potentiality to actualize (Bolton et al. 1999; Tigre, Henriques, and Curado 2023). Arguably, the contrast is greatest with our fifth primitive “action.” This primitive describes a situation in which the manager is required to make a response; in order to make this response, the manager needs proficiency and disposition.

According to Hoffmann (1999), the response is the “observable demonstration” that the manager has perceived the situation properly and possesses the relevant personal attributes to deal with it competently. This action can be related to a specific managerial task, such as interacting with stakeholders, allocating resources, negotiating, or handling disturbances. It can also be related to the overall performance of the manager in his/her job. Since the work of managers is fragmented, diverse, and variable (Antonacopoulou and FitzGerald 1996) and since many problems require ad hoc troubleshooting (Hales 1986), all competencies must be renewed on a regular basis and cannot be regarded as static concepts.

Further, the relationship between constructs included in our second, third, fourth, and fifth primitives has previously been visualized as an iceberg (Bergenhengouwen 1996; Garavan and McGuire 2001; Kennedy and Dresser 2005), with skills, knowledge, and behavior lying above the waterline, and abilities, capabilities, and attitudes below. The reasoning behind this is that knowledge, skills, and behavior are more observable characteristics and are, thus, easier to develop than abilities, capabilities, and attitudes, as the last ones represent the “deeper-lying personal characteristics” (Bergenhengouwen 1996). We agree that this visualization is helpful, because capabilities and attitudes are indeed more hidden than knowledge and skills. However, the iceberg visualization lacks the dimension of potentiality: knowledge, skills, and attitudes are constructs that describe something that remains in a person’s memory, whereas capabilities do not. Knowledge exists in declarative memory and skills and attitudes remain in nondeclarative memory (Squire 2004). Further, ability or capability is the power to do something by using the items stored in memory, either through conscious recollection of knowledge or automatic expression of skills and attitudes through behavior.

In our findings, the sixth primitive “context” and the seventh primitive “effectiveness” complete the identified components of managerial competence. Usually, effectiveness is the consequence of the manager’s response to a certain situation. This is only possible if the manager has the necessary combination of proficiency and disposition. There is consensus among researchers that competent managers make a difference in the level of organizational performance (Albanese 1989; Brown et al. 2018; Levenson et al. 2006; Sengupta et al. 2013; Veliu and Manxhari 2017). As indicated in the literature review, managerial competence enables managers to perform their tasks more effectively; it also helps them to achieve their individual goals and those of the organization and bring economic and social welfare to individuals and organizations.

5.3 Scope conditions of managerial competence

In addition to the definitions and semantic relationships to other constructs, construct clarity requires the author to delineate the scope conditions under which a construct will or will not be applicable (Suddaby 2010, p. 347). In our findings, primitives 1 and 6 form the scope conditions in which the managerial competence construct will or will not apply. Under the first primitive “role,” the most frequently mentioned constituting primitives were “manager” (Avkiran 1999;

Bücker and Poutsma 2010; Burgoyne 1989; Du Gay et al. 1996) and “managers” (Burgoyne and Stuart 1976; Busulwa et al. 2022; Carstens and de Kock 2017; Daouk-Öyry et al. 2021; Fjelstul and Tesone 2008; Harvey and Richey 2001; Hay 1990; Siu 1998). In these cases, the authors have used an element of the term being defined in the definition, which is tautological. Consequently, we propose that the words “manager” or “managers” should not be used in a definition of managerial competence and, thus, omit it from our working definition. However, the frequent use of “manager” and “managers” implies an individual focus, as it relates to individuals in management occupations. It does not specify the type of manager and is applicable to roles such as lower-level manager, middle manager, and senior manager. Consequently, the managerial role is the first scope condition in which the managerial competence construct will be applicable.

