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Leadership competencies and behaviours in pharmacy: A qualitative content analysis

Moudhi Aman [a,b,*], Naoko Arakawa [a], Claire Anderson [a]

[a] University of Nottingham, Pharmacy Practice and Policy Department, Nottingham, United Kingdom
[b] Ministry of Health, Kuwait City, Kuwait

A R T I C L E I N F O

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A B S T R A C T

Background: Across complex healthcare systems, effective leadership rises as a cornerstone for improving patient care, promoting innovation, and maintaining a thriving professional landscape. As with most healthcare professions, pharmacists are confronted with medication complexity, changing legislation, and technological integration into healthcare delivery. Lack of leadership in a pharmacy can lead to unorganized medicine dispensing, patient care, and stagnant innovation. Effective leadership requires competencies that blend knowledge, abilities, and behaviours to achieve tasks successfully. Leadership competencies empower pharmacists to lead change in their profession and healthcare system. Despite extensive research and development in various industries, the development of pharmacy leadership competencies and frameworks is limited due to specific challenges. It is essential for the pharmacy profession to continue investing in the development of leadership competencies to drive innovation and improve patient outcomes.

Objective: The objective of the document analysis is to identify pharmacy leadership competencies and analyse related behaviour statements from a global perspective.

Method: This study employs an integrative review utilizing a document analysis to conduct a qualitative content analysis on various sources to identify leadership competencies and behaviours within the pharmacy sector. A systematic approach was followed by searching five electronic databases (Medline, CINAHL, SCOPUS, ERIC, and Google Scholar) in addition to grey literature, policy documents and seeking experts for related documents to ensure comprehensive coverage of relevant field-based literature.

Results: Forty-eight documents were selected for analysis from the literature, most of which originated from Western countries with few representing the Middle East and African countries. Eighteen pharmacy frameworks incorporating leadership competencies were identified, two of which were healthcare frameworks encompassing pharmacists. A total of 96 competencies and 155 behaviour statements were identified from the documents. When grouped and similar competencies conjoined, 8 themes with 34 competencies emerged.

Conclusion: The document analysis portrays a comprehensive picture of the multifaceted landscape of pharmacy leadership competencies. By exploring the eight themes, their associated competencies and behaviour statements this study offers a roadmap for pharmacists to embark on their own leadership journeys. Future research, armed with the clarity and action-oriented language of effective behaviours, can bridge the gap between leadership and tangible impact.

1. Introduction

In today’s dynamic healthcare landscape, leadership acts as a crucial bridge connecting individual expertise to collective progress.[1] Pharmacists, like most healthcare professionals, face escalating challenges, including medication complexity, evolving regulations, and technological integration into healthcare delivery.[2,3] In this context, a pharmacy without a leader could result in disjointed dispensing of medication, uncoordinated patient care, and stagnated innovation.[4,5] While the concept of ‘leadership’ initially emerged in the business context,[6] its scope has now expanded to include the healthcare industry, including pharmacy.[1] In the past two decades, the study of leadership in

* Corresponding author. Division of Pharmacy Practice & Policy, School of Pharmacy, University of Nottingham, University Park, Nottingham, NG7 2RD, United Kingdom.
E-mail address: Moudhi.aman@nottingham.ac.uk (M. Aman).

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the pharmacy sector has gained increasing recognition.[7] However, despite this growth, a universally accepted definition of leadership in the field, as in other industries, remains elusive.[1,8,9]

The absence of a globally agreed concept of leadership has led to diverse definitions reflecting various views and perspectives. Within this research, definition of the term leadership is that adopted from Reeds et al.'s recent systematic review on leadership in pharmacy education, as "influencing, motivating, and empowering others to achieve a common goal".[8] Its standardisation has prompted more research into leadership definitions and competencies, along with assessment approaches across the profession and in pharmacy schools. This definition closely aligns with transformational leadership theory, one of the two prominent approaches often referenced in healthcare leadership. Transformational leadership prioritizes inspiring and motivating followers, promoting innovation, and cultivating strong relationships, in contrast to transactional leadership, which emphasises organized transactions and reward-oriented mechanisms to accomplish tasks and provide stability.[10]

Although leadership in healthcare has been widely examined and the pharmacy sector parallels other professions in numerous aspects, certain unique obstacles underscore the need for specialised leadership within the pharmacy sector. These include but are not limited to: the current global gaps in pharmaceutical services, the recent shift from product-centric to patient-centred care and the constant evolution of Pharmacoeconomics.[11,12] Strong leadership is, therefore, crucial in enabling pharmacists to navigate these obstacles and contribute to the growth and development of their profession through the delivery of high-quality pharmacy services and enhanced patient outcomes.[1]

Effective leadership revolves on a foundation of competencies that empower individuals to inspire, motivate, and direct others. A competency is a combination of knowledge, skills, and behaviours that enable someone to perform a task or activity successfully within a given job role.[13] Competencies are applied in different ways, one of which is through frameworks. Competency frameworks, like leadership, are increasingly being adopted by various sectors and used for a wide range of purposes. Historically, competency framework followed either a behavioural or functional approach while mostly in healthcare it followed a hybrid of both.[14] Competency frameworks are comprehensive representation of how competencies can be applied and followed, comprising a structured set of behavioural indicators that outline the observable behaviours required to demonstrate a specific competency.[13] This complexity of the behaviour state development is often captured through four meta-categories: task, relation, change, and external orientation; when these factors are shown together, they indicate the overall proficiency or skill of a practitioner.[1]Despite the wide cross-industry adoption of competency frameworks, effective leadership extends far beyond a simple task checklist, encompassing a diverse array of behaviours, which represent the multifaceted nature of successful leadership.[15]

