'I'm Just the Sunday Boy!': Exploring the role of uncertainty in 'becoming' a pharmacist

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Abstract

This thesis explores the notion of professionalism in pharmacy from a pharmacy education viewpoint, specifically the process of becoming a 'professional' as experienced by pharmacy students as they undertake the educational programme required for registration as a pharmacist. Registration as a pharmacist is commonly understood as an end-point in becoming a professional, portraying the educational programme as an acquisitional endeavour where upon completion, an individual has become a professional. Such understandings are problematic as they disguise the complex, uncertain and individual journeys that students experience as they undertake an educational programme that portrays becoming a professional as a static, linear process rather than an on-going negotiation and emergence of professional selves.

This study adopts a social constructionist framework to explore the experiences of pharmacy students at one Higher Education Institution (HEI) in the United Kingdom. Rejecting positivistic notions of control, prediction and generalisability this study uses an interpretive approach to the generation and analysis of interview data to gain understandings of the individual and local experiences of pharmacy students at this particular HEI. Interviews were conducted with nineteen students who prepared a repertory grid to describe their own constructions of an 'ideal' pharmacist and the grids were used as a catalyst for discussion in individual participant interviews.

Using the repertory grid approach afforded an insight into pharmacy students' experiences of 'becoming' a pharmacist, revealing themes and patterns

emerging from analysis of student narratives. Drawing on Actor Network Theory (ANT) as a theoretical lens to explore these themes and patterns from a socio-material perspective, the micro-interactions and exchanges that emerged from these networks exposed the innumerable realisations of 'becoming' a pharmacist.

Tracing some of these networks in this thesis revealed a number of powerful actors in these micro-interactions and exchanges. When considered individually these actors appear inconsequential, however, collectively these micro-interactions and exchanges reveal the highly individualised, complex and uncertain experience of 'becoming' a pharmacist. In coming together these non-human and human actors emerge as a driving force in the emergence of student identities as a pharmacist.

This study makes an original contribution to pharmacy education by revealing the uncertainty that pharmacy students experience in 'becoming' a pharmacist. It identifies that this experience is highly individualised and personal to each student and argues for embracing uncertainty as a helpful and essential experience of 'becoming' a pharmacist.

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Chapter 1 – Introducing the Study

This study explores the notion of professionalism in pharmacy from a pharmacy education viewpoint, specifically the experiences of pharmacy students becoming a 'professional' as they undertake the educational programme required for registration as a pharmacist in Great Britain. To date the majority of published literature in pharmacy on this topic has been concerned with defining, teaching, learning and assessing professionalism (Schafheutle et al. 2010) with little concern for exploring the experiences of pharmacy students undertaking this transformative journey from student to pharmacist.

This journey is often viewed as a move from learning and understanding theory to being able to apply theory in practice. I wish to reveal this journey as more complex and uncertain than such a linear and simplistic understanding implies. This study was not about establishing a definition of professionalism in a pharmacy context or about how professionalism is taught, learnt and assessed. From this perspective the study makes an original contribution to knowledge and to educational practice in pharmacy by revealing and opening up for examination the experiences of pharmacy students undertaking the required educational programme, illuminating the role that experiencing uncertainty contributes to the transformation from student to pharmacist. To achieve this goal the emerging (professional) identities of pharmacy students from a single Higher Education Institution (HEI) in the United Kingdom were examined as they undertook the educational programme required for registration as a pharmacist.

In this first chapter I discuss the rationale for the study from a personal perspective and professional perspective. This chapter explains the choice of professionalism in pharmacy education as a focus for this study and reveals why the topic is of interest to me personally, to pharmacy education as a discipline and more broadly to pharmacy as a profession. It will demonstrate that notions of 'professional' can be articulated in a number of different ways and will examine how these differing conceptualisations frame understandings of pharmacy as a 'profession'.

The Personal Context

I am a pharmacist and I am a lecturer in pharmacy practice. The origins of this research are grounded in this statement. At the time this study began I had been a registered pharmacist for ten years and a lecturer in pharmacy practice for six years at the School of Pharmacy at the Robert Gordon University (a post-92 University in Scotland). In the years following my registration as a pharmacist I practised in both community and hospital practice, and in both the United Kingdom and Australia. As a lecturer within the school I taught across the School's portfolio of undergraduate and postgraduate courses. During those six years within the School I had come to appreciate how individual and personal my sense of what it means to be a pharmacist was to me. This led me to reflect on how I came to know 'how to be a pharmacist' and to question the role that education had had to play in this process.

At the outset of this study I recognised that I was bringing the "self to the field" (Reinharz cited in Cannella and Lincoln 2011), and that my experiences as a pharmacy student, as a pharmacist, as a lecturer in pharmacy practice

and more broadly as a member of the profession all afforded me a unique vantage point from which to examine the emerging identities of pharmacy students. Embracing this notion of bringing the self to the field, Cannella and Lincoln (2011) view reflexivity as a process that compels the researcher to make visible the multiple identities that represent the self in the research field. Adopting a reflexive approach in this study therefore establishes what observations derive from me as the researcher, from the participants and from the interaction between us. In chapter four I provide an account of my presence in the field as a researcher, articulating clearly the decisions that were made and why those decisions were made in generating the data in this study. At this point, however I acknowledge that the selves I bring to the field cannot and should not be ignored because they are the "primary tool of inquiry" (Josselson 2007 p.545), instead I adopt Peshkin's (1988) stance where " by monitoring myself, I can create an illuminating, empowering personal statement that attunes me to where self and subject are entwined" (p. 20).

Scanlon's (2011b) use of a metaphor of "looking back, looking forward" (p. 1) as a form of reflexively musing on her journey as a professional resonated with me. In 'looking back' I could see that my own journey was similar to Scanlon's as "a journey of iterative professional becoming other" (Scanlon 2011b p. 1). I had crossed boundaries, from student to pharmacist, from UK practice to practice in Australia, from hospital practice to community practice to academia. I thought back to when I was a pharmacy student and questioned how much of my university education I used today in being a pharmacist. I remembered the subjects and the skills that I was taught and

practised at university. In 'looking back' I realised those subjects and skills were historically situated, practice had moved on, new procedures had been introduced, technology had advanced, new drugs had become available and other drugs had been withdrawn. Reflecting on my experiences of practising as a pharmacist I also realised that learning about those subjects and acquiring those skills had not taught me how to 'be' a pharmacist, they had just taught me what to do. I began to realise that I had been at various times "a professional stranger in an unfamiliar land" (Scanlon 2011b p. 1) as I crossed boundaries and encountered new and uncertain situations, becoming familiar with the unfamiliar. In 'looking forward' I began to question in what ways does the undergraduate Master of Pharmacy course, pharmacy education more generally and my own practice as an educator prepare students for experiencing their own "journey of iterative professional becoming other" (Scanlon 2011b p. 1) and for being a "professional stranger" (Scanlon 2011b p.1) as they cross boundaries between the familiar and unfamiliar.

From the outset of the study I was clear that I wanted to explore the phenomenon of 'professional becoming other' from the viewpoint of pharmacy students, I wanted to explore the experiences of pharmacy students as they undertook this 'journey' and to examine what shaped these experiences for them. In exploring these experiences I wanted to ensure that the voices of the students were not lost but heard loudly throughout this study acknowledging that "the philosophy of education must be to get at the meanings, the assumptions, the commitments which are implicit, but too often unacknowledged …" (Pring 2004 p. 164). In this study I therefore used my understandings of pharmacy and pharmacy education to inform but not direct

my role as a "social theorist" (Best 2003 p.10). As social theorist I am not attempting to generate theory, but to describe the unique personal experiences of pharmacy students within a social framework as they undertake their own "journey[s] of iterative professional becoming other" (Scanlon 2011b p. 1).

I was aware that as an individual I entered the research process from inside an interpretive community, this community has history and traditions which constitute a distinct point of view (Denzin and Lincoln 2011a). Pharmacy has historically been viewed as a scientific discipline (Barnett et al. 1987) and commensurate with that viewpoint, ways of understanding pharmacy have been grounded in positivistic notions; a perspective that is evident in the pharmacy literature that will be explored in chapter two. These positivist notions are also evident in my education and training and throughout my doctoral studies have led me to feel like a 'professional stranger', so this study is not just an in-depth account of a research process it is also a product of another of my "journey[s] of iterative professional becoming other" (Scanlon 2011b p. 1) and in the final chapter of this study I will reflect further on this 'journey'.

The Professional Context

This chapter continues by placing the study more widely in a professional context outlining the 'social framework' of pharmacy and pharmacy education. It begins by outlining the process and requirements for registration as a pharmacist in the United Kingdom providing some context for the reader. It examines the taken for granted assumption that pharmacy is a profession

before considering how wider sociological understandings of the concept of 'professional' can be understood in a pharmacy context.

The Registered Pharmacist

Registering as a pharmacist in Great Britain is presided over by the General Pharmaceutical Council (GPhC), the independent regulator for pharmacists, pharmacy technicians and pharmacy premises in Great Britain (General Pharmaceutical Council 2013). To register as a pharmacist with the GPhC, an individual must have completed a Master of Pharmacy (MPharm) course accredited by the GPhC at a Higher Education Institution (HEI) in the United Kingdom and a one year period of pre-registration training, culminating in the sitting of a registration examination. The pre-registration training is provided by an employer who is responsible for providing and supervising the training to ensure that the pre-registration trainee (the GPhC's term) is able to meet the GPhC standards for registered pharmacists.

It takes a minimum of five years from entering an MPharm course to finally being in a position to seek registration with the GPhC as a pharmacist. Higher Education Institutions (HEIs) only have a remit over the first four years, employers are responsible for providing the pre-registration training element, which constitutes the fifth and final year. This study however is concerned with examining the full five-year period to fully capture the entire journey from student to registered pharmacist.

This thesis has so far assumed that pharmacy is a profession and pharmacists are professionals, however, this is a problematic assumption as "the word

'professional' is used to cover a potentially bewildering variety of things"
(Watson 2002 p. 95), making the use of the word ambiguous and slippery.
The word 'professional' can be seen throughout society and everyday life being
used to describe people, services, objects, and spaces. The use of the word in
a variety of places and contexts creates uncertainty, confusion and even
conflict where claims of being 'professional' are contested. In the past there
has been debate within pharmacy about whether it could or should be
considered as a profession and consequently it is a taken for granted
assumption that pharmacy is a profession (Edwards 2011).