The sixth primitive, “context,” represents the setting in which the manager’s role is performed. Having context as a part of the definition is not tautological, but it appears to create circularity. As an example of circularity, Suddaby (2010, p. 347) defines cognitive ability as “a capability that enables people to learn more effectively in contexts that are dynamic or complex”, which includes variables—complex and dynamic contexts—that are causally related to the defined construct. The definitions resulting from the literature review mostly mention a specific task or job (Bücker and Poutsma 2010; Wickramasinghe and De Zoyza 2011) and a certain organization (Hogan and Warrenfeltz 2003; Wickramasinghe and De Zoyza 2011), but also a wide range of forces within and outside their organizations (Collin 1989), culture (Wickramasinghe and De Zoyza 2011), increasingly complex environments (Hay 1990), informal internal/external business networks (Harvey and Richey 2001) and market change (Ngai et al. 2011) as contexts of managerial competence. Such a variety of contexts in the definitions of managerial competence decreases the clarity of the construct. Additionally, the context influences and shapes the personal attributes of a manager. As already indicated by Hales (1986), factors such as the role of the manager in an organization; the level of responsibility; as well as the type, structure, and size of the organization largely affect managerial work and, therefore, also the competencies they require. Thus, even if two managers from two organizations of the same industry carry the same job title and have the same tasks, the competencies they require may be different. As contextual factors vary, it is impossible to make generic lists of competencies that are relevant for all managerial occupations (Bartlett and Ghosal 1997). This is important because there is still belief in theory and practice that competencies have universal relevance, which implies that if a competency leads to higher performance in Company A, it will also improve Company B’s performance. This so-called “reductionist view” on competency fails to consider the uncertain and unpredictable nature of managerial work (Bradley 1991). Consequently, we propose that the context should not be mentioned in the general definition of the managerial competence construct but as a scope condition of the definition. By recognizing role and context as scope conditions, we contribute to literature that studies the importance of context for competence (Antonacopoulou and FitzGerald 1996; Burgoyne 1989; Garavan and McGuire 2001; Hayes et al. 2000; Hoffmann 1999; Kurz and Bartram 2002; Stuart and Lindsay 1997).

5.4 Theoretical coherence of managerial competence

Finally—according to the fourth basic element of construct clarity—the construct, its definition, its semantic relationships to other constructs, and its scope conditions must have theoretical coherence (Suddaby 2010, p. 351). Together, the seven inter-related components—role, proficiency, disposition, capability, action, context, and effectiveness—form a theoretical coherence of the managerial competence construct in which all components must be simultaneously present for it to exist: The person in a manager’s role possesses or acquires different proficiencies and dispositions, which give him/her a capability to perform actions that are effective in a certain context. Hence, we define managerial competence as *proficiency and disposition that create a capability to effective organizational actions*. Its scope conditions are a certain role and a certain context, which are structural forms (Poole and van de Ven 1989) that define the extent of managerial competence. The same person’s managerial competence can vary in different contexts or, conversely, different roles can change the scope of managerial competence in identical contexts. As an example, Fig. 2 illustrates two scopes as it portrays the managerial competence construct and its coherence across the seven components.

In addition to the seven theoretical components identified in this study, Fig. 2 illustrates three different theoretical dimensions that define the relationships among these components. First, the X-axis represents the relationship between agency and

