

A Preliminary insight into the Role and Importance of Management Skills in the Prevention of Occupational Derailment: An exploratory analysis of UK and Spanish Pharmacists.

Liz Breen^a; J Acosta- Gómez^b; Justine Tomlinson^a; Kristina Medlinskiene^a; Jacobo Elies-Gomez^a

^aUniversity of Bradford, School of Pharmacy and Medical Sciences, Bradford UK.

^bFarmacia Acosta, Spain.

Abstract

The aim of this study was to examine the prevalence and importance of management skills in the pharmacy profession and pharmacists' ability to respond to current and future challenges in healthcare provision. As service professionals, pharmacists are engaged based on their expertise and skills, and are noted for their contribution to the knowledge-based economy and control over the application of their knowledge (Abbott, 1991). The same premise would apply to other professionals e.g. healthcare (nurses, doctors, psychologists); legal (lawyers, solicitors, barristers); consultancy; accountancy; banking and architecture (Von Nordenflycht, 2010). An exploratory analysis of UK and Spanish pharmacists' roles and their adoption of management skills was thus undertaken. Both healthcare systems are very similar and likewise the clinical training and role of pharmacists, professional standards and regulations are similar but there are subtle differences. Data was collected using semi-structured online surveys; two thirds of the data were collected from a UK audience and the final third from Spanish pharmacists. The data collection was planned and iterative in the first two stages (stage one influencing stage two) (UK) and the final stage (Spain) offered an opportunistic comparator study. The results demonstrated that there was overwhelming support for management skills to be part of undergraduate study. The outputs of this study identify the most important management skills pharmacists need to perform effectively. Consideration was also given to the impact of inability to perform in their role and hence the possibility of occupational derailment (leaving their role or being demoted). These findings offer important learning to support workforce development in all professional services.

Keywords: improvement; management skills; soft skills; pharmacists; UK; Spain; occupational derailment.

1. Introduction

Services contribution to economic growth has grown over the past two decades and their average contribution to gross domestic product (GDP) and value has increased (Deloitte Insights, 2018). Professional services provide knowledge, structure, innovation and entrepreneurship, and are highly rated based on these characteristics. Like all professional services globally, within healthcare the landscape is changing. Professionals are being challenged to respond and adapt accordingly in order to meet patients' needs and offer added value (Biggs, Hall & Charrois, 2019). This is very much the case with the pharmacist professional body where there is greater demand for high quality services and effective use of healthcare resources. The changing shape of the healthcare landscape requires pharmacists to simultaneously respond to new opportunities and deliver to their traditional roles (Yusuf and Sadar, 2011). There is limited research which focuses on how pharmacists are prepared to perform their roles whilst responding to societal and systemic changes and seizing new opportunities.

"Pharmacists are key players in the future of healthcare across the UK...they have greater expertise in medicines than any other health professional" (Royal Pharmaceutical Society (RPS), 2015:1). Their role

is varied, and they can operate in multiple environments; hospitals, community, primary care, academia, industry and other operational arenas such as the Armed Forces. The pharmaceutical expertise and clinical skills of pharmacists are increasingly recognised but they still *“remain one of the most underutilised professional resources in the [healthcare] system...”* (NHS England, 2016).

As a group, pharmacists' clinical expertise is critical in responding to the strategic vision set by the NHS Long Term Plan, 2019 (NHS.UK, 2019) and Patient Safety Strategy, 2015-2020 (Ministry of Health, Social Services and Equality, Spain, 2015). Pharmacists qualify with knowledge and skills in principles of quality assurance of medicines, medicine distribution chains (international, national and domestic markets), pharmacotherapy and provision of pharmaceutical care advice to patients and other healthcare professionals (WHO, 1997). Yet to enable a strategic vision, a broader skill set is required incorporating technical and non-technical skills. Indeed, in order to undertake managerial roles as part of normal professional progression non-technical skills, such as social and cognitive skills, are expected and needed. Management skills, as a broad set of skills, are also referred to as 'soft', 'non-technical', 'non-cognitive' (Handel, 2003) or 'non-clinical' skills and as such the terms can be used interchangeably. For the purpose of this study, management skills will be referred to as a broad set of soft skills (e.g. communication, teamwork, negotiation, planning etc). In a bid to understand more about this topic, we have chosen to undertake a preliminary analysis of the prevalence and importance of management skills within this profession. We begin by reviewing the literature pertaining to the influence of managerial skills in business today accompanied by the changes within the pharmacy profession. This will be followed by an examination of the pharmacy educational curriculum and the presence and need for management skills within the pharmacy profession. A discussion of the methodology employed in this empirical study will be presented and the associated findings. The paper culminates in analysing key themes and offers conclusions responding to the research questions and study aim.

This study shows that managerial skills as non-technical skills (NTS) has been proven to contribute to safer and more efficient task performance, but this aspect has not been examined within the pharmacy profession. This work attempts to redress this balance by demonstrating the importance and value of core and peripheral management skills to this profession. This work contributes to the practitioner arena in many ways by presenting evidence from 384 pharmacists of the importance of these skills within their current roles. Pharmacy councils, educational, government and advisory bodies and other service professions can benefit from such insights.

2. Literature review

The World Health Organisation (WHO) in January 2019 announced their top ten threats to global health and these dictate health service improvement agendas (WHO, 2019). Addressing such issues within our global health systems requires a skilled and resilient workforce (Biggs et al. 2019). Recent and influential legislation in both the UK and Spain have highlighted healthcare strategy plans and the role of the workforce in delivering to this i.e. the NHS Long Term Plan, 2019 (NHS.UK, 2019) and Patient Safety Strategy, 2015-2020 (Ministry of Health, Social Services and Equality, Spain, 2015). Changes within a country's National Health Service provision impacts on both primary care/social care (Community Pharmacists/Doctors/General Practitioners) and secondary care (Hospital Pharmacists) settings. The World Health Organisation in 1988 redefined the role of the pharmacist due to the increasing costs of healthcare and *“to serve the interests of both individual patients and the public at large”* (1988:2). The outcome of this consultation was that pharmacists are uniquely qualified, based on their *“knowledge of quality assurance, distribution and inventory management, and product pricing; custodians of technical information; provision of patient information, and have the ability to prescribe (at least in the UK) and sell medicines, and prepare them for other roles in pharmaceutical*

services administration, medicines manufacture and supply, quality assurance and national and institutional formulary committees” (WHO, 1988:2).

Increasing fiscal pressures within the National Health Service UK (NHS) and shortages of healthcare professionals, especially nurses and doctors, has led to the emergence of new roles for UK pharmacists. Examples of new and extended roles are: Primary Care Pharmacists in General Practitioner (GP) practices (Mann, Anderson, Avery, Waring & Boyd, 2018); Community Pharmacy extended services in end of life care (Edwards, Bennett & Blenkinsopp 2019) and Emergency Department Pharmacists (Greenwood, Tully, Martin, & Steinke 2019).

Considering this challenge, this study chooses to focus on the UK and Spanish healthcare systems and the importance of pharmacist management skills in delivering healthcare. Whilst healthcare in both countries is very similar, the professional training of both UK and Spanish pharmacists has slight variations. In the UK, pharmacists receive a standard level of training (4 or 5 years) which provides entry to primary and secondary care employment (GPhC, 2011). In Spain, Community Pharmacists must complete a five-year University Degree in Pharmacy, whereas to become a Hospital Pharmacist, a supplementary four-year pharmacy residency must be completed (Saavedra-Mitjans, Ferrand, Garin & Bussièrès 2018). In Spain, the role of pharmacists working within GP practices has been active for more than 20 years (ANECA, 2016); pharmacy stores must be owned by a pharmacist and chains (multiple pharmacies owned by one party) are banned (Chave, 2014). Activities for which GP Pharmacists are responsible for include: elaboration of diffusion of medicine leaflets/ bulletins, financial management associated with pharmaceutical budget and benefits, commissioning services and auditing (ANECA, 2016). Many of these activities are not covered in the pharmacy education at an undergraduate level, and pharmacists learn these skills and information ‘on the job’. Except for the Emergency Department Pharmacist role and the ability to undertake independent prescribing, Hospital Pharmacists in Spain perform the same roles as their UK counterparts.