Examining what might be considered as the traditional or classical
characteristics of being a profession, namely; mastery of a particular
discipline; advanced learning represented by higher education qualification;
independence and discretion with the working environment (Broadbent et al.
1997), it is evident that pharmacy shares all of these features, seemingly
providing substance to pharmacy's claim to being a profession. This may also
go some way to explain conventional understandings that view registration
with the GPhC as the end-point in becoming a professional, "quod erat
demonstradum', they has become a professional" (Scanlon 2011b p. 1). This
understanding is problematic because it makes no distinction between being a
pharmacist and calling yourself a pharmacist, where being a pharmacist is
assuming a legal title and calling yourself a pharmacist is a disposition; a
function of what you know and what you can do.

The GPhC's Standards of conduct, ethics and performance, reinforce this
notion in stating that "This document sets out the standards of conduct, ethics

and performance that pharmacy professionals must follow" (General Pharmaceutical Council 2012 p. 4). Portraying registration with the GPhC as a pharmacist as being synonymous with being a professional, rather than simply the attainment of a restricted legal title. Such casual thinking risks misrepresenting the complexities and uncertainties that 'professionals' are required to negotiate with each new case, situation or problem they encounter. Practising as a professional is an on-going process of learning through formal and informal training and day to day practice (Broadbent et al. 1997; Eraut 1994). From this perspective 'being' a professional is not considered to be an end-point, but a continual process of on going learning and developing. A distinction is therefore drawn in this study between 'being' a pharmacist, in the sense that an individual has met the registration criteria of the General Pharmaceutical Council and calling oneself a pharmacist, where an individual is displaying a disposition representative of a pharmacist.

Conceptualising Professional

As this study is concerned with examining pharmacy students' experiences of becoming a 'professional' it is worthwhile to consider what it means to be a professional more generally and what it means more specifically when applied to pharmacy practice. As discussed previously the GPhC portrays being a professional as synonymous with registration as a pharmacist, however as also discussed this is problematic as it does not represent the on going development of professional selves as suggested by Schön (1991), Broadbent et al. (1997) and Eraut (1994) which has increasingly become a feature of the landscape of being considered a professional.

There is a history to the study of the professions which demonstrates that how the term 'professional' has been conceptualised has changed over time, differs between parts of the world and between languages. Using the term 'professional' as a means of differentiating between groups of people in society can be traced back to the establishment of the original learned professions of divinity, medicine and law during the pre-industrial times of the 16th century (Freidson 1983). Since that time differing perspectives on the professions have been adopted by social scientists to conceptualise the function and role that these groups contribute to society and over time these groups have become more widely differentiated beyond the original three learned professions.

Talcott Parsons' systematic study of the professions, viewed professions as "fulfilling useful and necessary social functions" (Traulsen and Bissell 2004 p. 108). Parsons' functionalist approach focussed on the social role of the professions, viewing that there was a necessary asymmetry between professional and client (Abbott 1988) and that professionals were an integral part of the maintenance of a stable social system. A functionalist view of the professions assumed that a list of traits could be compiled that were "characteristic of an ideal-typical profession" (MacDonald 1995 p. 3) and that these traits could be used to assess the extent to which other groups could be considered professional. The usefulness of such lists are limited as they tend to represent the author's views rather than a universally shared definition of a profession (Eraut 1994) and potentially self-serving as they can be used by the profession itself to represent how it wants to or should be viewed (Traulsen and Bissell 2004).

Using doctors and lawyers as representations of an ideal type of profession, Etzioni (1969) continued this functionalist tradition arguing that 'new' professional groups such as nurses, teachers and social workers were 'semi-professions'. Describing them as semi-professions, Etzioni argued that they possessed, to a lesser extent, the same classical characteristics of a professional such as specialist knowledge, autonomy from supervision, specialist training. Such classical characteristics can be identified in pharmacy and therefore, pharmacy could be considered as a 'semi-profession'. Pharmacy has specialist knowledge of the production and use of medicines, it has autonomy from supervision through the GPhC (although that has been challenged) and requires specialist training through the completion of a specified and regulated educational programme. Characterising pharmacy and other 'new' professional groups as being semi-professions simply adds a "further ill-defined category" (Eraut 1994 p. 1) to the debates around which groups can and cannot be considered as a profession.

Offering an alternative to the functionalist perspective, interactionist approaches focused on "the actions and interactions of individuals and groups [and] how they constituted their social world as participants …" (MacDonald 1995 p. 4). Friedson came to be associated with this approach through his work on the medical profession, examining how the medical profession attained autonomy by achieving the support of political, economic or social elites (Traulsen and Bissell 2004). This approach gave rise to a version of a "power approach" (MacDonald 1995 p. 5), a different version of which emerges from a Foucaldian approach to the sociology of the professions and Foucault's central concern for the relationship between power and knowledge.

Recognising the multiple ways in which 'the professions' could be defined and theorised about, Freidson argued for viewing professions as a folk concept where,

> "one does not attempt to determine what a profession is in an absolute sense so much as how people in a society determine who is a professional and who is not" (Freidson 1983 p. 27)

Viewing 'the professions' as a folk concept, Freidson (1983) argues that 'professions' are a "socio-political artifact" (p. 34) that are limited to a number of nations in particular periods of history. MacDonald (1995) further observes that the word 'profession' is used in the English-speaking world but in some European languages has no direct equivalent. In particular Riska (2001) notes that the French language does not distinguish between the concepts of 'profession' and 'occupation' having only one word for both, illustrating Eraut's (1994) viewpoint that, "the professions are a group of occupations the boundary of which is ill-defined" (p. 1).

Designating a particular discipline as being a 'profession' is evidently tied up in both where and when that discipline is practised, further illustrating the problematic nature of attempting to have a universally shared understanding of what is and is not a 'profession'. Although Brante (2011) and Saks (2012) have argued that defining the professions is still required and relevant, Evetts (2003) resists the application of hard and fast distinctions of what a profession is by arguing that "professions are essentially the knowledge based category of occupations which usually follow a period of tertiary education and vocational training and experience" (p. 397).

These approaches demonstrate that there are a variety of ways to conceptualise the term 'professional' some of which are associated with particular periods of history, or particular parts of the world, or particular languages. These approaches talk about 'professional' from a societal perspective, examining the role that professions play in society, and who in society can determine who is or is not a profession and what characterises a group as a profession. There is an attempt in these works to reduce understandings of 'professional' to a universal understanding of what is a 'profession' that is shared across disciplines. There is an assumption that there is an innate quality of being 'professional' that can be shared by all disciplines or practices. Etzioni's (1969) work is a particular example where he attempts to achieve this by comparing what might be considered disparate disciplines of nursing, social work and teaching. The disciplinary practices of nursing, social work and teaching can be considered to be very disparate. It can be argued that caring for patients is very different to teaching a class, and similarly the requirements of a social worker are different to the requirements of a nurse. Whilst they maybe different disciplines, they equally all share a common characteristic of working with people. Arguably the object that is the focus of each of these disciplinary practices is a human being. From this perspective it might then be possible to conceive of an innate quality that describes being a profession, if you accept nursing, teaching and social work as professions, but again such a conceptualisation operates at a societal level.

Revealing a tension between societal and individual perspectives on 'professional', conceptualising the term 'professional' from a societal perspective ignores the individuals who practise particular disciplines. Societal

perspectives of 'professional' construct who is and who is not permitted to call themselves a professional. Social perspectives illustrate inclusion and exclusion, asserting control over particular groups. In the case of pharmacy, and like many other disciplines, these perspectives are enacted through legislation and regulatory frameworks. The title 'Pharmacist' is restricted by legislation and can only be used by those who are registered with the GPhC. Registration with the GPhC is tightly controlled and regulated and requires an individual to abide by the GPhC's Standards of conduct, ethics and performance, accepting responsibility to be "professionally accountable for [their] practice" (General Pharmaceutical Council 2012 p. 7). Here too a tension between societal and individual perspectives on 'professional' are constructed.

Access to the GPhC's register and requiring individuals to demonstrate a set of specific traits, characteristics and requirements controls the rights and privileges of being a pharmacist. Although, once admitted to the register it is the responsibility of the individual to ensure they practise appropriately. The GPhC acknowledge that,

> "You may be faced with conflicting professional or legal responsibilities. In these circumstances you must consider all possible courses of action and the risks and benefits associated with each one to decide what is in the best interests of patients and the public." (General Pharmaceutical Council 2012 p. 7)

This statement constructs 'professional' in a pharmacy context from an individual perspective. As a pharmacist you are required to act in a specific way that is defined at a societal level, yet you have to decide on an individual level for yourself what that way is. What emerges is a tension between societal and individual conceptualisations of being a pharmacist. On one hand

you have to comply with a regulatory framework that governs your practice, but on the other hand you are individually responsible and accountable for your own practice.

From a pharmacy context and from a wider sociological context, understandings of professional can be conceptualised in multiple ways. A profession can be conceptualised as serving a particular function or role for society or it can be considered as the expression of particular traits or characteristics. Conceptualisations can be viewed at a societal level or at an individual level, and in the case of pharmacy it appears that these are all held in tension. These tensions construct pharmacy practice as a space of ambiguity, complexity and uncertainty; it is this space that pharmacy students emerge into at the end of their educational programme.

Changing Notions of Pharmacy as Profession

Broadbent et al. (1997) suggest that current notions of the 'professions' are more firmly routed in the changes to occupational groupings that occurred during the industrialism of the nineteenth century. During this time new occupational groups were formed and existing groups re-organised as they attempted to gain the status of 'profession' to achieve "protection from competition in the labour market" (Freidson 1983 p.24). The establishment of The Pharmaceutical Society of Great Britain (known as the Society) in 1841 and the introduction of the Pharmacy Act 1852 restricted the use of the title 'pharmaceutical chemist' (this term means the same as pharmacist) to those that had passed the Society's exam, introducing protection for pharmacists from other groups competing with them in the labour market. This can be

viewed as the foundation of pharmacy's claim to being a 'profession' as it

established pharmacists to be in possession of "a basic body of abstract

knowledge" (Goode 1969 p. 277) which they used to,

> "'strike a bargain with society' in which they [the profession] exchange
> competence and integrity against the trust of client and community,
> relative freedom from lay supervision and interference, protection against
> unqualified competition as well as substantial remuneration and higher
> social status." (Rueschemeyer 1983 p. 41)

This 'bargain' exemplifies what Goode (1969) describes as the social control of

professional work, demonstrating the appeal of being able to call oneself a

'profession'. The professional work that is framed by pharmacy's claim to

being a profession has been shaped and influenced over time by a number of

external factors. The establishment of the National Health Service (NHS) in

1948 as part of the creation of a welfare state in the United Kingdom during

the first half of the twentieth century, imposed a new level of control on the

professional work of pharmacy and is a major factor that has driven changes

in the 'professional work' of pharmacists over the latter part of the 20th

century. As a consequence of the establishment of the NHS, pharmacy became

"embedded in hierarchically organised welfare services" (Broadbent et al. 1997

p. 5) and the role and responsibility of the pharmacist was essentially reduced

to fulfilling a technical role of supplying medicines in response to a

prescription.