Healthcare workers, including pharmacists, must continuously enhance and evaluate their competencies to address the evolving demands of the pharmaceutical sector.[16] This can be accomplished through several approaches, including competency frameworks. As the value of leadership competencies grows, important development goals have been defined by the International Pharmaceutical Federation (FIP), with Development Goal 6 (DG6) focused on leadership development.[17] This highlights the critical role of leadership competencies in empowering pharmacists to elevate their technical skills and become catalysts for positive change within the profession.[4,18]

Despite the thorough exploration and development of leadership competencies and frameworks in various industries, there remains a deficiency within the field of pharmacy. Some studies have examined leadership competencies within the pharmacy context; however, they restricted their inclusion to pharmacy students rather than practitioners,[8,19] Furthermore, existing studies on pharmacy leadership competencies and behaviours have predominantly concentrated on Western contexts, particularly the United States and the United Kingdom (UK), with a specific focus on improving educational practices or enhancing the skills of pharmacy students.[8,18,19] Although some systematic reviews have identified leadership competencies within a specific context, they did not include related behavioural statements, which are crucial in assessing professional performance.[14] General pharmacy frameworks and behaviour lists related to each competency with a global aspect have not been adequately developed. This study aims to identify the essential leadership competencies and analyse the related behaviour statements within a global perspective.

In recognition of the extensive knowledge and diverse practices found worldwide, we adopted a global viewpoint in our research. Our aim was to capture a wider diversity of leadership competencies recognised by pharmacy professionals worldwide by not limiting data collection to a certain geographical location. This comprehensive method enables us to recognise fundamental competencies in leadership that are universally relevant and can be adjusted to different healthcare systems and cultural contexts. To achieve this objective, this document analysis aimed to:

1. Identify leadership competencies for pharmacists.
2. Analyse the behaviours statements related to the leadership competencies.

2. Methods

A document analysis was conducted using a Qualitative Content Analysis (QCA)[20] approach to identify leadership competencies and the behaviour lists within the pharmacy sector. A QCA is one approach of a document analysis which is a methodical process that involves the evaluation or examination of documents, including both electronic and printed materials qualitatively.[21]

A systematic search was conducted of five electronic databases (Medline, CINAHL, SCOPUS, ERIC, and Google Scholar) using the PRISMA[22] protocol to provide transparent and clear reporting, in addition to grey literature and policy documents to ensure comprehensive coverage of the relevant literature in the field. Articles and documents obtained from the search were reviewed for relevance and entered into Mendeley to avoid duplication. Relevant materials from the websites of organisations such as the FIP, the World Health Organization (WHO), and the Royal Pharmaceutical Society (RPS) were reviewed to identify key themes related to leadership competencies. The resulting articles were subjected to QCA. Documents from the same institutions, such as the frameworks from the Royal Pharmaceutical Society and the NHS, were included only if they provided distinct insights on competencies in leadership, so avoiding duplication. To do this, we thoroughly cross-referenced the frameworks, taking into consideration their unique emphasis and target audience, allowing for a detailed yet non-repetitive analysis.

The decision to include multiple databases was based on their reputation for containing a wide range of scholarly articles related to pharmacy and leadership competencies. It is worth noting that an initial search of leadership competencies in pharmacy was conducted, but significant frameworks with leadership competencies were missed. A broader search using pharmacy and competency framework key words was applied and systematic evaluation to filter non-relevant data based on preset criteria explained the high exclusion rate after review. Additionally, due to limited resources, this study also leveraged data from pharmacy education leadership studies. Recognising potential differences in context and experience, the identified competencies were critically analysed for their applicability to pharmacy leadership positions, considering established frameworks and insights from practicing pharmacists. The search strategy was designed to capture articles related to leadership competencies within the pharmacy sector. Key search terms involved a combination of relevant keywords, including "leadership," "competencies," "pharmacy," "pharmacist," "pharmaceutical

sector," "competency framework," and related synonyms. No time limitations were imposed on the search to ensure a comprehensive examination of the existing literature. To maintain the focus of this study, studies concerning frameworks or evaluations were excluded if they did not include descriptions of leadership competencies with pharmacy. Inclusion criteria were: (i) languages: English or Arabic as the research aims to create a pharmacy leadership competency framework serving Kuwait; (ii) collected documents describing competencies and/or behaviours and/or skills and/or abilities and/or knowledge of leadership in the pharmacy sector; (iii) healthcare frameworks and/or documents specifically encompassing pharmacy, including leadership competencies, knowledge, behaviours, skills, and/or abilities. The research team consists of the primary researcher (MA) and two expert reviewers (NA & CA). To mitigate the potential biases arising from the primary researcher's limited experience with leadership perspectives, the expert reviewers played a critical role in reviewing and validating the data analysis, ensuring multiple perspectives were considered throughout the process. Regular team discussions ensured ongoing reflexivity, helping to balance interpretations and enhance the trustworthiness of the findings.

2.1. Data analysis

A QCA[20] was adopted to identify key themes and patterns within the textual data. Through an inductive and iterative process, the main ideas captured from the literature were coded to categorise them into overarching themes by MA. To ensure reliability and validity of the analysis, a coding form was structured from the codebook with the specific aim of clearly defining and describing all variables intended for collection, thereby facilitating their later tabulation in a spreadsheet or database.[23] This thorough step is crucial to ensure the replicability of research within the context of content analysis.[20,24] Additionally, discrepancies in themes were resolved through discussions with NA and CA.

2.1.1. QCA process: A step-by-step guide

The data was analysed using the six QCA phases to categorise the extensive content of texts into fewer categories using codes. The first and second step, data familiarisation, was conducted by the primary researcher (MA). The third step, defining coding units as well as categorization, were primarily conducted by the primary researcher with input essentially through meetings, suggestion and feedback, with all manuscript authors. The fourth step, theme development, involved mapping each category to a theme developed by MA and was thoroughly reviewed by NA. The fifth step involved interpreting the data and drawing conclusions, and the final step, presenting the findings, were reviewed by NA and CA. Data were imported into qualitative data analysis software NVivo 12 to code the textual phrases. Each of the leadership competencies was organised as a 'node.' A description of each competency is provided in Table 1. The competencies were then categorised into emergent themes as highlighted in Table 2. By following these steps and incorporating input from CA and NA throughout the process, the researcher was able to analyse and condense the extensive content of texts into fewer categories, allowing for a deeper understanding of the research aim and, finally, the interpretation of the data. Further details towards the role of researchers through the steps of QCA process highlighted in the supplementary file2.