2.1. The great skills debate – technical, non-technical, soft or humpty-dumpty?

Over past years researchers have undertaken to define job related skills and their importance to professional careers and to business. What is deemed as skilled work activities and how valuable soft skills are in the work environment is also under debate (Hurrell et al., 2013). This is particularly relevant to soft skills needed in service organizations, especially in customer-jobs (Grugulis, 2006). Higham et al. (2019) urge caution as to the use of the term soft skills when attributed to important professional clinicians. Hurrell, Scholarios & Thompson (2013) go as far as to question if soft skills are skills in any material sense or just a nonsensical ‘humpty-dumpty’ term (as per Lewis Carroll’s fictional character). Nonsensical aside, these skills are sought after by employers, especially in the service industries (Hurrell, 2016).

If we consider errors in healthcare settings, evidence suggests that errors in non-technical skills (NTS) (as opposed to technical) are common in adverse incidents (Higham et al., 2019). The focus thus moves from clinical skills development to the interactions that take place amongst teams, adopting a human factors approach to task performance and workforce development. Flin and Maran (2004) highlight a similar picture in the aviation industry with failure being attributed to NTS (cognitive and social), rather than a lack of technical knowledge, flying ability, or aircraft malfunction. Dubey and Gunesekearan (2015:89) purport that a combination of both skills sets are optimal; *“hard skills combined with soft skills, definitely offer a competitive edge to managers.”*

Flin et al. (2003) when designing the NOTECHS system (the European taxonomy of pilots’ non-technical skills (NOTECHS) and associated rating method included the following categories: co-operation,

leadership and managerial skills, situation awareness, and decision making. In the aviation community flight crew members non-technical skills are critical to ensuring enhanced safety. When examining NTS amongst anaesthetists Flin, O'Connor & Crichton (2008) described these as *"the cognitive, social, and personal resource skills that complement technical skills, and contribute to safe and efficient task performance"*. Hurrell et al. (2013:162) add to this stating that soft skills may be defined as: *'non-technical and not reliant on abstract reasoning, involving interpersonal and intrapersonal abilities to facilitate mastered performance in particular social contexts'*. There is thus a focus to both identify and nurture soft/non-technical skills within the workforce as these can contribute to the development of high performing, agile and resilient workforce teams. The identification of NTS can be seen in multiple studies focusing on graduates (Burrus, Jackson, Xi & Steinberg, 2013), healthcare professionals (Gross et al. 2019; Higham et al. 2019); pilots (Flin et al. 2003); surgeons (Yule, Flin, Paterson-Brown & Maran, 2006); anaesthetists (Flin and Maran, 2004; Flin, O'Connor & Crichton, 2008); project management (Carvalho and Junior, 2015) and supply chain professionals (Bak, Jordan & Midgley, 2019; Karttunen, 2018).

Burrus et al. (2013) conducted an analysis of the Occupational Information Network (O*NET) database in order to identify 21st century occupational skills. O*NET is a large job analysis, operated and maintained by the U.S. Department of Labor. Their analysis indicated that five competencies were important for most occupations: problem solving (e.g., complex problem solving), fluid intelligence (e.g., category flexibility), teamwork (e.g., cooperation), achievement/innovation (e.g., persistence), and communication skills (e.g., oral expression). In their systematic literature review, Higham et al. (2019) found one hundred and eighteen studies describing 76 tools for assessment of NTS in healthcare in their systematic literature review. Concerns about the measurement properties of these tools (including their validity and reliability) have been raised by educational and research communities. Flin and Maran (2004) highlighted technical and non-technical factors affecting aviation team performance focused on analysing individual characteristics, individual skills, group processes (team skill) and quality and safety outcomes. They proposed that NTS were task management, team working, decision making, situational awareness and stress management. These elements formed the basis of a more extensive study to identify NTS and to the development of the Anaesthetists' Non-Technical Assessment Skills system (ANTs) (as shown in Table 1).

Table 1 The Anaesthetists' Non-Technical Assessment Skills system (ANTs) (Flin and Maran, 2004)

Categories	Elements
Task Management	Planning and preparing Prioritising Providing and maintaining standards Identifying and utilising resources
Team Working	Co-ordinating activities with team members Exchanging information Using authority and assertiveness Assessing capabilities Supporting others
Situation Awareness	Gathering information Recognising others Anticipating
Decision Making	Identifying options Balancing risks and selecting options Re-evaluating

When examining purchasing and supply chain skills, Karttunen (2018) indicated that generic managerial skills (communication, cost analysis, teamwork, problem-solving, negotiation, influencing, and persuasion, as well as information technology skills) were deemed to be more important for this role.

Two studies which have offered further insights into the development of soft skills and the balance between these and their importance in candidate development/role delivery are Bak et al. (2019) and McCartney and Campbell (2006). Bak et al. (2019) chose to focus on supply chain professionals and the adoption of soft skills in role deployment. Their study involved a mixed methods approach of a questionnaire distributed to 120 supply chain employees followed by six interviews with supply chain experts. Softer supply chain skills have grown in emphasis over past years and may be linked to personality traits and attitudes rather than technical competency (Moss and Tilly, 1996). Based on literature scrutiny, 15 skills emerged within four categories (as shown in Table 2 below).

Table 2 Soft skill categories and items (Bak et al. 2019)

Soft skills categories	Soft skills Item
Decision-making skills	Problem solving (PRO)
	Planning skills (PLN)
	Flexibility (FLX)
Behavioural skills	Organisational skills (OSM)
	Communication skills (COM)
	Time management (TIM)
	Motivation and enthusiasm (MAE)
	Stress management (SSM)
Management skills	Initiative (INI)
	People management (PEM)
	Collaborative learning (COL)
	Teamwork (TEW)
Negotiation skills	Leadership skills (LES)
	Management of complexity and change (MCC)
	Negotiation (NEG)

The data collected was subjected to statistical analysis and delivered the following distribution of skills based on those reported by the respondents (see Figure 1). Zero, as presented in the radar chart, indicates low levels of importance, whereas a 5 indicates higher levels of importance. Bak et al. (2019) concluded that soft skills, especially behavioural skills such as communication, planning, initiative and negotiation, were seen to be more important when compared to decision making, negotiation and management skills.

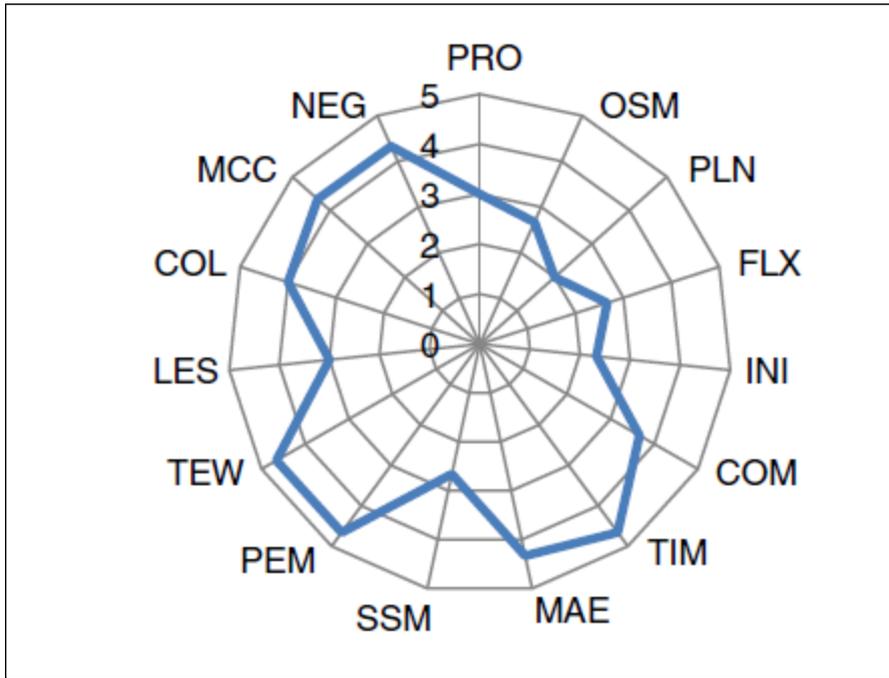


Figure 1 Distribution of skills based on emphasis as demonstrated in a radar chart (Bak et al. 2019).