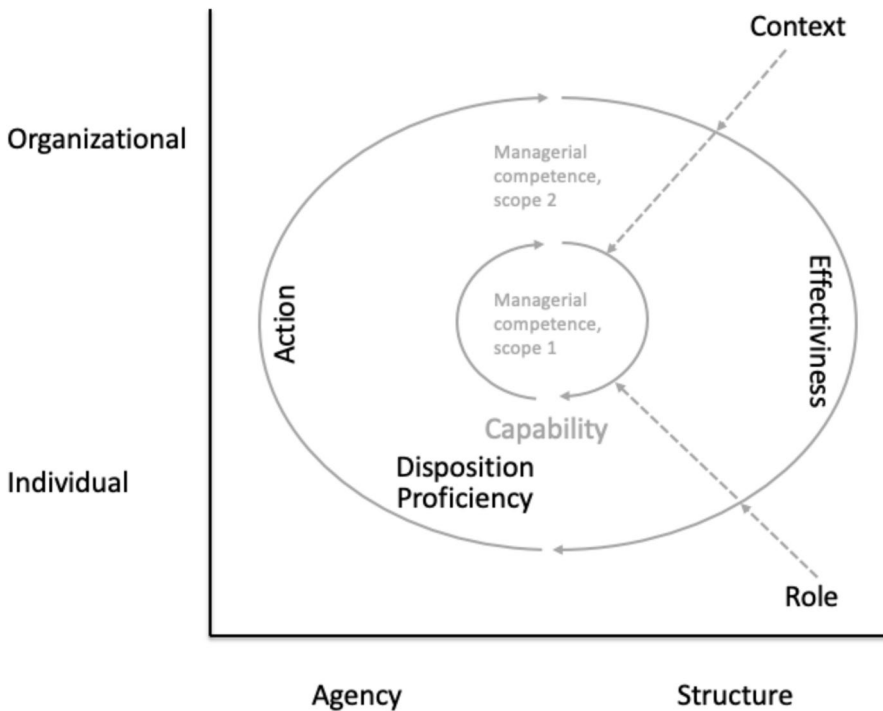


Fig. 2 The theoretical components of managerial competencies

structure. A person in a managerial role is both influenced by the structure—the demands of the role tied to the organization’s goals and values as well as the organizational context—and possesses the agency to take voluntaristic actions that can restructure his/her role and organizational context (see Poole and van de Ven 1989, p. 570). Second, the Y-axis depicts the relationship between individual and organizational levels. A manager’s voluntaristic actions originate at the individual level but have an impact on the organizational level. The effectiveness of these actions for the organization creates a feedback loop that influences both proficiency and disposition. Third, proficiency and disposition together create an ability to act in a certain manner. This ability is influenced by the manager’s role and the context of the situation. Therefore, we use the term “capability,” which implies that the individual not only has the ability but also the circumstances or conditions that enable her to achieve something. Both ability and the broader term capability refer to the potential to accomplish something. Thus, the third theoretical dimension in Fig. 2 is the relationship between potentiality and actuality. Potentiality, illustrated in grey font in Fig. 2, is determined by role, context, and capability. Role and context establish the circumstances or conditions that are aligned with capability. This alignment creates an infinite number of possible scopes that are actualized only through actions.

By demonstrating the theoretical coherence of the seven components of the managerial competence construct, we contribute to the stream of research that regards competence as a multidimensional concept (Burgoyne 1989, 1990; Le Deist and Winterton 2005; Winterton 2009). Specifically, we answer calls for a comprehensive framework for understanding managerial competence (Cheng et al. 2003; Stuart and Lindsay 1997; Viitala 2005; Winterton 2009). As defined in this article, the managerial competence construct includes both proficiency and disposition that enable managers to do their job effectively—traditionally emphasized in US studies and illustrated on the left side of Fig. 2—and the context and roles that set a standard for the tasks and duties required from managers, which are traditionally emphasized in UK studies and illustrated on the right side of Fig. 2. In the middle of Fig. 2 is “capability,” which, as argued above, can be explained with the dimension of potentiality and actuality. In US studies, capability has traditionally been viewed as an ability that enables potential actions, serving as an input from the individual to the organizational level. In UK studies, capability has traditionally been viewed as an output from the organizational to the individual level, which implies that a manager has the potential to meet the required standards (Cheng et al. 2003).

5.5 Research agenda

Table 4 illustrates our research agenda that is structured around the four key elements of construct clarity proposed by Suddaby (2010). Each section identifies potential research topics and tasks, research questions, and methods.

Apart from the four basic elements of construct clarity that are more theoretical, we also propose three additional areas of more practical relevance to study the construct of managerial competence. One area can include the measurement and operationalization of managerial competence. For example, researchers can create

Table 4 Research agenda relating to Suddaby's (2010) key elements of construct clarity