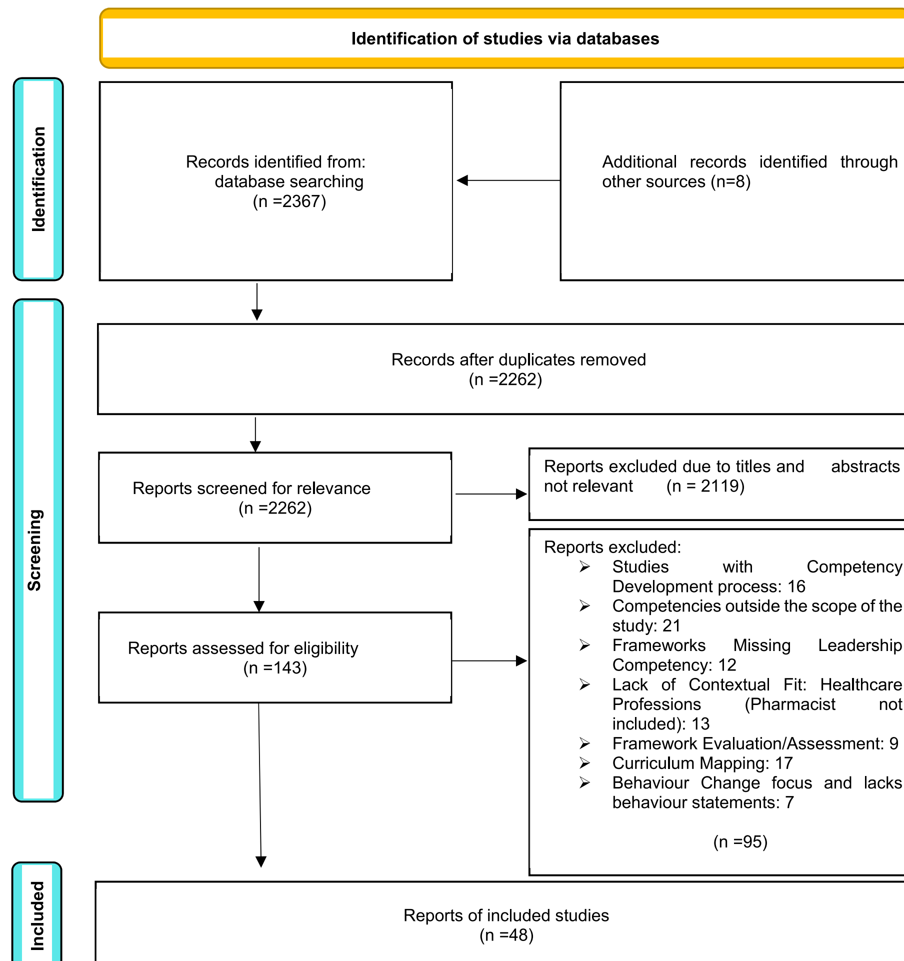

Fig. 1. Adapted PRISMa Flow chart of research strategy.[22]

3. Results

In total, 2367 published articles were identified from the literature searches conducted for this review. After the removal of duplicates, 2262 documents were evaluated. After screening titles and abstracts for relevance, 2119 were removed following the exclusion and inclusion criteria see Fig. 1. A total of 48 articles were selected for analysis presented in the supplementary file1. These included 40 from the electronic databases, two articles from the search of the FIP website and three documents from the RPS website. Additionally, a Kuwaiti policy document related to the application of a foundational competency framework in pharmacy was included along with a document[25] related to the Kuwait Advanced Competency framework. Of this literature, most documents were from Western countries with few representing the Middle East and African countries.

3.1. Selected competency frameworks

Eighteen pharmacy frameworks incorporating leadership competencies were identified, two of which were healthcare frameworks encompassing pharmacists. Over 70 % originated from Western countries (United Kingdom (n = 5),[26–30] Ireland (n = 1),[31] Netherlands (n = 1),[32] USA (n = 2).[33,34] From the Middle East, two generated frameworks were identified from Kuwait[35] and Qatar.[36] One framework each was found from Asia (Thailand[37]) and Africa (South Africa[38]) with two from the Western Pacific (one each from Australia[39] and New Zealand[40]). One global framework (FIP GbCF)[41] was found as well as one European framework.[42] All these frameworks consider leadership as a competency or skill required for pharmacists, but the extent to which the behaviours are described differs. Leadership competencies were generally categorised as 'organisational and management skills'[38]; however, in some cases, they were classified under personal and professional skills.[43] Four frameworks were specifically for leadership; two of these are intended for pharmacists,[27,33] while the other two are for all healthcare professionals including pharmacists.[28,29]

3.2. Differences between leadership competencies

Domains and competencies are organised differently in each framework. According to the American Society of Health-System Pharmacists (ASHP), the four descriptive areas of the Korn Ferry framework—self, thought, results, and people—are used to map the competencies.[34] It further details the actions that show leadership, both personally and in relation to other personnel and the organisation as a whole. Nevertheless, two models, namely the RPS[26] and Kuwait advanced framework,[25] detail the actions at various levels within each competency. Domains and sets of competences are similarly organised, with statements like 'demonstrating personal qualities', 'working with others', 'managing services', 'improving services', 'setting direction', 'creating the vision', and 'delivering the strategy'[27] as examples. Most pharmacy leadership frameworks[35,37,44,45] have used an adopt-and-adapt process from the FIP GbCF[46] model.