McCartney and Campbell (2006) also focused on soft skills but specifically in relation to managerial and leadership skills and associated success/failure factors. They concluded that a permutation of both managerial and leadership skills delivered the most successful combination of skills required to be a future leader within the workplace. Their work built on that of Daft (2003) who presented this case as per Figure 2 below. McCartney and Campbell (2006) extended the work of Daft (2003) by identifying key skills from literature sources that would likely demonstrate success or failure of candidates in managerial roles as per the quadrants shown in Figure 2 (skills ranked low, medium and high). For example, factors relating to success in managerial skills included: resources problem-solving skills, specialised knowledge, directing subordinates and goal achievement. Those factors which influenced success in leadership skills were interpersonal skills, strategic vision, challenging processes, synergistic thinking and emotional maturity. Factors related to failure associated with managerial skills were failure to meet objectives, over managing and an inability to prioritise, whilst when related to leadership skills these included poor interpersonal relationships, abrasive behaviour, inability to build a team and being reactive than proactive.

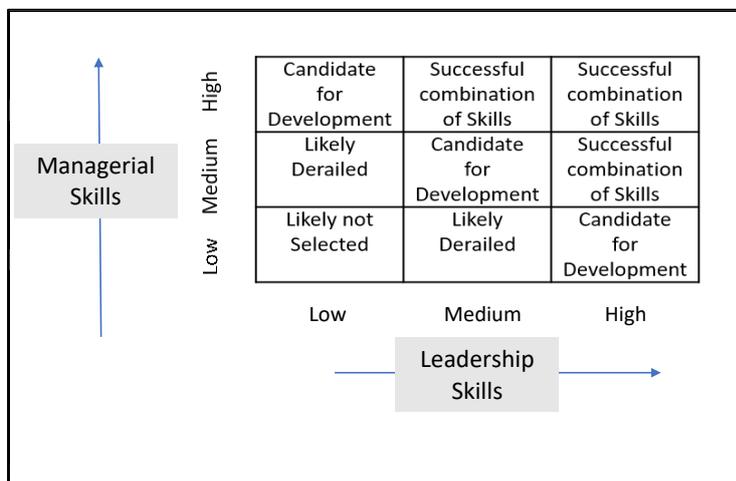


Figure 2 A model of individual success and failure (Daft 2003)

A clear output of this study was the message to recruit and train candidates well in soft skills, such as management and leadership, to avoid potential failure or derailment (Daft, 2003). This message is clearly relevant for all managers across all sectors. Further research into this phenomenon indicates that derailment occurs when individuals who are perceived to have high potential for success on recruitment underperform, are demoted, or leave the organization either voluntarily or involuntarily (McNally and Parry, 2002). Within the body of this study (pharmacist management skills) to avoid any confusion associated with the term derailment, the authors choose to extend this term to present the final term of *occupational derailment*.

A huge influence on a manager's work ethic and performance is their sense of professionalism and engagement with their professional body and community, e.g. the General Pharmaceutical Council (GPhC) (UK and Spain) and the Royal Pharmaceutical Society (UK). Concerns have been raised as to the impact of a lack of preparedness for the role, leading to a degradation of professional ethics and the possibly of what is termed 'professional abstinence'. Biggs et al. (2019) define professional abstinence as consciously choosing not to provide the full scope of patient care activities. They assert that *"the professional role is not just a competency but an embodied identity that guides pharmacists regardless of their expertise or practice setting.pharmacists should inherently apply the principles of best practice, adapt to fulfil evolving roles..... Given that available knowledge is increasing every second and that scope of practice is dynamic, what it means to be a pharmacist must continue to change"* (Biggs et al. 2019:148). Professional abstinence, if left unnoticed and not addressed, could lead to occupational derailment.

2.2 The case for Management Skills in the Pharmacy profession

Pharmacists of all grades must be prepared to manage not only their patient's clinical care, but the staff around them and the business, including finances and resources (Augustine et al., 2018, Mospan, 2017). An advance on the traditional management role is that posited by Tyler and Sadiq (2019:35), the Resilient Emergency Manager. This is described by the authors as; a manager able to adapt to changing conditions, make agile decisions, function interoperably, mobilize resources, scale programs, policies, and procedures, develop robust collaborative networks, and build redundant emergency management systems. This role is equally applicable in healthcare, public and private sector operations.

The need for management skills in pharmacy is particularly evident from the WHO's (1997) 'Seven-star pharmacist', which has set the minimum international standards and expectations for all current and future pharmacists' roles. The model reflects seven core roles, of which manager and leader are featured, alongside care-giver, decision maker, communicator, life-long-learner, and teacher (Thamby & Subramani, 2015). The manager domain encompasses effective resources management (human, physical and financial) and information governance (WHO, 1997). The Seven-star concept has now been updated to a Nine-star, and includes two additional roles: researcher and entrepreneur (Thamby & Subramani, 2015). Pharmapreneurs (as they are coming to be known) *"innovate new pharmacy business solutions that enhance the patient experience and strengthen the business of community pharmacy"* (Pharmacy Times, 2014:1). Entrepreneurial spirit is increasingly important in the modern healthcare system (Ramia, Salameh, Btaiche & Saad, 2016; Gebauer 2008), which is operating under budgetary constraints, with hypercompetition and thus requires novel methods of working (Singleton & Nissen, 2014).

2.3 Management competency development in pharmacy education

Although pharmacy education is predominantly focused on pharmaceutical care and treatment, there ought to be social, administrative and managerial aspects within pharmacy education to produce well-rounded healthcare professionals (Perepelkin, 2012; Perepelkin, 2017). Professional competence should go hand in hand with management competence (Ottewill, Jennings & Magirr, 2000). Whilst there is evidence of management skills clearly being a focus in pharmacy education (Augustine et al., 2018; Mospan, 2017), the reverse is also apparent (Thamby & Subramani, 2015; Davies et al., 2013; The Pharmaceutical Journal, 2013). There is also confusion as to what 'management' means (Ramia et al. 2016). Pharmacy management skills are often evident only as implicit 'transferable soft skills' such as communication or problem-solving. Additionally, effective attributes such as attitudes, communication and behaviours important in developing managerial capabilities are underrepresented in the pharmacy profession (Ramia et al., 2016). Whilst the pharmacy workforce agrees that business skills are crucial to the pharmacist's role (Davies et al., 2013), their level of uptake within pharmacy education is varied (Augustine et al., 2018). There are concerns that introduction of business and leadership training in undergraduate teaching will dilute the core components and science within the current education (The Pharmaceutical Journal, 2018) or lead to unmanageable workloads for students (The Pharmaceutical Journal, 2005). Management training should therefore come through optional modules, pre-registration training or simply from life experience (The Pharmaceutical Journal, 2018).

To excel in management, pharmacists need to have an excellent understanding of operational and strategic management levels (Ottewill et al. 2000). Strategic level competencies (e.g. innovation, tactical planning and objective setting) are rarely introduced and do not feature within the current UK education standards (GPhC, 2011). Many students, and potentially educators, often do not see the relevance of management education within their programme (Mospan, 2017; Singleton & Nissen, 2014) and students only realise during their first few weeks of practice that they are underprepared for this aspect of their role (Ramia et al., 2016). Formal workplace training involving management skills for graduate pharmacists is also scarce (Ottewill et al., 2000).

Historically, standards for the initial training and education of pharmacists in the UK have included self-management, leadership and risk management focused outcomes, with less focus on detailed human and fiscal management knowledge and skills (GPhC, 2011). The presence of business management modules within curriculums has resulted in positive outcomes, showing an increase in knowledge amongst all students (Monk-Tutor, 2001; Perepelkin, 2017; Rollins, Broedel-Zaugg, Reiselman & Sullivan, 2012). However exactly what skills need to be taught with ever increasing roles and changing dynamics for pharmacists or how these should be incorporated in already demanding curriculum is unknown (Augustine et al., 2018).