As discussed earlier in this chapter, the 'professions' have been conceptualised

differently depending on where they are situated temporally and

geographically making it challenging to deal with the changing nature of the

professions. Middlehurst and Kennie (1997) have suggested that focussing on

professional practice and professional relationships is one way to deal with the

changing nature of the 'professions'. Adopting Middlehurst and Kennie's perspective on the changing nature of the professions in this study offers a way of understanding how pharmacy practice and the role of the pharmacist was changed by the establishment of the NHS and how this has continued to evolve ever since.

The professional practice of pharmacists (what they did and how they did it) did not change with the creation of the NHS. Pharmacists remained as Barnett et al. (1987) describes "authorities on how drugs are manufactured, approved, purveyed and administered" (p. 52), possessing what MacDonald (1995) calls "advanced, or complex, or esoteric, or arcane knowledge" (p. 1). What did change though, was the nature of the professional relationship between pharmacist and client.

Prior to 1948 individuals did not pay to consult with a pharmacist, unlike doctors. It would often be less expensive for someone to visit a pharmacy and buy a medicine than consult a doctor. The introduction of the NHS in 1948 removed the financial implications of consulting a doctor partially eroding one of the roles pharmacists had fulfilled for society; providing access to affordable healthcare. The pharmacist-client relationship changed further when NHS prescriptions were introduced in 1952. Pharmacists were now presented with a request (a prescription) from a doctor to supply the patient with a particular medicine, where previously the patient would have consulted directly with the pharmacist and the pharmacist would have taken a decision about appropriate treatment. The introduction of NHS prescriptions essentially constructed the pharmacist as a 'gatekeeper' to medicines as pharmacists became the final

step in individuals getting access to either free or greatly subsidised medicines, thus reducing the roles and responsibilities of the pharmacist to the execution of a technical task.

The professional practice and professional relationships of pharmacy remained fundamentally unaltered until the 1990's when Hepler and Strand (1990) published their now seminal paper on a new model of practice they called pharmaceutical care. In recognising that preventable drug-related morbidity and mortality could be addressed by the adoption of pharmaceutical services, Hepler and Strand (1990) suggested a change in the philosophy of practice of pharmacy where the focus of practice and of the pharmacist moved from the procurement, preparation and evaluation of drug products to the individualised care of patients. This shift in focus from product back to the patient can be viewed as a return to the professional relationship that existed between pharmacist and patient prior to the establishment of the NHS.

Hepler and Strand's (1990) proposal to change the nature of the professional activity of a pharmacist, shared much with the introduction of scientific management or Taylorism into other professional areas such as medicine, education, law and accountancy (Broadbent et al. 1997). Scientific management or Taylorism saw the separation of the conception of a task from its execution, thus creating two groups of workers, the 'thinkers' and the 'doers' (Broadbent et al. 1997). In shifting the pharmacists from being a 'gatekeeper' of medicines to a person who cares for patients, pharmaceutical care can also be viewed as an attempt to separate the 'doing' and the 'thinking' roles that pharmacists had traditionally performed. Returning the

pharmacist to a role that they had occupied previously but had lost, to a certain degree, through the establishment of the welfare state.

In proposing this new approach to practice, Hepler and Strand (1990) described pharmacists as "standing at the threshold of professional maturation" (p. 534) arguing that pharmacists were capable of undertaking this new role but at the same time they recognised that this transition from 'gatekeeper' to carer of patients could be problematic and result in tensions and disputes;

> "Pharmacy today appears as a collection of disputatious factions and splinter groups, still 'a profession in search of a role', but now a profession unable to choose from a bewildering variety of functions and unable to overcome a variety of 'barriers to clinical practice.'" (p. 534)

The consequences of adopting the recommendations from Hepler and Strand's (1990) paper have pre-occupied pharmacy practice for almost two decades. In 2000, the Royal Pharmaceutical Society of Great Britain (RPSGB) undertook an examination of the "values that lie at the heart of our profession" (Cribb and Barber 2000 p. 6). This paper was an attempt to establish the role that pharmacy could fulfil in society in relation to medicines or as Parsons would conceptualise it, the "useful and necessary social function" (Traulsen and Bissell 2004 p. 108) of a pharmacist.

Cribb and Barber (2000) recognised there were fundamental debates and dilemmas in relation to medicines and health policy that could not be ignored. There were debates about priority setting in relation to health spending, changes to institutional and individual accountability, increased managerialism in healthcare and a shift in the role of the patient from a passive recipient of

healthcare to a more pro-active consumer of healthcare. The authors argued that as pharmacists adopted new roles resulting from changes in health policy, such as those suggested by Hepler and Strand (1990), they will increasingly encounter these debates and therefore there is "a need for greater value literacy in pharmacy" (p. 8) to ensure that pharmacy is able to participate in these debates with other healthcare professionals as equals. Cribb and Barber (2000) viewed value literacy as being, but not limited to, "an awareness of, interest in, and capability in identifying, discussing and 'handling' value and ethical issues in pharmacy" (p. 8), reflecting the shifting nature of the roles that pharmacists fulfilled. Pharmacists were adopting new roles that required them to be more directly involved in patient care in comparison to their more traditional role in the supply of medicines (Hepler and Strand 1990) and consequently would be more exposed to the uncertainties and ethical judgements that come from dealing with people rather than just their medicines indicating a return to a more intimate relationship of trust and interaction between pharmacist and patient that existed prior to the establishment of the NHS.

Embracing Hepler and Strand's (1990) philosophical approach to pharmacy practice, the Scottish Executive Health Department in 2002 published 'The Right Medicine: A Strategy for Pharmaceutical Care in Scotland' committing the Scottish Executive to "develop a strategy for pharmacy" (p. 82). By badging the strategy as a strategy for pharmaceutical care as opposed to just pharmacy, the strategy attempted to present a unified, modern understanding of the practice of pharmacy as a concern for patient care rather than as the fulfilment of a technical role. The strategy however depicted a mixture of the

traditional view of a pharmacist in a white coat with more modern images of pharmacists working with patients. It therefore did little to reconcile the technicist role of a pharmacist as a 'doer' with the modern view of 'thinker' and the strategy failed to address Hepler and Strand's (1990) concern that pharmacy is "a collection of disputatious factions and splinter groups" (p. 534) still searching for a role.

This analysis has illuminated the dynamic and changing nature of the notions of pharmacy as a profession over time. It has demonstrated that pharmacists have always had a role and a function to provide for society, however, this role and function has shifted and changed overtime. This constant movement has created a sense of uncertainty and confusion amongst pharmacists, as they are unsure about adopting unfamiliar roles whilst letting go of traditionally held roles and responsibilities.

The Changing Nature of Professional Regulation

This study began at a time when significant changes were being signalled for the regulation of healthcare professions and pharmacy in particular. In February 2007 the Department of Health (2007b) published the white paper, 'Trust, Assurance and Safety - The Regulation of Health Professionals in the 21st Century' describing the Government's approach to modernising professional regulation,

> "... to deal with the small number of professionals who, at some time in their working lives, provide poor quality care to patients, and who cause concerns for patients, their families and professional colleagues, while supporting the overwhelming majority in their commitment to better clinical care and higher professional standards." (p. 2)

Although not explicitly a response to individual inquiries into the misconduct of a number of healthcare professionals; Harold Shipman, Richard Neale, Clifford Ayling, Michael Haslam and William Kerr, the publication of the White Paper signalled changes to the regulation of healthcare professions. The Government viewed those organisations that had dual responsibilities for regulation and leadership were demonstrating a conflict of interest; an issue that was identified by various inquiries into poor conduct of individual healthcare professionals. This arrangement applied to the Royal Pharmaceutical Society of Great Britain (RPSGB), which had acted as both a regulator and leadership body for pharmacists since its creation in 1841. At the time the RPSGB were responsible for maintaining the register of qualified pharmacists in the United Kingdom and they were responsible for setting the syllabus and accrediting Master of Pharmacy degrees provided by Higher Education Institutions. Alongside this regulatory role, they were responsible for supporting the development of pharmacy practice and acting as a voice for pharmacy. The White Paper questioned how a body that was responsible for both regulating and supporting the development of pharmacy practice could do so in such away that assured the trust that society had placed in it.

The White Paper signalled the Government's intention to separate the leadership and regulatory functions of the Royal Pharmaceutical Society of Great Britain. It would create a new independent regulator called the General Pharmaceutical Council (GPhC) ending "... the freedom from lay supervision ..." (Rueschemeyer 1983 p. 41) that had been afforded to the RPSGB at its inception in 1841. The GPhC would be responsible for regulating all aspects of pharmacy including, pharmacists, pharmacy technicians, premises and

educational standards (General Pharmaceutical Council 2013). The Royal Pharmaceutical Society, being retained as a leadership body for pharmacy, would adopt the role of leading and supporting the development of practice through education, networking and mentoring (Department of Health 2007a).

Setting out a new framework for regulation of the healthcare professions, the White Paper also signalled that education of healthcare professions would also be scrutinised "to ensure that professional education adapts … so that health professionals are properly prepared for the complexity they face when they enter their profession" (Department of Health 2007b p. 16). This scrutiny ultimately led to the publication by the General Pharmaceutical Council (GPhC) of a set of new educational standards for the initial education and training of pharmacists (General Pharmaceutical Council 2011).

These new standards provide a holistic description of what is expected from the initial education and training of pharmacists. The standards describe the expectation at the end of the pre-registration training year, whilst acknowledging that HEIs are only responsible for the first four years. The standards are split into two mains sections, "expectations of a pharmacy professional" (General Pharmaceutical Council 2011 p. 33) and "the skills required in practice" (General Pharmaceutical Council 2011 p. 34).

Through these standards the GPhC construct a notion of being a pharmacist that is composed of a set of expectations and as a set of skills to be acquired. Some of these expectations and skills are a prefaced by the word 'professional' for example:

> "Demonstrate the characteristics of a prospective professional pharmacist as set out in relevant codes of conduct and behaviour." (General Pharmaceutical Council 2011 p. 39)

> "Reflect on personal and professional approaches to practice." (General Pharmaceutical Council 2011 p. 39)

Such prefacing constructs a notion of being 'professional' in acquisitional terms, by achieving the expectations you are therefore a 'professional'. This portrays becoming a 'professional' as a linear, uncomplicated experience that is the result of achieving educational outcomes.