3.2.1. Leadership competencies within the pharmacy sector

A total of 96 competencies were identified from the documents. When grouped and similar competencies conjoined, eight themes with 34 competencies emerged. The main competencies for leadership identified were Vision, Communication, and Emotional Intelligence (EI), particularly its components of Self-Awareness and Self-Regulation. This highlights the most frequently observed leadership competencies from the analysis. Each competency was grouped under its corresponding themes. Further description of each theme is shown in Table 1. Leadership competencies describe knowledge of leadership attitudes, behaviours, skills, and abilities, and clarify how leadership differs from management. Professional leadership demonstrates a knowledge of pharmacy education expressed as an understanding of organisational implications, processes, and roles.[47]self*regulation: the ability to control one's behaviour, focus, suspend judgment, think and listen before making a decision.[48]

Table 1
Shows the emergent themes and corresponding description.

Theme	Description
Emotional Intelligence	Emotional intelligence refers to the ability to understand and regulate one's own emotions as well as the emotions of others, with the purpose of establishing constructive relationships as well as handling challenging circumstances. Includes self-awareness, motivation, self-regulation*, and empathy.
Communication	The ability to use effective verbal, non-verbal, listening, and written communication skills to communicate clearly, precisely, and appropriately.
Culture & Governance	A range of abilities required to effectively lead, manage, and coordinate teams, projects, and processes within an organisation.
Personal and workforce development	A range of abilities to establish a supportive atmosphere that promotes and encourages both individuals and the organization development as a whole.
Resources Management	A range of competencies such as talent management, training and development, performance evaluation, and implementing strategies to continually enhance the quality of services offered and utilizing the talents of employees to enhance the organisations performance and service delivery.
Collaboration and Teamwork	Leadership skills that promote efficient teamwork and increase collaboration within an organisation are emphasised. Open communication, diverse viewpoints, cooperation and coordination, and a sense of trust and mutual support are all part of this domain's remits.
Setting Direction	A range of competencies that involves providing a clear vision, and guiding individuals and organisations towards strategic goals and objectives. It includes articulating a compelling vision, establishing strategic priorities, and offering guidance and support to individuals to align their efforts with the overall direction.
Professional and Social ethics	This theme explores the crucial competencies driving ethical decision-making, patient confidentiality, and social responsibility that define pharmacist's leaders as both dedicated professionals and ethical citizens.

3.2.2. Identified lists of behaviour

A total of 549 behaviour statements were identified from the documents and pharmacy/healthcare professional frameworks. After a thorough review, 155 listed behaviours were arranged according to their associated competencies. The behaviour statements are shown in Table 2. Only behaviours that relate to leadership competencies and had an action word meaning starting with a verb such as 'able to' as a behaviour statement have been extracted into Table 2, to ensure a clearer picture of leadership behaviours and for pharmacists to achieve intended outcomes.[13,45,63]

4. Discussion

Cultivating leadership competencies in pharmacists is essential for driving innovation, building productive teams, and enhancing patient care.[46] This research aimed to identify the key leadership competencies and behaviours necessary for effective leadership in the pharmacy profession. The study outlined eight main themes, comprising 34 leadership competencies and 155 associated behavioural statements. These themes range from the foundational pillar of emotional intelligence to the critical competencies of collaborative teamwork and communication, setting direction, culture and governance, resource management, and personal and workforce development. This discussion delves into discussing the analysed theme and presents a conceptualised

Table 2
Shows an established framework with the list of the leadership competencies and their corresponding behaviours.

Themes	Competencies (Frequency of references)	Behaviours statements (relevant references stated accordingly)
Emotional Intelligence	Self-awareness (34)	Seek to understand and incorporate knowledge of own perspectives, biases, styles, and views on others' backgrounds and cultural norms to bring awareness of the impact on own thoughts and actions (Self-awareness).[19,39]
		Apply assertiveness skills (inspire confidence).[31,41,49]
		Show leadership of self.[33,34,39]
	Empathy (6)	Develop systems and processes to ensure that patients are treated with sensitivity, empathy, respect, and dignity.[38]
	Social Skills (4)	N/A
	Motivation (20)	Demonstrate the ability to motivate individuals and/or the team (motivation).[34,40,41]
		Demonstrate the ability to self-motivate to achieve goals (motivation).[1,30,39,41]
		Provide effective feedback to individuals/teams that recognises good performance and identifies areas for improvement, engaging meaningfully in providing support in areas for improvement (motivation).[31,33,39]
	Self-regulation (8)	Develop systems and processes to ensure that work is carried out in an organised and efficient manner (Advanced-self-regulation).[27,34]
		Ensure their work time and processes are appropriately planned and managed (self-regulation).[27,33,39]
		Participate in continuous personal and professional development (self-regulation).[27,29,31,33,39]
		Reflect Critically on personal practice and skills and identify and address learning needs (self-regulation).[27]
		Display emotional awareness and effective self-regulation of emotions (EI). (self-regulation)[27,29,31,33,39,41,42,50]
Communication	Communication (19)	Understand the effective way of communicating with individuals.[31,34,39]
		Communicate strategic vision effectively with individuals and/or teams, breaking it down into discrete operational deliverables; ensures individuals and/or teams understand how they contribute to achieving the vision.[26]
		Communicate effectively with health and social care staff, support staff, patients, carer, family relatives and clients/customers, using lay terms and checking understanding.[27,37,39,41,42,51]
		Communicate their ideas and enthusiasm about the future of the organisation and its services confidently and in a way which engages and inspires others.[27,34]
		Demonstrate ability to present complex, sensitive, or contentious information to large groups of relevant stakeholders (Advanced level).[30]

Table 2 (*continued*)