2.4 Summary

In summary, the literature review has shown that there is a strong case for the development and training of pharmacists in technical and managerial skills. Whilst clinical expertise is expected and professionalism is a clear focus, there is a dearth of evidence relating to the development of management skills. Spain and the UK have been chosen for this comparative case analysis based on the affinity of their healthcare systems and practices. From the deliberations above there is a need to examine the role and importance of management skills training in developing pharmacists to respond to current and future challenges in healthcare provision.

To this end the following research questions were crafted:

- 1) Are pharmacists in the UK and Spain prepared for management practice?
- 2) What skills are needed to reduce the possibility of pharmacist occupational derailment?

3. Methodology

The aim of this study was to examine the prevalence and importance of management skills in the pharmacy profession and its impact on the development of this profession to respond to current and future challenges in healthcare provision. The study presents empirical exploratory research emphasising specific geographical contexts due to a dearth of informed research in this area.

3.1 Research Context

The two countries involved in this research were, at the time of this study, members of the European Union (EU); as a result, both countries are subject to a large body of legislation that has been developed and supported by the 31 European Economic Area (EEA) Member States, the European Commission and the European Medicines Agency (EMA) (EMA, 2014). These regulations are intended to ensure the quality, safety and efficacy of pharmaceutical products, and promote the good functioning of the internal market (EC, 2015). As stated previously both professions have governing bodies (General Pharmaceutical Councils, UK and Spain) who ensure that professionals are adequately trained for their role and rigorously monitored. Table 3 summarises relevant statistics for both countries.

Table 3 Key facts for the UK and Spain healthcare systems (as of 2018)

	United Kingdom	Spain	Source
Population	66.4 million	46.66 million	ons.gov.uk, ec.europa.eu
Health expenditure (USD per capita)	4070	3323	OECD (2019b)
Pharmaceutical expenditure (% health expenditure)	11.8%	18.5%	OECD (2019a)
Number of physicians (per 1000 population)	2.85	3.88	OECD (2019d)
Number of nurses (per 1000 population)	7.8	5.74	OECD (2019c)
Number of pharmacists registered	66,000	74,043	euroweeklynews.com (2019)
Pharmacist density per 10,000 population (2016) (EU average 7.36)	8	15	fip.org (2018)

According to Chave (2014), whilst the European pharmacy systems may be different, the challenges faced are surprisingly similar, and the pressures experienced are widespread. The UK and Spanish healthcare systems are similar in their structure and funding mechanisms. Both countries indicated via recent legislation that there is a strong focus on the strategic direction of their National Health Systems to deliver high quality services and promote patient safety (NHS Long Term Plan, 2019 (NHS.UK, 2019) and Patient Safety Strategy, 2015-2020 (Ministry of Health, Social Services and Equality, Spain, 2015). Pharmacists are therefore trained to do the same role but there are minor differences in training and role deployment as discussed earlier.

In both countries, outcomes of the undergraduate pharmacy education are developed in the context of expectations of a pharmacy professional and skills required in practice. According to GPhC (UK) (2011), skills required in pharmacy practice are implementing health policy, validating therapeutic approaches, supplying prescribed and over-the counter medicines, delivering safe and effective pharmaceutical services, working with patients and public, and maintaining and improving professional performance. In the UK, the pharmacy education is regulated and defined by the GPhC and consists of the following: 1) Four-year Master of Pharmacy (MPharm) degree or five-year MPharm degree with intercalated blocks of pre-registration training plus placements (GPhC, 2011). The Spanish MPharm degree is a five-year programme and its main objective is the training of experts in all aspects related to medicines (portalfarma.com, 2018). This provides the necessary clinical training to practice the pharmaceutical profession.

3.2 Participant Sampling and Access

The case country selection was made based on the commonality of practice in both countries and researcher location/participant access. A purposive/non-probability sampling approach was used to obtain responses from practicing pharmacists of primary and secondary sectors within UK and Spain (Saunders, Lewis and Thornhill, 2015).

Access to all cohorts was via a multi-channel approach. For the UK cohorts pharmacists were approached via social media groups affiliated with the University School of Pharmacy, Alumni, and Association of Pharmacy students, via direct e-mail to Pharmacy Staff, Local Pharmacy Forums, Pharmacy regional bodies and the Royal Pharmaceutical Society (RPS) as well as direct referral and snowball sampling through participants (Buckley & Majumdar, 2018). To access Spanish pharmacists, key professional associations disseminated the survey link to their association members. The gatekeepers as Presidents of these societies, in circulating this link, endorsed the survey completion to their group to increase the likelihood of participation (McFadyen & Rankin, 2017). These associations were the Spanish Society of Family and Community Pharmacy (SEFAC), Spanish Society of Primary Care Pharmacy (SEFAP) and Spanish Society of Hospital Pharmacy (SEFH). To enhance this response rate the survey link was also circulated direct to pharmacists through the Spanish researcher's personal networks.

3.3 Data collection

This was a qualitative exploratory study across a single professional cohort in two countries, UK and Spain. Data was collected in three stages: Cohort A (UK) November 2014; Cohort B (UK) November 2015 and Cohort C (Spain) July-October 2017. The study aims to address the research questions (Tukamuhabwa, Stevenson & Busby, 2017) and seek out views from the population involved (Saunders et al., 2015). The qualitative approach is an accepted practice in management (Cassell, 2016) and healthcare research (Murphy, Dingwall, Greatbatch, Parker & Watson, 1998) and aims to gain a better understanding, appreciate the context and its singularities. *"A qualitative study may help define the dimensions that a quantitative study would aim to measure and to suggest effective ways of asking questions by describing the language used by or intelligible to the population being examined"* (Murphy et al. 1998:3).

Based on the literature review undertaken, a questionnaire was designed in October 2014 which aimed to explore this area further to address the research aim and questions. Based on the findings and to maintain currency, this was subsequently updated in October 2015 e.g. increasing predetermined options within questions. A further update was undertaken in 2017 before this survey was deployed to the Spanish audience (Phase 3, Cohort C). This iterative approach allowed the

intelligence realised in previous survey outputs to be captured and explored further. The staggering of the data collection points was opportunistic and not planned, thus this is not a longitudinal study.

Whilst the nature of this study is exploratory, the open and closed questions posed within the online survey offer the researchers the opportunity to both explore the extent of this phenomenon (what the management skills are, how important are they) but also confirm their views on specific management teaching and skills. Qualitative research can generate data which is '*voluminous, unwieldy and unstructured*' (Bryman and Burgess, 1994:216). To this end, the researchers chose to build a survey, which for the most part was structured and quick to complete, reducing the risk of rejection or partial completion. Based on the flexibility of design, ease of tracking, distribution, completion and data analysis, an online survey was used (Joel and Anil, 2005). Recent research has shown that data collection via the internet can match high quality traditional research routes (Angrisani, Finley & Kapteyn, 2019). Google Docs was chosen as the survey tool for this case due to its flexibility in designing a complex questionnaire, its ease of use and for allowing effective monitoring of responses in real time (Rayhan et al. 2013; Travis, 2010). The survey for Cohort C was translated into Spanish and validated as part of the ethical approval process.

The online survey consisted of five sections: 1) Respondent Profile; 2) Management Skills; 3) Pharmacists practicing in Primary Care; 4) Pharmacists practicing in Secondary Care and 5) Management Experience. Based on the role of the respondent they were invited to answer sections 1, 2, 3 or 4 and 5. See Appendix for the survey questions. Piloting was undertaken by pharmacists for all three data collection phases and minor modifications were undertaken to enhance question clarity and the survey tool. An overview of the data collection process is outlined in Figure 3.