What emerges from this ever-changing policy context is an air of uncertainty and change. After almost nearly one hundred and sixty years of self-regulation and leadership, pharmacy practice entered a new era where everything was changing. The GPhC, a body who was independent of the profession, government and other interest groups, would now regulate pharmacy and pharmacists. Their remit would be to provide standards and rules that provide a framework within which pharmacy and pharmacists practise rather than directing how practice should be undertaken. In becoming the leadership body for pharmacy, the Royal Pharmaceutical Society (RPS) lost some of its influence over directing practice. Previously, due to the combined regulatory and leadership function, all pharmacists were members of the RPSGB and therefore it effectively had a captive audience. Under the new arrangements the RPS became a membership organisation, where individuals could choose to be a member of the RPS or not. These changes were turbulent and unsettling to the profession as a whole, as previously held roles changed and a new order was established.

Since the Royal Pharmaceutical Society (RPS) was released from it's regulatory function it has been able to focus purely on providing a leadership body for the profession. This leadership body has established support and development tools to support pharmacists in developing their knowledge and skills. It has provided networking opportunities to raise the public profile of pharmacy in terms of recognising the role pharmacy has to play in the delivery of healthcare. In driving the development of the profession forward it has developed evidence based Foundation and Advanced Pharmacy Frameworks to credential the practice of pharmacists. The work that the Royal Pharmaceutical Society has undertaken to date in the four years since it was established, has the potential to make a significant contribution to the delivery of healthcare in the United Kingdom.

Summary

This chapter has introduced the topic of this thesis as an exploration of the notion of professionalism from a pharmacy education perspective, specifically examining the experiences of pharmacy students as they undertake the educational programme required for registration in the Great Britain as a pharmacist.

The rationale for this project from a personal and professional perspective has been articulated. Illustrating that this study originates from my own reflections of being a pharmacist and a lecturer and how, by questioning this, I began to question the role of education in the transformative process from student to pharmacist.

The history of the discipline of pharmacy has been outlined demonstrating that change and uncertainty has been a constant feature of pharmacy since the establishment of the Royal Pharmaceutical Society of Great Britain in 1841. The profession has had to adapt to a changing society, as a welfare state was introduced and a National Health Service established, a shifting of the role of the pharmacist from a technician to a carer of patients leading to the adoption of a new philosophy of practice as suggested by Hepler and Strand (1990). The more recent changes to the regulation of pharmacy have also required the profession to adapt again to accommodate externally imposed requirements of society. Consequently these changes have also resulted in the publication of a set of new educational standards for the Master of Pharmacy course which impact on pharmacy education (General Pharmaceutical Council 2011), creating an ever-changing landscape of pharmacy practice which students encounter as they undertake the required educational programme for registration as a pharmacist.

The 'social framework' articulated in this chapter reveals two differing conceptualisations of pharmacy as a profession. One conceptualisation draws on a functionalist perspective and is concerned with establishing and asserting the "useful and necessary social function" (Traulsen and Bissell 2004 p. 108) of a pharmacist. The other conceptualisation emerges from a more traits base perspective, with a concern for being accountable, having a values system and being able to deal with ethical dilemmas. Whilst these conceptualisations differ they are conflated at times and are expressed as if they are one and the same thing.

Structure of Thesis

Chapter two provides a review of the literature that considers the notion of 'professional', continuing to describe the 'social framework' that pharmacy students experience in the process of becoming a 'pharmacist' by drawing on and critiquing literature that inquires into the notion of 'professional'. Primarily drawing on pharmacy literature it will also draw on literature from across disciplines to consider new ways of conceptualising and thinking about the notion of 'professional' in a pharmacy context.

Chapter three describes the conceptual framework of this study. It establishes the use of social constructionism as a theoretical framework and provides an account of how this framework guided the development of the methodology of this research.

Chapter four outlines the design of this study and provides an account of all the decisions that were taken in conducting the study, illustrating how these were underpinned by a consideration of the ethics of this study. It provides an overview of the research process, including how the participants were recruited and the various stages adopted in generating the data presented in this thesis.

Chapter five introduces the data that was generated in this study. By listening to recordings of the interviews and by reading transcripts of the interviews repeatedly, the students who participated in this study revealed uncertainties in their experiences. In this chapter characteristics of these experiences are

identified and observed and then grouped so that data exhibiting similar characteristics emerge and merge as patterns.

Chapter six the explores the patterns and themes that were identified in chapter five and are exposed to a socio-material understanding to consider what becomes visible in the emergence of socio-material assemblages.

Chapter seven discusses how the data generated and analysed in chapters five and six provides new understandings about 'becoming' a pharmacist. This chapter is one attempt at making sense of the data from a student and curricular perspective.

Chapter eight reflects on how the trustworthiness and authenticity of this study can be considered. It reflects on adopting a narrative inquiry approach in this study, the findings that have emerged from this study, the use of theory that has informed many aspects of the study and highlights some thoughts regarding future research directions.

Chapter 2 – Situating the Study in the Literature

Chapter one introduced this thesis as an exploration of pharmacy students' experiences of becoming a 'pharmacist', establishing that there are multiple ways in which the notion of 'professional' can be conceptualised. It illustrated that the landscape of pharmacy practice that students encounter is ever-changing where conceptualisations of pharmacy as a profession are framed as adopting roles and responsibilities. This chapter continues to describe the 'social framework' that pharmacy students experience in the process of becoming a 'pharmacist' by drawing on and critiquing literature that inquires into the notion of 'professional'. Primarily drawing on pharmacy literature it will also draw on literature from across disciplines to consider new ways of conceptualising and thinking about the notion of 'professional' in a pharmacy context.

The literature is viewed in this thesis as "a useful but fallible source of ideas" (Maxwell 2005 p. 35) and as such this chapter is not an attempt at providing a systematic review of the literature on this topic but examines the ways in which the study of the concept of professional has been framed within and outwith pharmacy. In acknowledging the quantity and diversity of literature that could be considered under an umbrella term such as professional, this critique is not intended to be an exhaustive critique of the field, instead this critique offers an illustrative account of the literature. This illustrative account will provide snapshots of this extensive field to explore the major works in this narrow topic of professionalism in pharmacy.

This literature review will scope out the work that has been undertaken in pharmacy education in relation to becoming a professional. In this way the literature review will illustrate the myopic approach that has been adopted in pharmacy education in considering this topic.

To further illustrate this myopic approach, literature from other disciples will be drawn upon throughout this literature review to illustrate the approaches that have been adopted in other disciplines and demonstrate that pharmacy practice needs to broaden its approach to and viewpoint on this topic. It has been necessary to be selective in which other disciplines have been explored due to the constraints of producing a thesis, however, as indicated earlier this literature review is concerned with providing an illustration of the landscape, highlighting potentials and possibilities as opposed to providing a systematic review of literature published on the topic of professionalism.

Professionalism in Pharmacy

As mentioned in chapter one the majority of the published literature in pharmacy has been concerned with how professionalism could be taught, learnt and assessed in pharmacy. Reviewing pharmacy literature highlights a lack of peer-reviewed articles on professionalism in pharmacy and demonstrates that the majority of work on this topic originates from the United States of America (USA) (Rutter and Duncan 2010; Wilson et al. 2010). The origins of these articles can be traced to the publication in 2000 of a set of recommendations in the form of a White Paper by the American Pharmaceutical Association Academy of Students of Pharmacy and the

American Association of Colleges of Pharmacy Council of Deans Task force on professionalism.

In analysing the published literature on professionalism in pharmacy it is clear that The White Paper (American Pharmaceutical Association Academy of Pharmacy Students, American Association of Colleges of Pharmacy Council of Deans 2000) was, at the time, a central document in the study of professionalism in pharmacy in the USA. In 2004, Sylvia surveyed 83 colleges and schools of pharmacy in the USA to establish the extent to which they had adopted the recommendations of the White Paper on Student Professionalism. The author discovered that the degree to which colleges and schools of pharmacy had adopted the recommendations varied. She concluded that there would be a benefit to establishing a consensus-based definition of professionalism as only ten out of fifty-two respondents had established the effectiveness of their interventions on student professionalism.

The White Paper also served as a basis and rationale for much of the literature that was published in the USA in subsequent years, with many authors (Berger et al. 2004; Boyle et al. 2007; Chisholm et al. 2006; Duke et al. 2005; Hammer et al. 2000) unquestionably and uncritically adopting the ten broad traits that the White paper defined as being displayed when acting professionally. Viewing professionalism as "the active demonstration of the traits of a professional" (American Pharmaceutical Association Academy of Pharmacy Students, American Association of Colleges of Pharmacy Council of Deans 2000 p. 4), the White Paper conceptualises the notion of being a professional as a traits based concept.

The production of the White Paper by two pharmacy organisations underlines the argument that conceiving professions as being characterised by a set of traits, merely reflects the views of the profession itself and how it wants to be viewed (Eraut 1994; Traulsen and Bissell 2004). The White Paper therefore constructs an understanding of 'professional' in a pharmacy context as being about the expression of a set of specific traits or characteristics which as discussed in chapter one offers only a limited and narrow view of being 'professional' as a pharmacist.

More recently in 2010 the Pharmacy Practice Research Trust published a report on Professionalism in Pharmacy Education in the United Kingdom by Schafheutle et al. (2010), which stated that "Research is needed to help start an informed debate about the meaning of professionalism in modern day pharmacy practice" (p. 2). In this report the authors attempted to "understand and clarify how professionalism is learned, cultivated and facilitated in the academic environment" (p. 18) and in common with much of the pharmacy literature, the notions of being a 'professional' are portrayed as taken for granted universal definitions.

Schafheutle et al. (2010) collected data from three different schools of pharmacy in the United Kingdom by reviewing documentation, observing teaching sessions and conducting interviews and focus groups with students and teaching staff. They concluded that role models were an important element of both the academic (i.e. the teaching staff they encounter within the University) and practice (i.e. the practising pharmacists they encounter on placements) environments, whilst acknowledging that although practice

placements are not a strong component of the Master of Pharmacy programme some professionalism teaching can be successfully delivered in the academic environment. This report reveals a prevailing notion in the pharmacy literature that professionalism can be construed as another subject area within the curriculum that can be taught, learnt and assessed.