Themes	Competencies (Frequency of references)	Behaviours statements (relevant references stated accordingly)
	Listening (5)	Able to listen to different views and show respect.[31,33]
		Listen attentively to the team and value their suggestions.[27,33,52–54]
	Negotiation (3)	Demonstrate influencing and negotiation skills to resolve conflicts and problems.[29]
Collaboration and Teamwork	Collaboration (16)	Works collaboratively with multidisciplinary resources across care settings to develop and implement strategies to manage risk and improve safety and outcomes from medicines and care delivery.[27,37–39,42]
	Teamwork (13)	Involving individuals and demonstrating that their contributions and ideas are valued and important for delivering outcomes and continuous improvements to the service.[27,30,34,55]
		Create an atmosphere of staff engagement where desirable behaviour, such as mutual respect, compassionate care and attention to detail, are reinforced by all team members.[26–28]
		Seek contributions from across the team of ideas and solutions to improve services including amplifying the voices of those who may feel marginalised or disenfranchised.[27,30]
	Culture Awareness (6)	Demonstrate respect, cultural awareness, sensitivity and empathy when communicating.[26,27,31,33]
Setting Direction	Vision (21)	Create a vision of the future and translate this into clear directions for others.[30,31,34]
		Engage appropriate stakeholders from within and beyond their immediate care setting in developing strategy or vision at a team and/or service level.[29,34]
		Engage with colleagues and key influencers, including patients and the public, about the organisation's future vision.[29]
		Demonstrate confidence, self-belief, tenacity, and integrity in pursuing the vision.[29,46]
		Take appropriate steps to mitigate barriers to achieving a strategic vision at a team, service and/or organisational level.[41]
		Demonstrate understanding of, and contribute to, the organisation's vision.[28,35]
		Influence the vision of the wider healthcare system: Working with partners across organisations.[29]
		Demonstrate authenticity, integrity, and role-modelling, leading by example at a team and/or service level. (Embodying the vision)[29,30]
	Provide Direction (16)	Provide direction and guidance to peers, pharmacy staff and others in the performance of their duties.[56]
		Create clear direction for achieving goals.[29]
	Making Decisions (6)	Participate in and contribute to organisational decision-making processes.[30,40]

(*continued on next page*)

Table 2 (*continued*)

Themes	Competencies (Frequency of references)	Behaviours statements (relevant references stated accordingly)
		Demonstrate attention to details and accuracy in decision-making.[36] Make considered and timely evidenced-based decisions incorporating consultation if required.[31] Demonstrate creative decision-making when confronted with novel problems or challenges.[44]
	Innovation (12)	Engage in innovative activities by using creative thinking to envision better ways of accomplishing.[41,56,57]
Culture and governance	Accountability (1)	Demonstrate ownership by holding self-accountable for own commitments and goals.[29,36]
	Understand organisational culture. (10)	Able to demonstrate awareness of the political, social, technical, economic, and organisational aspects.[56] Able to understand and practice business skills in clinical and cultural contexts as well as different types of processes, such as changes, services, development, resources, and planning.[36] Able to distinguish between leadership and management.[35,58]
	Strategic context (10)	Demonstrate an understanding of the needs of stakeholders. Practice reflecting relevant local, national, regional, or global policy.[7,37,43] Demonstrate understanding of the pharmacy education and training role in governance, Influence the planning or development of governance processes in education, for the team and/or service delivery.[35] Create and maintains a contemporary strategic plan for pharmacy practice, aligned with organisational goals and strategic priorities.[29] Contribute to professional activities planning with consideration of strategic context.[41]
	Organisational management (9)	Understand and contribute to organisational/corporate and clinical governance.[41] Undertake project management aligned with the organisation requirement/vision.[41] Participate in organisational planning and review.[41] Ensure satisfactory completion of tasks with appropriate handover; recognises the importance of timeliness and attention to detail.[35,41]
	Governance (4)	Demonstrate understanding of the pharmacy education and training role in governance.[40,43] Influence the governance agenda for the team and/or service.[37,43] Shape and contributes to the governance agenda at a higher level.[43] Influence the planning or development of governance process at a national or international level.[37,43]
	Problem solving (4)	Apply problem-solving and conflict management skills.[40,41,59] Proactively develop, identifies and frames areas of potential conflict as opportunities and works through agreements equitably by integrating diverse views.[59]
	Change Leadership (9)	Able to energize stakeholders and sustain their commitment to changes in approaches, processes, and strategies.[36] Lead role in guiding the pharmacy team through service reconfigure/ staffing changes.[33,37] Developing talent and building employees' skills to handle new changes.[36]
Professionalism and Social Ethics	Professionalism (4)	Monitor the professional landscape for emerging trends and practices and leads change.[40] Demonstrate altruism, integrity, trustworthiness, flexibility, and respect in all interactions.[52] Demonstrate high levels of professionalism; treating all involved with dignity and respect.[38] Adopt an open-minded approach to, and deal properly and professionally with, complaints regarding product care, patient care, and how patients are treated within the organisation.[33]
	Professional ethics and social responsibility (4)	Adopt professional standards and ethical principles -maintaining patient confidentiality -promoting a culture of professionalism and continuous learning.[40] Demonstrate awareness of the responsibility of their position.[39]
	Professional knowledge (5)	Able to understand the pharmacy profession's history and issues that may shape its development in the future.[8]
	Integrity (2)	Act and behave with integrity.[37]
Resource management	Manage human resources. (14)	Facilitate, supports and contributes to training and continuing professional development of team members.[27,39] Able to understand and comply with legal requirements associated with recruitment and performance management processes.[31,40] Describe and clarifies duties and responsibilities with individuals.[40] Establish role clarity and performance standards.[27,31] Supervise, develop personnel and promote improved performance.[39] Manage human resources and staffing structure appropriate to the functions of the service, and to safely meet the needs of all service users.[31,39] Support staff to provide care by the rights of patients and service users.[31] Apply a standard system for performance management, including poor performance.[31] Provide team members with access to a complaints management process.[31] Establish ongoing methods for measuring performance to gain a detailed urges understanding of what is happening.[40,60] Establishes, supports and maintains a culture focused on learning and improving.[27]
	Managing Financial resources (5)	Plan and manage physical and financial resources.[40,60] Ensure financial management positively contributes to the effective use of resources.[34,39]