3.4 Data Analysis

Whilst a qualitative study, the survey findings were reported using descriptive statistics and clear themes were analysed. Themes help organise data in groups of repeating ideas which allow the researcher to answer the research questions (Vaismoradi, Jones, Turenen & Snelgrove, 2016). There is however no consensus on the right or wrong way to conduct thematic analysis (Saldana, 2015; Vaismoradi et al. 2016). Translating scales and rankings into meaningful statements of importance was very insightful in this study and facilitated the production of key outputs. The frequency of responses was calculated using the quantity of times that words/phrases were mentioned/offered and reported as percentages of cohort response to determine their significance/importance. This was particularly useful when options were offered to respondents and their choice of response confirmed the importance of key skills.

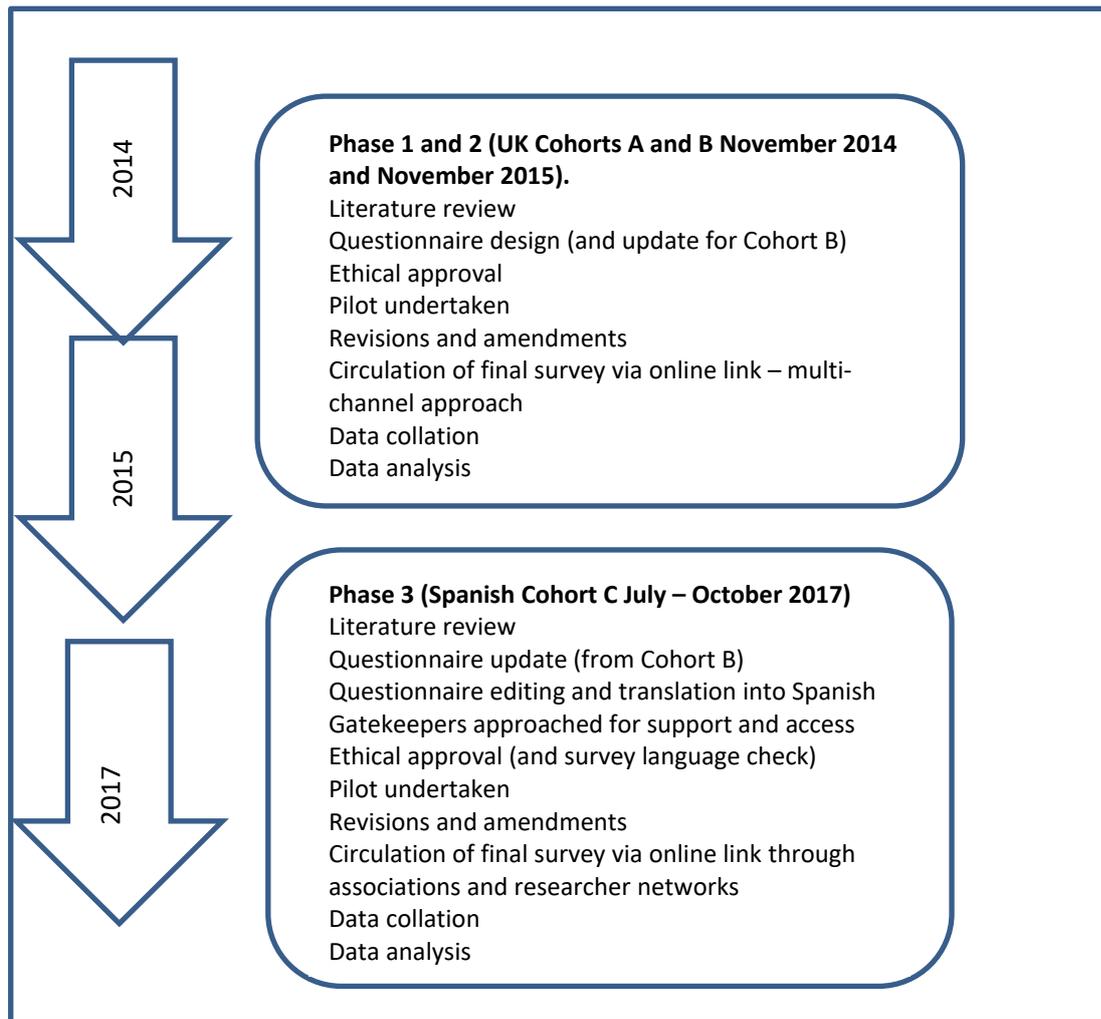


Figure 3 The sequence of activities within the three phases of the study.

3.5 Ethical considerations

All versions of the online surveys used in this study were approved by the Chair of the Biomedical, Natural, Physical & Health Sciences Research Ethics Panel at the University of Bradford. Participant anonymity and confidentiality was always assured.

3.6 Reliability, Validity and Generalisability

To enhance the reliability of the survey tools and access to participants, pharmacy researchers and academics and pharmacists (UK and Spanish) were involved in the design and deployment of the online survey tool. The reliability of the study outputs was further enhanced by the fact that the survey tool designed was used in all three phases of the study and was updated to maintain its currency. As validity is concerned with the integrity of outcomes and credibility of the conclusions obtained in the study, steps were taken in the design and execution to ensure this was the case. Interpretation of the findings and the creation of this paper were robust as the writing team consists of two British pharmacists, one Spanish pharmacist working in the UK, one resident Spanish pharmacist and one healthcare management academic. The latter academic was involved in all stages of the design, data

collection and analysis of this study. The authors did not set out to prove that the findings of this study are generalizable to either location. Instead they offer a snapshot of opinion and views into management skills development within this profession that can prove useful to academics and policy creators in both countries and other professional services.

4. Results

The survey was deployed as per the times indicated (See Figure 3) and 384 responses returned across all the surveys. The findings are presented as per the line of questioning in the survey tool.

4.1 Respondent Profile

The number of respondents in the UK across both cohorts were smaller due to the timing of the survey availability. The role demarcations in Spain are also slightly different from the UK hence these are reported separately in Table 5.

Table 4 Cohort A and Cohort B respondent profile (UK responses 2014 and 2015)

	Cohort A UK November 2014 85 responses	Cohort B UK November 2015 67 responses
Male	45%	61%
Female	55%	39%
Primary (combined)	65%	N/A
Primary (Community Pharmacy)	N/A ^a	26.4%
Primary (GP Practice)	N/A ^a	15.3%
Secondary	21%	58.3%
Primary and Secondary roles	14%	N/A
Full time	78%	63.9% ^b
Part time	22%	29.2% ^b
Locum	N/A ^a	2.8% ^b

^anot included in 2014 survey

^bnot all responses provided for work schedule

Table 5 Cohort C respondent profile (Spanish responses 2017)

	Cohort C Spain 2017 232 responses
Male	34%
Female	66%
Community	66%
Primary Care	16%
Secondary (Hospital)	13%
Community and Primary Care	2%
Community and Hospital	1%
Primary Care and Hospital	3%
Full time	90%
Part time	10%
Locum	-

Respondent data was collected to determine the breadth of their duties but also their level of experience. The tasks undertaken by pharmacists were incredibly varied and included clinical checking of prescriptions, prescribing new medications, allocating resources, selling products to customers, managing staff, providing medicines advice to doctors and nurses, counselling patients, managing stock, writing protocols, coordinating a chain of 30 pharmacies and delivering to government targets.

The findings indicated that a large proportion of those who engaged in the study had 11 years or more of experience in a pharmacy role (See Table 6) (this could be across multiple roles within the profession and across both primary and secondary care).

Table 6 The extent of professional experience (as registered by years) reported by respondents.

Pharmacist Experience (years)	Number of responses (% of total)		
	Cohort A	Cohort B	Cohort C
0-2	11	11	4
3-6	17	14	12
7-10	21	13	11
11-15	22	22	20
16-20	7	13	24
21 or more	22	27	29

4.2 Managerial experience and its impact of management modules on performance.

When asked if they had any management experience, 82% of participants from Cohort A considered themselves as having some managerial experience; however, 10% did not have any experience (and there was no response from the remainder). Similarly, 79% of Cohort B stated that they had managerial experience as a pharmacist while only 21% indicated they had none. Of those who indicated they had, this was mostly in the form of managing other staff in a team, whether pharmacy or multidisciplinary. In cohort C, the Spanish respondents reported the lowest level with 61% indicating that they had management experience.