Element of construct clarity	Research topic and task	Research questions	Research methods
Definitions of Managerial Competence	<i>Refinement of Definitions Across Contexts</i> Investigate the nuances of managerial competence definitions across different industries, cultures, and organizational sizes to enhance understanding and applicability	How do definitions of managerial competence vary across different sectors (e.g., healthcare, technology, education)? What are the culturally specific attributes that influence the definition of managerial competence?	Qualitative interviews with managers across industries Comparative case studies of organizations in different cultural contexts
Semantic Relationships to Other Constructs	<i>Exploring Interconnections with Related Constructs</i> Analyze how managerial competence relates and differentiates from other constructs like leadership and emotional intelligence	What are the overlaps and divergences between managerial competence and leadership effectiveness? How does emotional intelligence influence the components of managerial competence?	Systematic literature review to map relationships Network analysis to visualize and quantify semantic connections between constructs
Scope Conditions of Managerial Competence	<i>Contextual Factors Influencing Managerial Competence</i> Examine the situational factors that affect the expression and interpretation of managerial competence, such as industry demands, organizational culture, and team dynamics	What contextual factors optimize or hinder the effectiveness of managerial competence components? How does the nature of the workforce (remote vs. in-person) influence managerial competence requirements?	Mixed-methods approach combining quantitative surveys and qualitative focus groups Longitudinal studies to assess the effects of changing contexts over time
Theoretical Coherence of Managerial Competence	<i>Building a Theoretical Framework for Managerial Competence</i> Develop a comprehensive theoretical framework that integrates the identified components of managerial competence and situates them within broader management theories	How can the proposed seven components of managerial competence be integrated into existing competency models? What theoretical implications arise from reconceptualizing managerial competence in relation to strategic management theories?	Conceptual paper defining a theoretical model Empirical studies to test the model in real-world settings, using factor analysis to validate the components

and validate assessment tools to measure the seven components of managerial competence by conducting a psychometric analysis of newly developed assessments. Potential research questions could be “What are the most effective methods for assessing each component of managerial competence?” and “How can the measurement tools be adopted for different organizational contexts?” Another area could be HRM, specifically talent management. Researchers can conduct action research in organizations to develop and test talent management practices related to managerial competence. They can examine how organizations can design their recruitment processes that are aligned with the seven components or investigate the most effective training methods for developing each component of managerial competence. Finally, the longitudinal effects of managerial competence on organizational performance, employee satisfaction, or innovation is also a potential area to study. For example, researchers can develop surveys to measure managerial competence and organizational metrics over time or analyze performance data from organizations that have implemented development programs for managerial competence. An overview of these three areas with research topics, research questions, and methods is presented in Table 5.

6 Conclusion

This research presents a significant advancement in the understanding of managerial competence by systematically decomposing the myriad definitions of the concept found in the literature into foundational components. Through the application of semantic decomposition of 31 definitions, we identified seven prime primitives—role, proficiency, disposition, capability, action, context, and effectiveness—that encapsulate the essence of managerial competence. This nuanced analysis not only clarifies the often ambiguous and multifaceted nature of managerial competence but also contributes to the theoretical discourse in several keyways.

6.1 Theoretical contribution

Overall, our study contributes to organizational and managerial research concerned with competence in general and managerial competence more specifically (e.g., Asumeng 2014; Qiao and Wang 2009; Ruth 2006). Prior research found no agreement or consistency regarding the definition of managerial competence, which is counterproductive for further theoretical development and empirical testing of the concept (Yaniv 2011).

By delineating the core components of managerial competence, our findings provide a clearer, more defined framework that researchers and practitioners can utilize. The identification of these primitives enables a more precise operationalization of managerial competence in empirical studies, which is critical for advancing both theory and practice in management.

Our systematic decomposition aligns with Suddaby’s (2010) criteria for construct clarity by offering a structured approach to understanding managerial competence.

Table 5 Research agenda related to practical areas of managerial competence

Further areas	Research topic and task	Research questions	Research methods
Operationalization of Managerial Competence	<i>Developing a Robust Measurement Framework</i> Create and validate assessment tools to measure the seven components of managerial competence across various contexts	What are the most effective methods for assessing each component of managerial competence? How can the measurement tools be adapted for different organizational contexts or cultural settings?	Psychometric analysis of newly developed assessments Pilot studies to validate the tools in different organizational environments
HRM and Managerial Competence	<i>Applying Managerial Competence in Talent Management</i> Investigate how organizations can utilize insights from managerial competence to improve recruitment, training, and development programs	How can organizations design competency-based recruitment processes that align with the proposed components? What training methods are most effective for developing each component of managerial competence?	Action research within organizations to develop and test talent management practices Case studies showcasing successful implementation of competency frameworks in recruitment and training
Longitudinal Impact of Managerial Competence	<i>Assessing the Long-Term Outcomes of Managerial Competence</i> Explore the long-term impact of managerial competence on organizational performance, employee satisfaction, and innovation	What are the longitudinal effects of developing managerial competence on organizational outcomes? How does the perceived effectiveness of managerial competence change over time within teams?	Longitudinal surveys measuring managerial competence and organizational metrics over time Performance data analysis from organizations that have implemented competency development programs