(*continued on next page*)

Table 2 (*continued*)

Themes	Competencies (Frequency of references)	Behaviours statements (relevant references stated accordingly)
	Manage Service Resources (9)	Provide facilities, equipment and work processes to support staff and service user safety.[33]
		Relate goals and actions to the strategic aims of the organisation and profession.[27,33]
		Monitor the workplace and work practices to identify and minimise security risks and ensure compliance with workplace safety policies and procedures.28,32,34,35
		Accept responsibility for implementing workplace safety procedures in an emergency.[40]
		Monitor safety in areas of special needs and acts to maintain compliance with accepted practice standards.[40]
		Develop a clear understanding of priorities and formulate practical short-term plans in line with workplace strategy.[30]
		Establish and promotes a framework for workplace safety and a safe working environment.[40]
		Ensure patient's safety.[29]
		Recognise when affected by setbacks or stress and manage with effective coping strategies (resilience).[41,61]
		Identify resource requirements and manages those resources effectively to ensure continuity of services.[34]
		Able to report incidents associated with medicines and medicines use adequately.[40]
		Ensure development, implementation and regular review of standard operating procedures for all aspects of services provided.[40]
Personal and workforce development	Personal development (12)	Understands the need for continuing professional development, takes personal responsibility for it, and demonstrates that commitment.[27,34]
		Participates in continuous personal and professional development.[33,34]
	Leadership Learning (12)	Able to identify Leadership attitudes, skills, behaviours and abilities.[8]
		Influence others to use knowledge and evidence to achieve best practices.[27]
	Mentorship and Coaching (11)	Ensures that staffs, under one's responsibility are competent to undertake the tasks allocated to them.[27,34]
		Provide mentoring and coaching and direction in professional situations where this is required.[31,39,42]
		Able to demonstrate mentorship behaviour.[31,39,42]
		Participate actively in training other healthcare professionals and non-clinical staff.[33]
		Educate pharmacy personnel on problem-solving needs and conflict management skills.[34]
	Role Model (6)	Understands and demonstrates key attributes of a role model.[40]
		Builds credibility and portrays the profession in a positive light by being professional and well informed.[31]
		Leads by example to serve as an effective role model and mentor for colleagues, and to motivate individuals in the team.[39,40]
		Act as a role model, behaving in a manner which reflects the values and principles inherent in the vision.[39,42]
	Adaptability (4)	Demonstrate flexibility and adaptability to a variety of conditions and circumstances.[27,34,37,61,62]

categorization to the leadership competencies. This comprehensive analysis illuminates a clear path for leadership development in this vital healthcare profession.

On analysis of the leadership competencies and related behaviours, it was found that the themes title representing the leadership attributes varied within the frameworks. While some highlight the theme title as 'leadership and organisation',[32,39] others present it under the theme 'personal skills.[31,38] Analysis further highlighted the relationship between management and leadership, as many frameworks likely use both terms within the theme given that strong leadership builds upon foundational personal qualities that are also essential for effective management. However, some of the leadership frameworks segment each leadership competency under factors (self, thought, results, people).[34] For instance, Hersey and Blanchard's Situational Leadership Model emphasises the theme of 'leadership and organisation' as a crucial component of effective leadership.[64] Understanding these distinctions is critical when presenting the leaders competencies and in tailoring leadership training programmes in the pharmacy profession to develop well-rounded leaders.

Emotional intelligence (EI), along with the domains of 'setting direction' and 'communication', dominated in terms of the number of competencies. Similar results were shown by recent study that conducted a survey asking pharmacists globally about the top leadership competencies and EI was one of the mentioned.[65] EI, which comprises subcategories (self-awareness, self-regulation, motivation, social skills, and empathy), emerged as the most prominent theme, consistently emphasised across most analysed frameworks.[8,9,34,39,56] Both self--awareness and self-regulation were the most-listed subcategories. However, the related subcategories remain a subject of debate, with varying perspectives on their scope and composition. For this study, both self-awareness and self-management were placed under the self-awareness competency, acknowledging their close association and frequent interchangeability in leadership discussions.[34,35,38,66] This choice aims to streamline the framework and avoid potential confusion arising from overlapping terminology. However, some frameworks expand the scope to include interpersonal aspects like empathy and social skills.[35,61] Despite this nuanced discussion, it is important to recognise the reality that all leaders must successfully control their own emotions and use them for growth.

The theme of setting direction, particularly the subcategory of vision, the cornerstone of effective leadership, featured prominently in the most extensively examined literature. This multi-faceted construct unfolded in three distinct yet interrelated dimensions: (i) developing one's vision[59]; (ii) disseminating the vision to fellow team members; (iii) fostering collaboration and alignment through effective communication[27,34,67] and (iv) aligning the vision with established leadership principles, anchoring it within recognised best practices.[27,34]

Related to the setting direction theme, developing a leader's vision is as important as effectively communicating it. The importance of vision must be carefully assessed in relation to other crucial attributes in the complex landscape of leadership competencies.[68] Utilizing good behaviour statements can bridge this gap,[13] providing a clear framework for applying and assessing vision as a leadership competency.[63] For instance, the ASHP framework has selected the precise word "Purpose-driven vision" to indicate the ability of establishing direction. This is

accompanied by explicit behaviour statements that are applicable at three levels, ranging from leading individuals to the entire organisation.[34] In essence, these statements can guide pharmacy leaders on how to cultivate a strong vision and ensure its effective implementation within their teams.