The participants were presented with a list of predetermined management modules (as informed by the literature) and asked which taught modules could potentially improve their performance as a pharmacist. The respondents could choose as many modules as they wished in their responses and the results are presented in Table 7. Within both UK cohorts, studying leadership and performance management was the most selected module, however this was not reciprocated to the same extent within the Spanish cohort. Working with staff and motivating them seemed to be a priority for the Spanish pharmacist group.

Table 7 Impact of taught management modules on pharmacist performance (highest impact to lowest).

Module	Percentage of cohort responses		
	Cohort A	Cohort B	Cohort C
Leadership and performance management	87%	90%	64%
Coaching and mentoring	73%	70%	42%
Employee relations and motivation	68%	61%	74%
Self-diagnosis and skill development	49%	43%	47%
Business planning	47%	45%	41%
Quality management	33%	43%	47%

Accounting and financial management	27%	39%	44%
Management accounting and decisions making	31%	25%	40%
Business process analysis/diagnostic tools	21%	25%	31%
Business networking	20%	16%	14%
Financial modelling	19%	25%	12%

4.3 Importance of Management skills as a Pharmacist

Respondents were presented with a list of management skills (as informed by academic literature, taught MBA content and management practice) and asked to rank the importance of each one on a scale of 1-10 (10 being the most important). Table 8 details the skills deemed to be most important as a percentage of the group response. Within Cohort A, interpersonal skills were deemed the most important skill, whereas for Cohort B this was communication and for Cohort C communication was also the most popular skill required. Respondents were also asked to consider one management skill that was crucial for them to succeed in their role. The responses varied across cohorts with the greatest volume of skill nominations originating from the Spanish cohort (see Table 9).

4.4 Self-management and its impact on others

Being able to effectively manage yourself as a manager and leader can influence others to do likewise. Respondents were asked if managing themselves effectively led to managing others successfully. Pharmacists of Cohort A (91%) considered this to be the case whereas 7% of pharmacists did not agree with this statement. Two percent of the respondents chose not to complete this field. Most respondents purported that the best techniques to manage themselves (in order to manage others) are leading by example; being a role model; organisation and managing their own workload by ensuring efficient time management.

Similarly, 91% of Cohort B believed that managing oneself effectively enabled them to manage others successfully. The response to this was more positive amongst the Hospital Pharmacists with 95% in agreement than the Community Pharmacists in primary care (82%). Pharmacists in this group felt that with effective self-management it is important to lead by example and demonstrate good practice to others. Views expressed stated that self-management allows one to assess one's own work and thereby prioritise and delegate more effectively. It also facilitates quality reflection to know one's own limitations; highlights the potential for further development of management skills as well as gaining respect and credibility from fellow staff. 90% of respondents in Cohort C agreed with this statement and the remaining portion of the cohort did not. One respondent said, *"You can hardly ask for commitment, or work in a team if you as a boss do not set an example"*

Table 8 Demonstrating the importance of management skills (ranked as most important by respondents)

Cohort A		Cohort B*		Cohort C*	
Skill	Frequency	Skill	Frequency	Skill	Frequency
Interpersonal skills	62%	<i>Communication</i>	71%	Communication	59%
Delegation	51%	Interpersonal skills	50%	Ability to make decisions	50%
Empathy	43%	<i>Training and staff development</i>	46%	Empathy	49%
Adaptability	42%	Approachability	44%	Training and team development	47%
Computer skills	42%	Time keeping	43%	Conflict resolution	46%
Decisiveness	38%	Adaptability	36%	Time management	42%
Time keeping	37%	<i>Managing risk</i>	36%	Interpersonal skills	36%
Stress management	33%	Decisiveness	32%	Autonomy	30%
Approachability	20%	Empathy	31%	Stress management	24%
Autonomy	17%	Autonomy	30%	Capacity for delegation	24%
		Stress management	29%	Business administration	22%
		Computer skills	25%	Computer skills	18%
		Delegation	21%	Strategic and scenario planning	17%
		<i>Conflict resolution</i>	19%	Risk management	16%
		<i>Project management</i>	17%	Project management	15%
		<i>Strategic and scenario planning</i>	14%	Process diagrams and systems analysis	10%
		<i>Process mapping and system analysis</i>	13%		
		<i>Business management</i>	6%		

*based on feedback from 2014 survey the skills categories were extended (as indicated in italics).

Table 9 Reporting of one crucial management skill by respondents and frequency of response.

Cohort A		Cohort B		Cohort C	
Skill	No/% of responses	Skill	No/% of responses	Skill	No/% of responses
Time management	15 (17.6%)	Time management	9 (13.4%)	Communication	23 (9.9%)
Leadership	9 (10.6%)	Communication	9 (13.4%)	Supply/Logistics management	22 (9.5%)
People management	8 (9.4%)	Leadership	6 (9%)	People management	20 (8.6%)
Communication	8 (9.4%)	People management	6 (9%)	Empathy	13 (5.6%)
Organisation	6 (7%)	Delegation	5 (7.5%)	Organisation	12 (5.2%)
Delegation	4 (4.7%)	Interpersonal skills	4 (6%)	Time management	10 (4.3%)
Negotiation Assertiveness	3 (3.5%)	Organisation	3 (4.5%)	Leadership	10 (4.3%)
Diplomacy Multi-tasking Motivational skills Interpersonal skills Planning	2 (2.4%)	Negotiation Influencing Flexibility Business continuity planning Adaptability	2 (3%)	Negotiation skills Planning	6 (2.6%)
Managing change Interpersonal skills Influencing Empathy Economics Emotional intelligence Confidence Conflict management Approachable Business management Coaching Dealing with pressure (target related)	1 (1.2%)	Ability to prioritise Being a good listener Behavioural psychology Clinical pharmacy management Credibility Dealing with ambiguity Empathy Employee relations (HR) Management of change Patience Project management Risk management Stress management Team working	1 (1.5%)	Human relations management Knowledge management Strategic vision	5 (2.2%)
				Adaptability Forecasting Maintaining education	4 (1.7%)

				Patient management	
				Have vision Manage service	3 (1.3%)
				Analytical skills Assertiveness Manage emotions Professionalism Competency Consistency Customer care Being responsive Information management Information technology Interpersonal skills Patience Marketing Resolution management	2 (0.9%)
				Delegation Relationship management Attentiveness Recognise the impact of own work Commercial management Conflict management Maintain control Co-operation Efficiency Project management Quality management Listening General management Be motivated Decision making	1 (0.4%)

4.5 Management education during the pharmacist career

Participants were asked if they had studied any management modules as part of their degree. Only 14% of respondents in Cohort A had done so. In Cohort B 11% has studied some modules, 10% were unsure if they had and a large proportion (79%) stated that they had not. 75% of Cohort C respondents reported that they had never studied management modules at undergraduate level, 21% said yes, they had, and 4% could not remember if they had.

When asked if management modules should be offered in pharmacy degrees 85% of Cohort A said Yes and in Cohort B 90% agreed with this view. 96% responded positively to this proposition in Cohort C. For those respondents who had answered positively to having a management module in place on a pharmacy degree, they were then asked if this module should be optional or compulsory. The results to this question are displayed below.

Table 10 Views from respondents regarding management module presence in pharmacy degrees

Response	Cohort A	Cohort B	Cohort C*
Compulsory	60%	56%	65%
Optional	38%	44%	35%
Omitted	2%	-	-

*only 219 out of 232 respondents replied.

The findings showed that 27% of Cohort A had undertaken some form of formal postgraduate (PG) management study; 25% had completed in house training and 21% reported that they had not undertaken any management courses at this level. A higher response was received from Cohort B with 79% of staff stating that they had undertaken this type of study, 39% of which indicated this to be in house training followed by workshops/seminars (25%). The Spanish response was much higher with 70% of this group reporting that they had undertaken formal PG management study; 20% had participated in a university programme to do this (Masters and PhD) and 11% had acquired this knowledge via a business school.

If pharmacists do not undertake supplementary PG qualifications, they can complete training programmes provided by their companies and external parties as part of their continuous professional development (CPD). Within the UK, pharmacist CPD is mandatory and monitored by the GPhC, and as such this was an additional focus for this study and was covered in the survey. When asked if their company/organisation supported management training as part of CPD, 54% of Cohort A said yes, 58% of Cohort B said likewise and 51% of Cohort C concurred with this view.