This chapter will continue by examining professional socialisation as one approach taken in the literature to address how professionalism can be taught, learnt and assessed before examining this topic more generally.

Professional Socialisation

Many of the articles on professionalism from the United States have conceptualised pharmacy students becoming pharmacists as a process of professional socialisation. Professional socialisation of pharmacy students has generally been portrayed as a metaphor for learning as acquisition.

Chalmers et al. (1995) view professional socialisation as "the general process whereby students learn about the professional role of pharmacists and the expectations of performance in that role" (p. 86). This idea of professional socialisation in pharmacy is shared by Beck et al. (1996), who make explicit that this is not just limited to acquisition of knowledge and skills but also "appropriate behaviours, attitudes, and values" (p. 122). Beck et al. view that this process begins when individuals select a career choice but the greatest impact is as students progress through a curriculum of study interacting with academic staff, practitioners, peers and other healthcare professionals. These perspectives portray professional socialisation purely as an acquisitional

endeavour. They assume that professional socialisation of pharmacy students happens as they acquire knowledge, skills, behaviours, attitudes and values. They portray a limited notion of who the agents involved in this process are and highlights Chalmers et al.'s (1995) concern that, "patients are mere abstractions in traditional pharmacy education" (p. 87). These perspectives on professional socialisation of pharmacy students are somewhat limited in scope and suggest a structuralist approach to understanding professional socialisation, framing professional socialisation as an educational outcome.

Considering professional socialisation from a structuralist perspective assumes the notion of a "homogenous ideal practitioner" quoting Shuval (cited in Chalmers et al. 1995 p. 86) Chalmers et al. argue that this reflects a "structural-functional perspective" on professional socialisation which appears ideal because it suggests a notion of consistency and homogeneity. Assuming the existence of an 'ideal practitioner' suggests that consistent messages about the profession's ideology and philosophy of practice can be established and articulated. Once articulated these messages can then be communicated to students, assuming that the process of professional socialisation of pharmacy students proceeds smoothly, linearly and with positive outcomes.

Berger et al. (2004) argue that professional socialisation is a process that must engage an entire organisation and that professionalism is both a curricular and extracurricular concern. Berger develops previous notions of professional socialisation as an educational outcome delivered by a curriculum, by viewing a curriculum as an object that articulates and guides the delivery of technical competence and therefore portrays the pharmacist as a technician,

as someone who follows protocols. Berger et al. suggest that whilst students are the focus of professional socialisation, they need to have appropriate role models for professional socialisation to be successful. Access to such role models has been problematic for pharmacy students as they have traditionally been viewed as a "burden to practice and pharmacist" (Austin and Duncan-Hewitt 2005 p. 384).

Manasse et al. (cited in Beck et al. 1996) identified that in some cases there could be incomplete or inconsistent socialisation of pharmacy students and arguing that this occurs because "the pharmacy profession lack[ed] a unified philosophy of practice" (p. 122). Notions of incomplete or inconsistent socialisation disrupt assumptions of professional socialisation as being an unproblematic phenomenon with positive outcomes for pharmacy students. Rather it suggests that students can encounter inconsistent messages about professional ideology and philosophy of practice and therefore opens up the possibility that professional socialisation could also result in negative outcomes for pharmacy students.

Whilst accepting that the 'structural-functional' perspective may be ideal, Chalmers et al. (1995) argue that it is not realistic because pharmacy as a discipline has changed and continues to change, demonstrating the fallibility of relying on apparently temporary consistent notions of professional ideology or philosophy of practice that reflect pharmacy. Instead they argue for understanding professional socialisation from a "situation adaptation perspective" (p. 86), which they view as a more realistic approach because it

does not assume that professional socialisation is a linear and smooth process and instead accepts that it could result in conflict and ambiguity.

Conflict and ambiguity is what Brown et al. (2001) suggest students encounter as they experience and attempt to reconcile the "conflicting dichotomy that exists between the professional and business identities of pharmacy" (p. 245). These differing identities were highlighted by Hibbert et al.'s (2002) analysis of focus group and interview data from their study examining the professional role and status of the community pharmacist in the context of consumerist health care. They concluded that consumerism represented a significant challenge to the professional work of the community pharmacist in relation to the supply of deregulated medicines (i.e. those medicines that can be supplied without the authorisation of a doctor), as consumers viewed this transaction as about "buying a product rather than obtaining a professional service" (p. 59).

Brown et al. (2001) also suggest that one of the barriers that might hinder socialisation of pharmacy students is the reliance of educators on traditional teaching methods that emphasise the acquisition of cognitive skills over the development of attitudes, values and interpersonal skills consistent with the ideologies and responsibilities of belonging to a particular occupational group. As Brown et al. note "it is the effective application of knowledge, not the knowledge itself, that defines the importance of professionals to the society they serve" (p. 245) echoing Rueschemeyer's (1983) view that the 'professions' have a contract with society and Monrouxe et al.'s (2011) notion

of professionalism as an interpersonal discourse of social interaction between individuals.

Hammer (2000) highlights an important question that has remained unanswered in the literature in relation to professional socialisation: what are students being socialised to, is it "to the ideals of the profession or to the current state of practice?" (p. 455). This idea resonates with some of the themes that emerged in chapter one as tensions between societal and individual conceptualisations of 'professional'. The policy landscape promotes the notion that 'professionalism' is unquestionably beneficial but portrays it as a regulatory imperative, as was illustrated in the GPhC's Standards of Conduct, ethics and performance. Hammer is unsure that socialisation to the current state of practice is sufficient and perhaps risks the de-professionalisation of pharmacy that Anderson (2004) and Woodward (2004) have expressed concerns about. In concluding that educators need to develop new methods of teaching that encourage the development of the affective traits that are as much a part of being a pharmacist as the acquisition of knowledge, Brown et al. (2001) have not answered Hammer's (2000) question about what pharmacy students are being socialised too, which is as important as the way which this socialisation is facilitated.

Approaches to Teaching Professionalism in Pharmacy
In 2001, Hammer & Paulsen (2001a) described the design and development of a longitudinal professional skills development course sequence. Ironically, the introduction to the paper states that "… pharmacy education needs to facilitate students' integration of knowledge, skills and attitudes from various

disciplines…" (p. 77), yet what is presented is a discrete component of a course that deals specifically with professional skills development with no obvious attempt at integration. The authors did undertake an evaluation of their course but their conclusion that "a new entry level PharmD program has helped to establish and assess ability-based education in the curriculum" (p. 82) does not add anything to the wider body of knowledge on professionalism in pharmacy. The professional skills that were included in this course e.g. team working and communication skills, are those that are regarded in UK higher education to be transferable and represent learning level outcomes as opposed to unique skills that represent the body of knowledge of pharmacy.

Similarly, studies by Carter et al. (2000); MacKinnon et al. (2001); Brown et al. (2001) and Brehm et al. (2006) all describe courses that were designed to develop pharmacy students' professionalism. Each of the courses were delivered to separate cohorts of students in different schools of pharmacy and thus their contribution to the body of knowledge regarding professionalism in pharmacy students is limited by the quantitative approach to analysis that was adopted in all four studies. Although the quantitative analysis of these studies provides little generalisable data to other sites, they do challenge the dominance of the acquisition of scientific knowledge as the prevailing educational paradigm in pharmacy education. Brown et al. (2001) observed "that some traditional teaching methods not only fail to foster professional socialisation, but might impede the process" (p. 245) and that some teaching staff will need "to venture beyond the security of their academic comfort zones, as they are called to nurture, not just lecture" (p. 245). This is a point that MacKinnon et al. (2001) acknowledged in their design of an introductory

practice experience for students that encouraged them to interview preceptors, pharmacists, technicians and patients to discover the answers to practice issues which were then discussed in class. The authors believed that their approach of allowing the students to become familiar with the practice environment through self-discovery facilitated the students' to develop their "own personal practice philosophies" (p. 249).

Austin (2002) discussed the opportunity that Group Socialization Theory (GS Theory) holds for professional education. He suggests that grounding professional education in GS Theory could be a means to promote learners from a surface approach to a deep approach to learning. He further argues that GS Theory provides the possibility of designing assessment tools and outcome measurements that are more predictive of professional practice than more traditional methods of assessment which may not be predictive of an individual's future practice or professional conduct. I will return to this point about assessing professionalism in pharmacy in a subsequent section, but this section will continue by exploring two further approaches to teaching professionalism in pharmacy that also emerge from the literature as important.

White Coat Ceremonies

A growing trend in schools of pharmacy in the USA to assert the importance of professionalism in pharmacy students has been the adoption of a White Coat Ceremony. The idea of a White Coat Ceremony was developed by medical schools in the USA as a way of highlighting to incoming medical students the importance of balancing an excellence in science with caring for patients

(Jones 1999). Brown et al. (2003) investigated the prevalence of 'White Coat Ceremonies' in USA schools of pharmacy as "a catalyst for professional growth" (p. 1415) concluding that the effectiveness of a White Coat Ceremony in achieving this growth is a "highly subjective process" (p. 1417). They acknowledge that professional socialisation is difficult to measure in scientific terms but that the outward behaviours associated with the affective traits of motivation, commitment, enthusiasm or compassion can be observed and that the White Coat Ceremony must be viewed as part of a set of educational strategies.

Although White Coat Ceremonies have not been adopted so widely by UK schools of pharmacy the balance between science and pharmacy practice in the UK Master of Pharmacy curriculum has been a topic of debate in pharmacy education for many years (Taylor and Harding 2007). Taylor and Harding (2007) identified from their research with UK pharmacy students that there was a tendency for them to prioritise the acquisition of a solid grounding in the sciences over the establishment of a professional identity which they defer till later in their course. Taylor and Harding reflect on the fact that this may be representative of the current curriculum and therefore is not representative of the students' willingness to adopt such an identity but reflects a pragmatic approach to their studies to 'pass' their exams.

e-Professionalism

Recognising the increasing usage of social media within society, the notion of e-professionalism or online professionalism is a relatively more recent addition to the literature on professionalism in pharmacy. This small body of work

illustrates the rather myopic perspective that is pervasive through the pharmacy literature on professionalism. The approach taken is short sighted and fails to take account of the wider sociological perspective that constructs notions of 'professional'.