Traditionally, communication has often been viewed as a general competency or a leadership attribute within pharmacy.[19,27,41] Communication and collaboration were sometimes combined as a single theme in previous studies, potentially overlooking their distinct roles in successful pharmacy leadership.[31,41,61] This study suggests that viewing communication and collaboration as distinct competencies, as in the Dutch framework,[35] provides a more nuanced understanding of their roles in successful pharmacy leadership. While both are essential for effective leadership, recognising them separately allows for a deeper exploration of their unique contributions. This contrasts with Australian[39] and New Zealand[40] frameworks, which treat them as a single competency.[57] By understanding how communication and collaboration work both independently and together, we can gain a deeper appreciation of their strengths in driving exceptional leadership. Notably, while language usage is crucial for effective communication and instruction delivery, it was not explicitly addressed in the data.

Dissemination of learning and continuous professional development within the leadership aspect is underpinned by three key areas: leadership understanding,[8] organisational and cultural awareness,[19] and professional knowledge.[8] Additionally, management knowledge is often highlighted.[34] These interconnected strands, woven into leadership frameworks within diverse professional competencies, empower continuous growth and adaptation. Despite some frameworks not emphasising this knowledge, leaders are expected to possess a minimum understanding of the relevant organisational culture for effective professional practice.[58] Notably, some frameworks emphasise reflective learning, encouraging leaders to introspectively assess their progress and identify areas for improvement within the same.[26] This resonates with the UK leadership framework for pharmacists, which emphasises the importance of self-awareness in employing this knowledge effectively.[27]

This analysis of leadership competency frameworks highlights how geographical needs influence leadership definitions and prioritisation. While the International Pharmaceutical Federation's (FIP) Global Competency Framework (GbCF) incorporates leadership as part of its larger competency structure, it does not serve as a fully established global leadership competency framework. The revised 2020 version of the GbCF added more leadership-related abilities, particularly for early-career pharmacists, but leadership remains integrated into a larger professional competency framework rather than a standalone focus.[69] The data adds to a recent leadership global needs assessment survey which foregrounds the need to adapt leadership development programmes to a country's specific needs.[65] While some frameworks, like the Dutch one,[70] adopt existing models (CanMed,[71] in this case), others, like Saudi Arabia,[61] Croatia,[45] Ireland,[31] and Kuwait[35] adapt global frameworks (FIP GbCF)[41] to their specific geographical contexts. This emphasises an important point: a 'cookie-cutter' approach to leadership development does not work. Local needs must be the driving force behind developing competency frameworks; leaders should have the skills needed to address the unique challenges they face by tailoring frameworks to specific geographical realities.

Geographical regions may differ in their alignment with leadership or competency frameworks, as highlighted by Stupans et al., who reported that high-income countries with similar health needs (Australia, Canada, the United Kingdom, and the United States) demonstrated strong alignment with the FIP GbCF and shared a common view of pharmacists as 'patient-focused medicines experts,' regardless of degree title.[72]

Beyond geographical influences, the growing need for technological competencies in leadership is evident, particularly in areas such as technological advancement and big data analytics—both critical for addressing 21st-century challenges.[72] Our analysis revealed a notable gap in these competencies. Technical competency involves using ICTs, managing data, and collaborating digitally.[73] The importance of this competency varies by country due to differing healthcare systems, infrastructures, and disease burdens, highlighting the value of country-specific needs assessments.[65] Clear task definitions at macro and micro levels are essential for adapting to technological advances in leadership, management, and operations.[73]

In an era of constant transformation, the competency of leading change emerges as increasingly crucial.[65,74] John Kotter, a renowned expert in leadership and change management, emphasises its critical role in his 8-step process, which integrates understanding organisational dynamics with defined actions, stressing that this requires both patience and adherence to ensure success.[74]Echoing this importance, Janke et al. emphasise the need to prepare young pharmacists for the inherent complexities of change initiatives.[61] Similarly, the NHS clinical leadership framework in the UK recognises the importance of identifying the context for change while setting the direction. On the same page ASHP (US) on the framework of the Professional and Leadership Competencies highlights the competency "agility" for leaders to embrace change and adaptations.[34] Equipping future pharmacists to participate effectively, collaborate with others, and leverage existing systems within organisations therefore becomes essential.[19] By acknowledging this crucial competency and addressing potential gaps in educational preparation,[19]pharmacy professionals are empowered to navigate their changing field with agility and purpose.

Delegation, an important leadership competency, it is significantly under-represented in the current existing literature.[34] Top performers in leadership are individuals who effectively adopt best practices and delegate tasks, thereby becoming leaders themselves.[75] Despite its importance, this competency received only one mention within the frameworks.[76] In addition, one of the highlighted competencies found in two resource documents was the ability to see potential in new opportunities.[9,40] One document mentioned opportunism as a competency, while another mentioned it as a behaviour for which a leader must seek out opportunities.[9,40] Additionally, conflict management was highlighted in the ASHP executive leaders framework, while entrepreneurship was not presented within the leadership frameworks, despite being mentioned as a top skill for which training was required.[65] This might reflect the need for leadership frameworks to be frequently updated in line with current challenges.

Despite the multitude of options, behavioural statements remain the preferred mechanism for measuring competencies in most frameworks.[8,13,14] A critical gap encountered on analysis was the dearth of detailed behaviour descriptions specific to pharmacy leadership. Simplistic statements like 'the ability to lead' or 'lead by example[38] provide little practical guidance, echoing Reed et al.'s concerns about behavioural vagueness.[8] The ambiguity of 'government behaviours' for pharmacists seeking political engagement serves as yet another illustration of this. Such generalisations lack the specificity needed for actionable guidance, highlighting the need for contextual enrichment and measurable outcomes aligned with organisational objectives.[63] Moreover, the lack of clarity of behavioural descriptions hinders competency application, emphasising the importance of clear, specific behaviours associated with self-regulation, such as managing stress effectively or demonstrating resilience in challenging situations.[8,13]