4.6 Management skills and impact on career opportunities

The impact of the management skills on career opportunities was raised in Cohort A findings and introduced into the survey for Cohort B and C. The results from Cohort B indicated that 96% of participants believed having good management skills gave them more career opportunities. It was felt that in order to progress to more senior positions and to allow for general progression to higher levels, management skills are essential, but some noted that they may not be as necessary, depending on the direction of the career. The Spanish respondents in Cohort C (86%) believed that possessing good management skills offers more job opportunities, being entrepreneurial, being more professional and being more complete.

5. Discussion

The aim of this study was to examine the prevalence and importance of management skills in the pharmacy profession and its impact on the individual's ability to respond to current and future challenges in healthcare provision. Data was collected in a three-step process; UK 2014, UK 2015 and Spain 2017. Analysis was undertaken focusing on the importance and prevalence of management skills to support the role of pharmacists as healthcare practitioners. This was an exploratory study to determine the views of Spanish pharmacists and UK pharmacists. On examining the overall profile respondent profile, there were generally more female participants than male, but this result was not explored further in this study (it was noted though that 71.6% of registered pharmacists in Spain are female (Consejo General de Colegios Oficiales de Farmacéuticos, 2018)). The bulk of respondents who participated were based in the primary care or community sector and were full time pharmacists. Cohort 2 (UK 2015) was the outlier group who had more males than females take part and more secondary (hospital) participant responses. There was no apparent reason for this response profile. The respondents were experienced pharmacists with nearly a third of each cohort having respondents with 21 or more year's expertise in this role.

From the findings, three clear themes stood out as important in this study; 1) the extended nature of pharmacist role; 2) the management skills that are needed in order to perform their role effectively and 3) the development of management skills within the pharmacy curriculum.

5.1 The extended nature of the pharmacist role

The role of the pharmacist has changed dramatically from the provider of pills and potions, to that of the clinical expert that we have in place today. As much as 20 years ago the WHO (1988) stated that their role needed to change due to healthcare costs and patient need. The workforce within healthcare must be smarter and more targeted with their resources to respond to current challenges such as patients living longer and the impact of noncommunicable diseases (WHO, 2019). Dynamic practice is expected (Biggs et al. 2019) and the professional workforce must be prepared for this.

The responsibilities of the pharmacist, as outlined in the findings, clearly show that today's pharmacist in both countries must be flexible in what they do within their roles and hence need to be trained to do this and have the confidence to use this training. The Seven-star Pharmacist (WHO, 1997) asks for pharmacists to have the following roles: caregiver, decision-maker, communicator, manager, lifelong learner, teacher, and leader as well as extending this further to researcher and entrepreneur (Thamby & Subramani, 2015). From the responsibilities described in this study we can see examples of all roles listed above but less evidence of the Pharmapreneur (Pharmacy Times, 2015). As indicated by Gebauer (2008) this role would be valuable to the marketization and design of services for these pharmacy enterprises to remain competitive as small businesses. That said, entrepreneurial training for pharmacists can fail to deliver the expected direct impact on sales and profit (Hindle & Cutting, 2002) but may still be a source of financial value at a later stage.

Therefore, why do pharmacists need to have management skills? Pharmacists within this study overwhelmingly asserted that the possession of management skills has a very positive impact on career opportunities. This was not only to do the job well, to apply for and secure promotions but also to be a better pharmacist and be 'more complete'. This was also demonstrated by respondents advocating that by being capable of managing themselves they could more effectively manage others in a team, with 90% of respondents across all cohorts believing this to be the case. Non-technical skills such as management skills are sought after within service operations (Grugulis, 2009; Hurrell, 2016), to lead and manage the workforce and to ensure business sustainability. Having a good manager who can lead and inspire a team to perform well is integral to success and would impact positively on

attrition rates, reduce role failure, professional abstinence (Biggs et al. 2019) and occupational derailment (McCartney and Campbell, 2006). Pharmacists need to have innate skills to lead and inspire others as well to excel in their clinical role (Ottewill et al., 2000).

5.2 What management skills do our future pharmacists in UK and Spain need?

Knowledge of leadership and performance management, coaching and mentoring, employee relations and motivation were deemed important across the cohorts. Whilst the UK cohorts both ranked all these very highly, the Spanish cohorts were less appreciative of these modules overall. Employee relations and motivation was perceived to be the most impactful management module according to Spanish pharmacists. Time management, communication, leadership and people management skills were crucial for all pharmacists in this study to succeed in their role and are relatively standard management skills. These were closely followed by negotiation and organisational skills. All of which are readily transferrable skills which provide an excellent platform to allow pharmacists to become rounded professionals (Perepelkin, 2012; Perepelkin, 2017). This allows them to take on new challenges and extended roles (Yusuf and Sadar, 2011) but also become an integral part of interprofessional teams to deliver the best service to patients (Greenwood et al., 2019; Luetsch & Burrows, 2018). The skills reported were a mixture of both social and cognitive skills. These are soft skills that were deemed critical in the NOTECHS and ANTS frameworks for pilots and anaesthetists respectively (Flin and Maran, 2004; Flin et al., 2003; Flin et al., 2008).

As shown in Figure 4, all three cohorts agreed on the importance of two main management skills: communication and people management (as indicated in bold). The Spanish pharmacists however, highlighted the importance of supply and logistics management which was not mentioned at all in the UK responses. The explanation for this may lie in the interpretation of what management skills are and how they are enacted in pharmacy roles, as there does appear to be confusion regarding this (Ramia et al., 2016). In general, the key management skills as highlighted are akin to those stressed in other studies (Bak et al. 2019; Karttunen, 2018; Burrus et al. 2013; Flin and Maran, 2004; Flin et al, 2003; Flin et al., 2008). The exceptions to this were outlier skills of supply chain/logistics, empathy and delegation, as reported by the Spanish cohort and UK Cohort B.

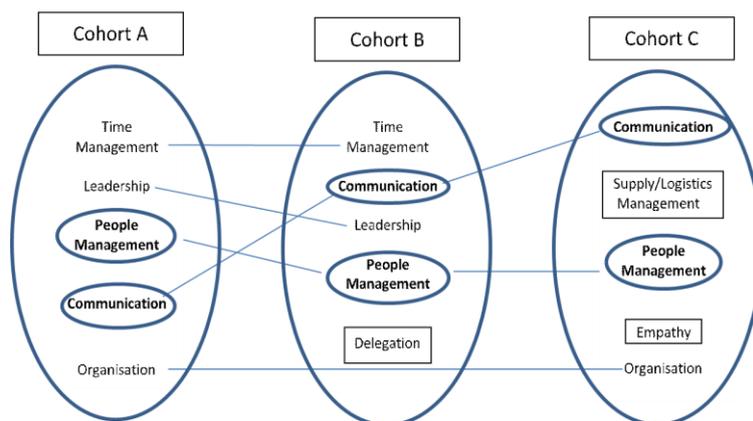


Figure 4 The top 5 crucial management skills as reported by UK and Spanish Pharmacists

Being able to be agile and resilient in a role; to respond, to flex and be confident in decision making, provides a solid foundation for service delivery and dynamic practice (Biggs et al. 2019). These are the attributes of an emergency manager as outlined by Tyler and Sadiq (2019) and would be very desirable to any responsive organisation, pharmacy services included. But can the pharmacist deliver to these? In examining the survey responses, both UK and Spanish pharmacists commented on the adoption of non-traditional management skills, such as managing risk, decisiveness, conflict resolution, stress management, adaptability and empathy; all skills expected in a responsive manager. Forty-six percent of the Spanish respondents stated that conflict resolution was important in their role in comparison to 19% of the UK cohort (B). Risk management was ranked twice as high amongst Cohort B as the Spanish cohort.