In the USA, Cain et al. (2009) administered a questionnaire to incoming first year pharmacy students at three colleges of pharmacy to gauge their level of Facebook activity and examine their opinions about their accountability regarding information they disclosed through this medium. The authors identified that a large percentage of the students expressed the opinion that individuals should not be held responsible by authority figures for information posted on their profile. The authors suggest that there is a need for raising the awareness of students regarding "these new 'e-professionalism' issues" (p. 6). Similarly in the United Kingdom Prescott et al. (2012) conducted a questionnaire survey with pharmacy students at one university to examine their use of and attitude towards Facebook and professionalism. Based on their findings, they too argue that there is a need to raise awareness within the pharmacy student population regarding 'online professionalism' and that students "require clear guidelines on online professionalism" (p. 3). Utilising Cain et al.'s questionnaire, Ness et al. (2013) examined the self-reported social media behaviour of graduating students from four colleges of pharmacy in the USA seeking employment. The authors concluded that graduating students recognised the importance of maintaining a professional image online and agreed with Cain et al. (2009) that there was a need for raising the awareness of pharmacy students about the potentially negative experiences that could arise from an online presence.

In their personal view of how digital media could affect how people view professional behaviour, Rutter and Duncan (2011) suggest that a more explicit ethical framework could "minimise the various risks and facilitate an online or digital presence that is professional, positive and safe" (p. 433). They further suggest that pharmacy organisations should provide leadership in using on-line means of communication. Their view reflects the standard approach taken to viewing professionalism and professional behaviour, as an object that can be enshrined in guidelines, as an authority to comply with and that individuals will fall into line. In no way does the pharmacy literature consider this to be an individual attribute, or an act of 'becoming'. It is a deterministic and absolutist perspective.

In acknowledging that the use of social media is increasing across society, there is a question about why pharmacy, or any other professional grouping should be considered differently to the rest of society in relation to the use of social media. These studies suggest that there are different standards or expectations when using social media if you are a pharmacist than if you are not a pharmacist. Whilst these studies were conducted in different settings, they were all conducted by and within the discipline of pharmacy education, conducted by academics working in pharmacy education and concerned the views of pharmacy students.

Direct comparison of the findings of these studies is problematic given the small populations investigated in each, and the differences between pharmacy education in the USA and the United Kingdom. These studies do however add to the theme that is emerging from this reading of the pharmacy literature

that 'professional' and 'professionalism' are being constructed as definable topics. Throughout the pharmacy literature, 'professional' and 'professionalism' are conceptualised as topics that can be reduced to a series of characteristics that can then be the focus of education and the development of student (professional) identities. Furthermore, if these characteristics are known then assessments can be developed to measure them.

Assessing Professionalism in Pharmacy

As noted in the previous section, one theme that emerged from a review of the pharmacy literature was the assessment of professionalism in pharmacy. A number of authors have attempted to develop and test different approaches and instruments to assess the development of professionalism in pharmacy students with the uncritical assumption that this is desirable and achievable. In 2000, Hammer et al. (2000) developed and tested an instrument to assess pharmacy students' behavioural aspects of professionalism. The instrument consisted of 38 items which the authors believed represented seven dimensions representing what they called behavioural professionalism. Following testing of the tool, the authors concluded that the majority of differences in scores that were identified were related to the characteristics of the assessors rather than of the students.

In developing such instruments it needs to be clear that if an effect is being observed, it may arise from the individual being observed or from the way in which they are being observed. In other words, the observation maybe an artefact of the tool, the application of the tool, or the application of the tool by an individual. The development of this tool highlights the inherent limitations

of developing tools to assess professionalism (however it might be conceptualised), that is being clear about what is being measured.

Pursuing the notion that professionalism can be measured, assuming that the correct tool can be developed and tested, Chisholm et al. (2006), based on Hammer et al.'s work developed another tool based on the American Board of Internal Medicine's (ABIM) six tenets of professionalism; altruism, accountability, excellence, duty, honour and integrity, respect for others. The application of this tool to a group of first year pharmacy students and a group of graduates showed no difference in the measures applied with the tool. The authors suggested that this might have been due to the higher starting scores of the first year group creating a ceiling effect to their results.

The tool developed by Chisholm et al. was adopted and further tested longitudinally by Poirer and Gupchup (2010). For one class they demonstrated that following administration of the tool at yearly intervals over three years there were improvements in the professionalism scores that the tool produced. Due to the lack of use of personal identifiers, the authors cannot attribute scores to individuals and therefore the unit of analysis in this study remains at the sample population level rather than at an individual level.

Seeking "to expand and improve existing tools for measuring professionalism in pharmacy students" (Kelley et al. 2011 p. 8), Kelley et al. aimed to develop an instrument to measure behavioural professionalism on a scale that minimised the potential for a ceiling effect, which Chisholm et al. (2006)

suggested may account for why they observed no difference between year groups.

Concluding their review of the literature about professionalism in pharmacy, Rutter and Duncan (2010) suggest that developing tools to measure professionalism is difficult, as evidenced by a lack of published research. They argue that "[p]rofessionalism is a complex composite of structural, attitudinal and behavioural attributes" (p. 21) and that a universal definition of professionalism would be helpful in progressing work in this area. A viewpoint also shared by Wilson et al. (2010).

Such a definition could offer a sense of consistency from which tools could be developed, but the dual challenges of ensuring the tools were valid and reliable would remain. Any tools would be required to be administered by assessors such as in Hammer et al.'s (2000) work or self-administered as in the work of Chisholm et al. (2006). In either case there are inherent challenges in ensuring that different assessors are consistent in their application of the tools or in the case of self-reporting, managing the challenge of social desirability bias where a responder is more likely to select the more socially desirable response (Bryman 2012).

The authors of these studies rightly acknowledge that the development, testing, re-testing and refinement process of such instruments can last a lifetime, therefore it can be questioned what value there is in pursuing the development of such tools. As identified by Poirer and Gupchup's (2010) study, a lack of individual identifiers limits the unit of analysis to a cohort

level, which might be useful from a regulatory perspective, but when considering the development of student (professional) identities, any analysis necessarily needs to be at the level of the individual.

These studies exemplify the positivistic approach that has been adopted by much of the published pharmacy literature on professionalism. The literature uncritically assumes a notion of professionalism as an object that can be measured, but this notion goes further than just assuming that it can be measured, it also assumes that it can be measured in an undergraduate student. There is an assumption that the development of professionalism in students is linear and traceable over time in a quantitative manner, each year an individual's score will be higher than the last. Conceiving professionalism as an object that can be measured in this way also suggests a notion of there being a finite end-point. To presume otherwise, and adopt a scale that is infinite, would undermine the argument for measuring it; if there is no end-point what is the need to measure it.

What emerges from the literature is a desire to develop an agreed single definition of professionalism in pharmacy so that effective educational interventions can be designed, assessment tools developed and students' professionalism measured.

Suggesting that it might be "... easier to discuss what professionalism is not, rather than what it is ..." (Hammer 2006 p. 1), Hammer recognises that there is an indefinability and ambiguity to the concept of professionalism. She argues that professionalism is defined by its demonstration in practice and is

manifested not only in the individual practitioner but the practice environment too. She further subscribes to the view that professionalism cannot be taught, but through professional socialisation, students can learn to adopt the values, attitudes and practice behaviours that are seen as representing professionalism.

Conceptualising Professionalism

The multiple ways in which professionalism can be conceptualised and understood is also evident in the literature about medical education. Adams et al. (2006) adopts a position that views professionalism as a competency area that residents must be able to demonstrate competence in, whereas Cohen et al. (2006) define professionalism as a principled responsibility of a doctor and as the fulfilment of the "medical profession's contract with society" (p. 608). Here again there are different constructions of 'professional', in one respect it is viewed as the performance of a task and in another way it is viewed as a relationship with society.

Monrouxe et al. (2011) add to these notions of professionalism by adopting a position that views professionalism as being "constructed within numerous and progressively complex discourses" (p. 587) which they refer to as individual, collective, interpersonal and complexity discourses. They view the individual discourse as constructing professionalism as a set of attributes that an individual possesses whereas "the discourse of collective professionalism focuses on 'attributes' that uphold the collective body of the profession in which society places trust." (p. 587).

The interpersonal discourse views professionalism as being constructed through the "social interaction between individuals" (Monrouxe et al. 2011 p. 587) and in this sense professionalism becomes defined by the members of the occupational group as they interact and create a shared professional identity (Evetts 2006) as opposed to a definitive definition of professionalism being imposed upon them by an organisation. This is perhaps what Hammer (2006) alluded to when she said that professionalism is defined by its demonstration in practice.

Applying a notion of professionalism as a discourse to the pharmacy literature discussed, it becomes apparent that ideas of individual and collective discourses of professionalism have a resonance with pharmacy practice. Wingfield's (2006) definition of professionalism talks about possession of values and behaviours and shares much with a notion of professionalism as being an individual discourse. The White Paper (American Pharmaceutical Association Academy of Pharmacy Students, American Association of Colleges of Pharmacy Council of Deans 2000) talks about the demonstration of traits by an individual, such as adopting a 'covenantal relationship with client', 'knowledge and skills of a profession' underlying the possession of a unique body of knowledge as defined by MacDonald (1995) and 'pride in the profession' which positions it within a notion of professionalism as a collective discourse. Conceptualising professionalism as individual and collective discourses resonates with the analysis in chapter one of notions of 'professional' that illustrated a tension between societal and individual conceptualisations of 'professional'.

Complexity discourse recognises professionalism as "a dynamic construct of actors and structures shifting across time" (Monrouxe et al. 2011 p. 587) and views it as being in constant conflict as the "principles and attributes of professionalism … are negotiated and renegotiated over time" (p. 587). The interpersonal and complexity discourses represent notions of professionalism that are more complex and perhaps more traditionally associated with the wider sociology literature and have not featured significantly in the pharmacy literature, again a similarity can be seen in the medical literature as Monrouxe et al. (2011) note that the individual and collective discourses of professionalism are the ones that are typically encountered in medicine.

The dynamic nature of the discourses of professionalism is captured by Evetts (2003) in her analysis of the concept of professionalism showing that it was once interpreted as a normative values system that was rejected in the 1970's and 1980's when it was re-interpreted as an ideology. The division of labour in society between those who possessed what Friedson (2001) calls a "specialization - the use of a circumscribed body of knowledge and skills thought to gain particular productive ends" (p. 18), and those who did not, gave rise to professionalism's interpretation as a normative values system where society placed trust on those with a 'specialization', and those who had such trust bestowed upon them, had "to be worthy of that trust" (Evetts 2003 p. 400). This interpretation was rejected during the 1970's and 1980's as 'the professions' increasingly became viewed as "elite conspiracies of powerful occupational workers" (p. 401) and professionalism was re-interpreted as an ideology where "a distinct occupational group sought a monopoly in the market for its service, and status and upward mobility (collective as well as

individual) in the social order." (p. 401). More recently this notion of professionalism has also been challenged by a re-interpretation of professionalism as both a normative value system and ideology.