By formulating an improved definition, analyzing the semantic relationships to other constructs, determining the scope conditions in which the construct applies and demonstrating how the seven conceptual components form a theoretical coherence, we improved the construct clarity of managerial competence. The synthesis of the seven identified primitives into a coherent framework facilitated the development of a robust theoretical model. This model can serve as a foundation for future theoretical explorations and empirical validations, significantly contributing to the evolution of management theories. In this regard, our conceptualization of managerial competence can help to overcome prior definitional challenges and, thus, enable more rigorous theoretical and empirical research in the future (Post et al. 2020; Suddaby 2010).

6.2 Managerial implications

By establishing a clear understanding of the construct of managerial competence through the seven prime primitives identified, organizations can create a stronger framework for developing, assessing, and nurturing managerial talent. For example, the defined components of managerial competence can be integrated into recruitment and selection processes. This ensures evidence-based decision-making, as organizations can compare prospective candidates' self-perceived competencies with evaluations from supervisors or peers. This alignment helps identify individuals who demonstrate strong managerial potential according to the seven primitives, which can lead to improved hiring decisions and ultimately result in better organizational performance.

Beyond selection, managerial implications can be achieved by combining primitives with empirical competency gap analyses (Wickramasinghe and De Zoyza 2009). This can pinpoint areas where managers require targeted development, thereby ensuring that training programs address the most critical skill deficits. For example, once gaps related to the primitive "context" or "disposition" are revealed, organizations can design specific interventions—such as scenario-based workshops or one-on-one coaching sessions—to develop resilience and adaptability in line with the unique industry or cultural conditions managers face.

Further, understanding the significance of the "context" primitive emphasizes the need for managers to adapt their competencies based on specific organizational cultures, industries, and market conditions. Therefore, training programs should include contextual simulations and scenarios that prepare managers for the intricacies of their unique environments, thereby fostering adaptability and resilience. This echoes Qiao and Wang's (2009) empirical finding that organizations should account for varied cultural and market conditions when refining their competency models.

Lastly, recognizing the importance of the primitives "disposition" and "effectiveness" in managerial competence can drive organizations to foster supportive environments that promote positive attitudes and effective teamwork. Empirically, behavioral event interviews with both average and superior managers (see Cheng et al. 2005) appear as a practical method for finding the needed competencies. By embedding these competencies into the organizational culture—through continuous

feedback loops, mentorship, and leadership development initiatives—companies can cultivate an environment that fosters collaboration, motivation, and overall team performance.

6.3 Limitations

Our research has a few limitations. First, the study is based on 31 definitions of managerial competence identified through a systematic literature review. While this number may provide a few insights, it may still be limited in scope and lack representation of all possible definitions across different contexts, cultures, and sectors.

Second, the process of semantic decomposition that we have applied to identify the underlying components of managerial competence relies on the interpretation of researchers. This introduces potential biases, as different researchers may decompose the same definition in varying ways, thus leading to inconsistencies in identifying the major primitives.

Third, a few of the identified prime primitives may conceptually overlap, thereby leading to ambiguity in distinguishing among them. This could complicate their application in both theory and practice and require further clarification and differentiation.

Fourth, managerial roles are multifaceted and can differ significantly across organizations and industries. The seven identified components may oversimplify the complexities involved in actual managerial practice and behavior.

Author contributions Idea conceptualization and literature search were conducted by Dennis Grenda. The data analysis was performed by both authors. The first draft of the manuscript was written by Dennis Grenda, and Lauri-Matti Palmunen commented on previous versions of the manuscript and helped in structuring the work. Lauri Matti-Palmunen wrote parts of the introduction and discussion chapter. Dennis Grenda revised all chapters with a focus on conciseness and the overall fit of the paper. Both authors read and approved the final manuscript.

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Data availability No empirical data was collected for this research. The dataset is based on the articles listed in Table 1. All articles with their DOIs are included in the reference lists.

Declarations

Conflict of interest The authors have no relevant financial or non-financial interests to disclose.

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