If we revert to the results of the 'one most crucial management skill needed by a pharmacist', we can see that the breadth of response for this question is much more extensive for the Spanish cohort (twice as much as those listed by the UK pharmacists in either cohort) and key attributes such as responsiveness, assertiveness, adaptability, conflict management, control, and strategic vision are all mentioned. This would indicate that the Spanish cohorts are more rounded in their interpretation of pharmacy management. This may be due to the nature of the Spanish pharmacy system where pharmacists are trained, in the main, to operate within a community setting, to run their own business, and therefore their training is more 'worldly-wise'. They then choose to specialise to take on hospital or other pharmacy roles. However, this view is based on the interpretation of responses provided and the singularity of the Spanish profession. We did not collect data on this issue so there is no direct evidence of this in this survey.

5.3 The development of management skills within the pharmacy curriculum

According to the extant literature, management training is built into pharmacy educational programmes (Augustine et al, 2018; Mospan, 2017) but to a greater or lesser degree (Davies et al., 2013; The Pharmaceutical Journal, 2013). However given the clinical focus and prioritisation in an already demanding programme, there are questions as to what additional skills need to be developed for future pharmacist roles (Augustine et al., 2018) and if the introduction of management modules will dilute the current offering or overburden students (The Pharmaceutical Journal, 2018 and 2005). The inclusion of more management modules/skills development is therefore uncertain now.

The respondents within this study overwhelmingly agreed that management modules should be embedded within undergraduate degree programmes, with approximately 60% purporting that these should be compulsory modules. Added to this, pharmacists did say that they had undertaken management skills development at postgraduate level, as part of inhouse workshops, seminars etc. The assumption is that pharmacists have the knowledge and skills to do their clinical role based on their education, but this needs to be supported within the workplace. CPD support was clear in this study from both professional associations and employers. The emphasis on the development of management skills as part of continuous professional development was less prevalent, with over 50% of respondents across all cohorts saying that their company did support them, but with between 42-49% saying that this was not the case.

5.4 The development of management skills within professional services

Professional services are noted for their expertise and skills, esoteric knowledge and its implementation (Abbott, 1991). However, this still needs to be supplemented with social and cognitive skills (managerial skills such as leadership, communication, decision making etc) to manage processes, systems and people, to perform in business and to be economically sustainable. All professional services benefit from excellence in such skills, especially those highlighted as critical in this study (See Figure 4 above) and in other healthcare professions e.g. anaesthetists and doctors. Professional services as highlighted in Von Nordenflycht's taxonomy (2010) e.g. healthcare (nurses,

doctors, psychologists); legal (lawyers, solicitors, barristers); consultancy; accountancy; banking and architecture, as service providers rely heavily on communication and people management in their role. This is especially pertinent in an era where the customer has a stronger voice and communications move offline and are monitored and regulated. It is important that employees in these services are trained adequately in their specialist skills but also more rounded management skills.

Professional services operate in challenging times. Where once professionals such as legal experts cornered the market, now legal guidance can be sought via the internet. Legal professionals therefore must be resilient in responding to and buffering challenges, but also demonstrating agility in seeking opportunities to diversify and remain competitive. Healthcare professionals similarly face challenges given greater demand from more informed patients, patients living longer with many health conditions, whilst coping with austerity measures/government interventions and funding constraints. Managerial soft skills can equip the workforce to better respond to such trials. Developing a resilient workforce which demonstrates characteristics such as those proposed in the Resilient Emergency Pharmacist can lead to workforce readiness and role confidence whilst avoiding professional abstinence and occupational derailment. Based on this and other studies conducted we propose that there is a high level of transferable learning on management/soft skills development, inter and intra professional sectors, and professional bodies should seek to access and use this to support workforce development.

6. Conclusions

The aim of this study was to examine the prevalence and importance of management skills in the pharmacy profession and its impact on the development of this profession to respond to current and future challenges in healthcare provision. The results of this study show that management skills are deemed to be very important and some indeed crucial to performance. Pharmacist knowledge and experience of these skills varies according to undergraduate education and employer support. In exploring this issue, the following research questions were crafted:

- 1) Are pharmacists in the UK and Spain prepared for future management practice?
- 2) What skills are needed to reduce the possibility of pharmacist occupational derailment?

We found that the pharmacy curriculum as taught today does not seem to prepare pharmacists adequately to perform in their role as future managers, as per the expectation of the Nine-star pharmacist (Thamby & Subramani, 2015). This was common across both countries. An overtly absent element was that of the Pharmapreneur, the pharmacist who is needed in the current global health system facing immense and somewhat insurmountable challenges.

The findings also demonstrate that there is a lack of recognition in the academic literature of the importance of management skills in the pharmacy profession and this study attempts to redress this anomaly. The findings show that pharmacists acknowledge the positive impact of these skills and advocate their presence within their personal development to perform well and to support career aspirations. The study demonstrated that the classical management skills (leadership, people management, communication and organisation) remain a fundamental expectation of management education but in the face of an evolving healthcare system and demands on the public sector is the traditional manager good enough? These skills are considered highly important in recent studies (Bak et al. 2019; Karttunen, 2018) and need promoting and nurturing within the workplace (Bak et al. 2019; Karttunen 2018; McCartney and Campbell, 2006). Current traditional training and skills development

offer a pharmacist a strong foothold in any role, but we argue that they would sustain the *modus operandi* and not be a powerhouse for change.

Building on the work of Daft (2003) as extended by McCartney and Campbell (2006), we advocate that pharmacists should be trained to have complementary levels of both clinical and managerial skills, as opposed to managerial and leadership (Daft 2003), as this would offer them a competitive edge (Dubey and Gunasekaran, 2015). This could lead to the development of what we term a 'Resilient Pharmacy Manager'. This manager would embrace the skills and attributes of the resilient emergency manager posited by Tyler and Sadiq (2019); a manager who *"is able to adapt to changing conditions, make agile decisions, function interoperably, mobilize resources, scale programs, policies, and procedures, develop robust collaborative networks, and build redundant emergency management systems"*. Developing pharmacists to be equipped with this level of managerial and personal resilience and associated attributes would offer a new dynamic to the pharmacy workforce, and one that would be called upon and effectively utilised within public sector healthcare. The profession would also need to support undergraduate training with PG and CPD opportunities to avoid the prospect of pharmacist occupational derailment from their roles.

Recommendations from this study are aimed at pharmacy researchers, academics, professionals and pharmacy practice and educational bodies:

- 1) A focused review is taken of the non-technical/management skills required by pharmacists for their current and potentially future 'growth' roles – aptly termed 'advanced management skills'. Such a review would embrace the wealth of data that exists on soft skills adoption across multiple disciplines as shown in the literature review. This would facilitate the building of new academic theory where it currently does not exist.
- 2) The development of a management skills taxonomy (theoretically grounded and needs evidence-based).
- 3) These 'advanced management skills' should be taught within the undergraduate pharmacy curriculum in Spain and the UK and be continuously updated.
- 4) Benchmarking of education/training and CPD systems should be shared between Spanish and UK General Pharmaceutical Councils.
- 5) Management skills development should be reviewed as part of staff appraisals and professional revalidation and a core element of workforce development in professional services.

The limitations of this study were that the timings of both UK studies were brief and thus access was limited. This was not the case with the Spanish study, so there is a sample imbalance as evidenced in the response rates. Whilst the survey sought both open and closed responses, interviews would have provided more detailed insight into this would not have yielded the same breadth in participant coverage. Due to the methodological approach adopted this study offers a preliminary insight into this subject, but further research is needed.

Future research should consider:

- 1) Undertaking a quantitative longitudinal tracked study to examine the deployment of key soft skills, which would include management, leadership etc to determine their uptake, relevance and impact on personal and business performance and career prospects. This can be applied to pharmacy and all professional services.
- 2) To project and 'future-proof' this professional group, interviews with pharmacists and associated regulatory and advisory bodies should be undertaken to examine capabilities required for role readiness and identify the role of technical and soft skills within this. This will be important to prepare the workforce for future public sector challenges and its serious threats for example digital literacy,

security threats and disaster recovery/management and choosing other dissimilar countries from the UK/Spain to gain further insight into this subject matter.

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Appendix A. Supplementary data.

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.emj.2020.02.008>.

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