Evetts (2003) views professionalism as a balance of a "normative values and ideological controls" (p. 411) that differ across occupational groups and recognises that professionalism is constructed and operationalised from inside and outside of the occupational group, therefore agreeing with Freidson's (2001) view that professionalism is "a set of interconnected institutions providing the economic support and social organisation that sustains the occupational control of work" (p. 2). Evetts (2006) has further suggested that professionalism should now be viewed "as a discourse of occupational change and control" (p. 138) as the concept has been increasingly used in different contexts such as marketing, mission statements, organisational aims and objectives and as a way of motivating employees. This challenges the taken for granted notion of 'professionalism' in the pharmacy literature as a stable entity as Evetts (2003) has highlighted that 'professionalism' is utilised in many ways for multiple purposes.

Evetts (2003) and Monrouxe et al. (2011) make a case for viewing professionalism in a more dynamic and less restrictive way than has been conceptualised in the literature reviewed so far. Evetts' analysis supports Monrouxe et al. 's argument that professionalism is a dynamic and shifting concept that is constructed by actors and structures. As noted in chapter one pharmacy practice has shifted across time, constructing the pharmacist as a 'professional' according to classical understandings of the 'professions' and

then more as a technician as the National Health Service was established and NHS Prescriptions were introduced. Through the adoption of pharmaceutical care there was renegotiation, re-interpretation and a return to a more trusting patient centred relationship between pharmacist and client. Changes to the regulation of the healthcare professions have changed the actors and structures involved in the regulation and leadership of pharmacy practice, therefore again reinforcing the uncertainty and complexity of the pharmacy practice landscape that was discussed in chapter one.

Monrouxe et al.'s argument for viewing professionalism as a collection of discourses suggests viewing the concept of 'professional' in a pharmacy practice context in different ways. Drawing on Wenger's theory of Communities of Practice as "a unifying construct through which education, practice and continuous professional development may be viewed" (Austin and Duncan-Hewitt 2005 p. 388), Austin and Duncan-Hewitt argued to reconceptualise Pharmacy Schools as Expert Communities of Practice, suggesting that transforming how pharmacy education is organised and conducted could address the problem of pharmacy students access to role models. They further suggested that viewing pharmacy education from a Community of Practice point of view could encourage the development of a practice-centred identity in students allowing them to "appropriate the ways in which the members of the practice (or profession) think, feel, and behave; that is they learn to be" (p. 373).

Pharmacy Education as a Community of Practice

Wenger (1998) suggests that engagement in social practices is the fundamental process that supports and encourages learning. By engaging with and participating in social practices, individuals form informal 'communities of practice' which provide spaces for individuals to construct and assume identities that relate to a particular community. He contends that identity provides a personal narrative of becoming in the context of different communities and therefore provides a way of understanding how learning changes the individual. Wenger's perspective on learning as being a fundamentally social phenomenon offers an alternative viewpoint to institutionalised learning practices that have been revealed in the pharmacy literature, serving only to sustain the assumption in pharmacy education that learning is an individualistic endeavour. He rejects the notion that learning has a beginning and an end and is a consequence of teaching, learning is neither linear nor hierarchical, instead learning is conceptualised as a social phenomenon that extends beyond the classrooms of educational institutions and into the social communities in which individuals participate. This notion of learning offers an alternative to the linear and acquisitional notions of learning that dominate in the pharmacy literature. It challenges the notion that 'professionalism' can be measured and can be measured at specific time-points.

In adopting a social constructionist stance, Wenger's theory of Communities of Practice interrogates the "taken-for-granted ways of understanding the world" (Burr 2003) and challenges the assumption that knowledge represents objective, unbiased observations of the world (ibid). Using the lens of

Communities of Practice, Wenger (1998) views knowledge as being "a matter of competence with respect to valued enterprises" (p. 4) and that engagement in these 'enterprises' is the enactment of knowledge. He does not separate acting from knowing, seeing both as a duality involving the whole person through engagement with practice.

Wenger's view of 'practice' differs to the perhaps commonly held understanding and use of the term 'practice' as being the "customary way of doing something" (Soanes et al. 2001 p. 1003). In the way that he views acting and knowing to be inseparable, Wenger views the practical and theoretical as also being inseparable too; communities of practice are places where we develop, negotiate and share our own theories and ways of understanding the world (Wenger 1998). Wenger's conceptualisation of 'practice' sheds new light on viewing the notion of professional in a pharmacy practice context. As noted in chapter one and again earlier in this chapter, notions of 'professional' appear to be constructed from societal and individual perspectives that are held in tension. If notions of 'professional' were recast in terms of Wenger's notions of practice, then becoming a pharmacist would then be framed as an engagement with practice rather than restricted to the acquisition of traits and characteristics, challenging prevailing conceptualisations of 'professional' in a pharmacy practice context.

Communities of Practice has been used throughout the literature as a way of understanding how different institutions operate. Wenger (1998) views that the perspective on learning offered by Communities of Practice applies to disciplines, industries, economic regions and organisations and within these

different institutions there are implications for the individual, the community and the organisation. Examining how public health policy and practice is achieved, Mallinson et al. (2006) suggested that communities of practice theory could be a useful framework for "cultivating communities of practice" (p. 283). The notion that communities of practice could be cultivated conveys an autocratic perspective on communities of practice. This perspective is inconsistent with Wenger's theory, which views communities as emerging from the continued interaction and participation of its members and not through the implementation of strategy and policy. Even although within the theory Wenger allows for the identification of patterns that emerge from the engagement within the practices of the community, each time these patterns are experienced is a new experience and contributes to the on-going process of meaning making, they are familiar but not predictable.

Attempts have been made to actively set up Communities of Practice to develop professional identities (Andrew et al. 2009). This idea conflicts with Wenger's (1998) notion of communities of practice as being "so informal and so pervasive that they rarely come into explicit focus" (p. 7); they exist and we are part of them because they are integral to our daily lives. It is perhaps not remarkable that Cuddapah and Clayton (2011), when using Communities of Practice as a theoretical framework in exploring the experiences of new teachers, found that it "had potential explanatory power to help us understand [Beginning Teacher Program] BTP success" (p. 63). In acknowledging that Communities of Practice have received widespread attention as a potential means for understanding and promoting learning and knowledge generation in differing environments, Amin and Roberts (2008) are critical of the resultant

"formulaic distillations of the workings of Communities of Practice and instrumentalist applications" (p. 353).

Lave (1996) uses the terms 'newcomers' and 'old-timers' to illustrate how the maintenance of communities of practice constantly requires 'newcomers' who through participation in the practice of a community become 'knowledgeably skilful', in other words assume the identity of a practitioner (full participant). The 'old-timers' essentially sanction access to the community to 'newcomers', engaging with them in a process of legitimate peripheral participation and through a centripetal process, the 'newcomers' move towards the centre of the community. In this respect it is perhaps understandable why Davies (2005) views communities of practice as being hierarchical in nature. This sanctioning Davies suggests is an expression of power within communities of practice that is not fully developed. Participation in the practices of the community are controlled not by the individual who seeks to join a community but sanctioned by those already within the community. There is a clear arrangement within the community that presents a ranking in terms of status, being a full participant is different in status to being a peripheral participant.

Disagreeing with Davies, Eckhert and Wenger (2005) view that "Practice always involves the maintenance of the community - and therefore its power structure" (p. 583), they view communities of practice as power structures themselves as opposed to power resting with individuals within the community. They suggest that viewing communities as hierarchical is simplistic and confuses the notion of 'practice' as being an activity as opposed to "a way of doing things, as grounded in and shared by a community" (p.

583). For Eckhert and Wenger it is the notion that a community is continually negotiating what counts as competence within it that defines a community as a community of practice.

From the context of the pharmacy practice landscape, it appears that Wenger's (1998) theory of communities of practice and Lave's (1996) notion of legitimate peripheral participation may provide a way of understanding how student pharmacists ('newcomers') experience the transition towards becoming a pharmacist ('old-timers'). Austin and Duncan-Hewitt's (2005) reconceptualisation of pharmacy education as a community of practice places the pharmacy student on the periphery of the community and through participation and engagement with the community they would gain increasing rights and responsibilities until they achieve status as a full participant in the community. This compares with the current system where an individual goes from having little or no responsibility or legal accountability to significant responsibility and legal accountability in a relative short period of time. However, Austin and Duncan-Hewitt's idea is also at odds with Wenger's original intention of not viewing trajectories as "a fixed course or fixed destination" (Wenger 1998 p. 154) as this is exactly how Austin views this notion of a graduated licensing system; there would be a fixed course and a fixed destination to registration as a pharmacist, thus returning to deterministic conceptualisations of 'becoming' a pharmacist.

Becoming as a Metaphor

As an alternative to Austin and Duncan-Hewitt's (2005) proposal to consider pharmacy education as a Community of Practice, Hager and Hodkinson's (2011) conceptualisation of learning as 'becoming' in a professional context appear to offer a more fluid and less deterministic conceptualisation of 'becoming' a pharmacist. They reject acquisitional and transferal metaphors of learning that view knowledge as an object that exists and therefore can be acquired and transferred. This notion of knowledge is problematic when considering professionalism as it suggests that being a professional is about acquiring knowledge that can be enacted in a workplace. Scanlon (2011b) argues that this notion of 'being' a professional symbolises professional expertise as being static and terminal, contradicting notions of learning as being a life-long endeavour (Hager and Hodkinson 2011).

Using a metaphor of 'becoming', allows exploration of developing identities of pharmacy students as they transition towards registration as a pharmacist. Scanlon (2011a) drawing on the ideas of Schutz's 'stranger', Wenger's 'trajectories' and Ibarra's 'possible selves', argues that conceptualising professional identity as 'becoming' highlights the "evolutionary, processural nature of developing a professional self" (p. 14) rejecting conventional explanations of learning as novice-to-expert as suggested by Lave's (1996) notion of legitimate peripheral participation, Wenger's (1998) Communities of Practice and the Dreyfus model (Flyvbjerg 2001). Hager and Hodkinson (2011) accept that human understanding of learning necessarily requires the use of metaphor and agree with Scanlon that, 'becoming' is a helpful metaphor for examining the idea of professional learning.

> "Because learning transforms who we are and what we can do, it is an experience of identity. It is not just an accumulation of skills and information, but a process of becoming – to become a certain person or, conversely, to avoid becoming a certain person". (Wenger 1998 p.215)

This study therefore draws on the notion of 'becoming' as a metaphor for framing the experiences of pharmacy students engaged in this process of transformation from student to pharmacist.