In terms of behaviour statements, an interesting point noted in relation to health-related competency framework terminology that might be an issue, is the convergence of functional and behavioural elements. As this analysis involves an international review, the issue of terminology use might differ between countries.[14,77] Given that healthcare has a dual emphasis on both workplace behaviour and performance management and education and skill development (functional), this convergence makes sense.[14] Finally, effective competency frameworks prioritise the ability to apply skills, ensuring that they extend beyond theoretical knowledge. This emphasis on real-world

applications is critical for obtaining desired outcomes.[13]

This study argues that three main factors—expanding contexts, inconsistent terminology, and conceptual variations—are responsible for the lack of clarity in behavioural descriptions within frameworks.[13,14,59] Addressing these issues requires establishing clearer interpretations of terms, standardising concepts, and fostering consensus on behaviour expectations within competency frameworks.[13,63] Such efforts will enhance the efficacy of frameworks in guiding talent development and organisational growth.[14] Future research efforts should therefore focus on addressing the identified gaps in existing frameworks, particularly in the realm of detailed behaviour/functional approach descriptions.

Additionally, future research should investigate the cultivation of specific EI components within pharmacy leadership development programmes; existing research is limited in terms of generalisability and validity, as it frequently uses student samples or employs questionable EI models.[78] To learn more about how specific EI evaluations and training programmes may help pharmacists become better leaders, more robust evidence is required.[79,80]

One of the significant findings of this study is the limitations of leadership frameworks in the Middle Eastern hemisphere, particularly their lack of theoretical grounding and limited engagement with leadership theories. This calls for further research and development to establish robust frameworks tailored to the specific nuances of Middle Eastern contexts.[81] Future research could investigate the adaptation and integration of established leadership theories, like servant leadership or transformational leadership,[81] into frameworks to bridge this gap and promote a more nuanced and regionally specific approach to leadership development.[82] This could potentially foster more effective leadership within these settings. Additionally, research should explore the unique aspects of leadership required in the pharmacy profession, differentiating it from leadership in other healthcare specialists.

One key strength of this research lies in its meticulous attention to both behavioural details and contextual depth. To the researcher's knowledge, this is the first study to explore both leadership competencies and analyse their corresponding behavioural statements within the pharmacy profession, both in education and practice. Employing a unique methodological approach, all relevant leadership-related competencies were extracted from both literature and frameworks, recognising them as valuable sources of information for understanding leadership development needs. A few previous studies explored leadership competencies within the pharmacy profession, though these were focused at a high level, neglecting the critical bridge between understanding these competencies and applying them in practice. This research bridges that gap by providing both a comprehensive list of leadership competencies relevant to pharmacists, and the specific behavioural statements associated with each. Importantly, this study fills a further gap in existing literature, often focuses on Western contexts, by incorporating policy documents from various sources, including Arabic data.

4.1. Limitations

This study has a number of limitations. Firstly, only published policy documents were included, potentially missing out on valuable insights. Given that these documents are generally produced for some purpose other than research, they may omit certain details such as the group to which the competencies apply.[21]

Secondly, there is the matter of the inherent subjectivity of qualitative research. The primary researcher's prior experience with leadership, background and viewpoints can subtly influence data interpretation. This was mitigated by thorough reflexivity to ensure reliable and credible conclusions (as mentioned previously in the Methods section). Furthermore, the initial coding was performed by a single researcher, potentially introducing a level of subjectivity. Although periodic validation by secondary reviewers minimised potential bias, a coordinated coding technique could improve reliability in future studies.

Thirdly, generalisability might be limited beyond the field of pharmacy as studies from other healthcare professionals could uncover valuable synergies and potential challenges within the broader healthcare team. Moreover, pharmacy leadership studies, as identified, often lack a clear adoption of leadership theories or models, necessitating future research in this area.

A final drawback of this study is that despite the use of the close relationship between knowledge, skills and abilities (KSAs), it is useful to distinguish what is required to attain specific leadership competencies. By addressing these limitations through future research, an enhanced understanding of pharmacy leadership can be gained to empower pharmacists to maximise their potential within the healthcare landscape.

4.2. Practical implications and future research

The comprehensive knowledge outlined in this study has two practical implications. First, it lays the groundwork for the development of an all-encompassing framework for pharmacy leadership. This enables both human resources and training teams to create focused development programmes and planned training to help eliminate perceived competency gaps and to successfully provide pharmacists with the necessary tools and skills to succeed in their leadership positions.

Secondly, Our findings transcend borders, offering valuable insights by having data drawn upon an international documents and frameworks towards pharmacy leadership. In essence, by focusing on specific, actionable behaviours, this study provides a practical roadmap for developing effective pharmacy leaders globally, empowering them to make a lasting impact on patient care and the healthcare landscape. However, pharmacy leadership models have certain limitations. While applying good behavioural statements is a positive aspect, additional research and development are needed to construct localised leadership frameworks. These frameworks should go beyond identifying behaviours to measure leadership and differentiate from other professions' leadership approaches. The establishment along with evaluation of tailored leadership development programs, integrating the specified competencies and behaviours, can substantially improve the leadership capabilities of future pharmacists.

5. Conclusion

This study has presented a comprehensive overview of the multifaceted landscape of pharmacy leadership competencies after an in-depth exploration of the eight core themes and their associated competencies, complemented by over hundred behavioural statements. Through a rigorous qualitative investigation, we identified significant deficiencies in current leadership frameworks and generated a rich model that implies the good behaviour statements. This research provides a solid foundation for further investigations into the complex connection between leadership competencies and their implementation in various pharmacy environments. The study offers a roadmap for pharmacists to follow when embarking on their own leadership journeys, equipping them with the knowledge and tools necessary to navigate the complexities of this demanding yet rewarding field.

CRediT authorship contribution statement

Moudhi Aman: Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Naoko Arakawa:** Writing – review & editing, Supervision, Project administration, Data curation, Conceptualization. **Claire Anderson:** Writing – review & editing, Supervision, Project administration, Data curation, Conceptualization.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.sapharm.2025.02.001.

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