Researching Professionalism in Pharmacy

There are a number of methodological issues that are apparent in the published research on professionalism in pharmacy and which are helpful to consider in terms of informing the methodology and methods adopted in this study. There is an assumption that changes in behaviour can be seen in a relatively short period of time. A course that introduces or encourages professional behaviour may result in a behaviour change, but that change may not occur conveniently by the end of the programme of study when the evaluation takes place. It is unfortunate that Hammer and Paulsen (2001b) did not consider evaluating their integrated course sequence in a longitudinal manner reflecting the design of the course. If a course is designed to have an impact over a prolonged period of time, it seems reasonable that the evaluation of the course should be undertaken at appropriate time periods throughout the duration of the course and beyond.

Secondly, there is an over-reliance on survey style data collection methods (Duke et al. 2005; Chisholm et al. 2006; Brehm et al. 2006). These methods may not allow individuals to acknowledge that their behaviour may have changed tacitly but they are unable to identify that they have or equally they

may be unable to articulate why their behaviour has changed. Although these data collection methods serve a purpose, they provide a very limited perspective on any aspect under study with the risk that something relevant is overlooked or its importance overstated.

The pharmacy specific literature has a heavy reliance on quantitative methods in researching professionalism in pharmacy. Studies by Wagner et al. (2007) and Goldie et al. (2007) both used qualitative approaches to examine medical professionalism. These studies utilised focus groups for data collection which were then transcribed and analysed. However, in their analysis of the transcripts they treat the meanings and intentions of their participants as objects independent of the participants' thoughts about them, rejecting interpretivism for positivism (Pring 2004).

As noted in chapter one I wished to adopt an approach that privileges the voices of the students in this study, therefore challenging the dominance of positivistic approaches to researching professionalism in pharmacy will be one influencing factor in the construction of the conceptual framework in chapter three.

Summary

In reviewing the literature it is clear from the frequent citing of the White Paper (American Pharmaceutical Association Academy of Pharmacy Students, American Association of Colleges of Pharmacy Council of Deans 2000) as the rationale for a particular study the apparent importance that has been this placed on this paper. This is potentially problematic as the conceptions of

'professional' contained in the document have been used uncritically and with no reference to the large volume of sociological writing in this area.

In reviewing the literature that relates to professionalism in pharmacy this chapter has revealed the narrow focus and myopic approach that dominates the literature in this topic. Professionalism is conceptualised as a topic that can be characterised and consequently taught, learnt and assessed. The pharmacy literature attempts to construct being 'professional' as a certain linear process, adopting a traits-based approach to conceptualisation of being 'professional' where demonstration of the required traits suggest that you can act as a 'professional'.

The critique of the literature in this chapter has demonstrated a lack of primary research into professionalism in pharmacy, particularly in relation to pharmacy education. Traditionally, the research that has been undertaken in the name of pharmacy has been lab-based experimental work or clinical or pharmacy practice based research. Although these research areas employ quantitative and qualitative research methods, the philosophical stand point from which they are interpreted has been grounded in positivism and there is a need to investigate how other research philosophies could provide a fresh perspective to all areas of pharmacy research. This review informs the conceptual framework of this study that will be constructed in chapter three.

Chapter 3 - Framing the Study

This chapter presents the conceptual framework constructed to frame this study, articulating a "system of concepts, assumptions, expectations, beliefs and theories" (Maxwell 2005 p. 33) that support and inform how the study was designed and conducted. Miles and Huberman (1994) argue that at the outset of a study researchers will have a preliminary conceptual framework.

> "The researcher has an idea of the parts of the phenomenon that are not well understood and knows where to look for these things - in which settings, among which actors. And the researcher usually has some initial ideas about how to gather the information." (Miles and Huberman 1994 p. 17)

As described in chapter one, I was drawn to Scanlon's (2011b) metaphor of "looking back, looking forward" (p. 1) as way of understanding my own experiences of 'becoming' a pharmacist. Reflecting on these experiences it led me to question how pharmacy students experience the multiple and contested notions of 'professional' and how they develop identities as a pharmacist. As outlined in chapter one, the landscape of pharmacy practice is ever-changing with consequences for pharmacy education. Chapter two situated these ideas further by drawing on the published literature demonstrating the issues that are present in the literature. The critique of the literature in chapter two demonstrated a lack of primary research into professionalism in pharmacy, particularly in relation to pharmacy education. The pharmacy literature is dominated by studies that attempt to examine how professionalism can be taught, learnt and assessed, highlighting a gap in the literature where the professionalism is examined from the perspective of individual students to gain an appreciation of how students might view and make sense of their

transition from pharmacy student to pharmacist. I was therefore approaching the fieldwork with an "orientating idea" (Miles and Huberman 1994 p. 17).

Research Aim and Questions

Articulating research questions for a study "force[s] you to consider that most basic of issues - what is it about your area of interest that you want to know?" (Bryman 2012 p. 10). In this section I articulate the research problem that emerges from chapters one and two in the form of a study aim and research questions.

This study aims to explore the experiences of pharmacy students as they progress towards 'becoming' a pharmacist. This study sets out to specifically address the following research questions.

- What themes and patterns emerge as students represent their identity?
- In what ways do pharmacy students represent their experiences of 'becoming' a pharmacist?
- How do pharmacy students position themselves within the 'profession'?
- In what ways are the identities of pharmacy students represented as they transition from student to pharmacist?

Arguing that disciplined inquiry can be approached from many different paradigms, Guba (1990) views a paradigm as a "basic set of beliefs that guide action" (p. 17) which can be described by responses to three basic questions; epistemological, ontological, and methodological. The remainder of this chapter continues to construct the conceptual framework of the study by

responding to the basic questions of epistemology, ontology and methodology thereby connecting with a research paradigm (Maxwell 2005).

Epistemology and Ontology

This section discusses how issues of epistemology and ontology are considered in this study. These considerations are then used to inform the theoretical perspective of this study and its methodological approach.

Epistemological assumptions deal with the nature of knowledge and "how we know what we know" (Crotty 1998 p. 8). Crotty's framework of four basic elements of research views that ontological assumptions emerge along with epistemological assumptions, whereas Cohen et al. (2011) adopts Hitchcock and Hughes notion of epistemology and ontology that ontological assumptions give rise to epistemological assumptions which in turn influence methodological considerations. Although Crotty and Cohen describe the relationship between epistemology and ontology differently, they agree that epistemological and ontological assumptions underpin methodological considerations and consequently the particular methods that are employed in a study.

Issues of epistemology and ontology can be approached from different perspectives, and at times there is a blurring of distinctions between whether a particular position is called an epistemology or ontology. Crotty (1998) refers to objectivism as an epistemology that "holds that meaning, and therefore meaningful reality, exists as such apart from the operation of any consciousness" (p. 8) whereas Bryman (2012) describes objectivism as an

ontological position that "asserts that social phenomena and their meanings have an existence that is independent of social actors" (p. 33). Similarly to Crotty and Cohen's differing descriptions of the relationship between epistemology and ontology, Crotty and Bryman differ on their description of objectivism as an epistemology or ontology. They are however consistent with their conceptualisation of objectivism as a stance where everything has a meaning independent of our interactions with it, as illustrated by Crotty (1998):

> "That tree in the forest is a tree, regardless of whether anyone is aware of its existence or not. As an object of that kind ('objectively', therefore), it carries the intrinsic meaning of 'tree-ness'. When human beings recognise it as a tree, they are simply discovering a meaning that has been lying there in wait for them all along." (p. 8)

Crotty's illustration resonates with how the pharmacy literature explored in chapter two conceptualises notions of professional and professionalism. The literature assumes that pharmacy is a profession regardless of whether anyone is aware of it or not, like the tree in the forest. It further assumes that there is an intrinsic meaning of 'professional-ness', in the same vein as a tree carries an intrinsic meaning of 'tree-ness'. This notion of 'professional-ness' would perhaps be more commonly understood as professionalism, which the Oxford Dictionary (Soanes et al. 2001) defines as a noun meaning "the competence of skill expected of a professional" (p. 1022). Therefore, when the terms professional or professionalism are deployed in an objectivist stance, humans are simply recognising a meaning that has been lying in wait from them to discover. Such meanings assume a single universally shared and static understanding of what and who a professional is, and as discussed in chapters one and two such notions are problematic.

Constructivism as an alternative position to objectivism asserts "that social phenomena and their meanings are continually being accomplished by social actors" (Bryman 2012 p.33). This stance unlike objectivism believes,

> "there is no objective truth waiting for us to discover it. Truth, or meaning, comes into existence in and out of our engagement with realities in our world." (Crotty 1998 p. 8).

In essence this means that the tree in Crotty's analogy of objectivism has no meaning until a human being interacts with it; there is no undiscovered meaning lying waiting to be discovered. Likewise constructivism offers a way of understanding notions of professional and professionalism as being continually constructed and deconstructed by actors. Understandings of these terms are varied and multiple, there is no universally shared understanding. In other words they are constructed by individuals rather than imposed upon them.

Social constructivism describes an approach to research that attempts to reveal individuals' "understanding of the world in which they live and work" (Creswell 2007 p. 20). A social constructivist stance views 'reality' and 'knowledge' as relative concepts, accepting there are differences between what societies understand as 'knowledge'. Accepting that "human 'knowledge' is developed, transmitted and maintained in social situations" (Berger and Luckman 1966 p. 15), Berger and Luckman suggest that the focus of understanding should be the processes that constructs this 'knowledge' as an accepted 'reality' by individuals and not what passes as 'knowledge'.

Adopting a social constructivist stance in this study challenges objectivist assumptions about the world as having a defined 'knowledge' and 'reality' of

its own that is encountered by pharmacy students 'becoming' a pharmacist. Situating this study in a social constructivist paradigm accepts the multiple realities of pharmacy students' experiences of 'becoming' a pharmacist. It rejects the notion that there is a body of knowledge that can be defined and labelled as professional or professionalism and instead accepts that pharmacy students experiences of 'becoming' a pharmacist are constantly being developed, transmitted and maintained through social situations within which they participate. It is these social situations that are the focus for inquiry in this study. Furthermore, constructivism rejects notions of hierarchy, removing constraining forces such as culture and organisation that represent external frames of reference that pharmacy students encounter, which from an objectivist stance would be viewed as realities confronting students.

Theoretical Perspective

Emerging from a constructivist epistemology, interpretivism views the objects of the natural sciences as being fundamentally different from the individuals that inhabit the social world, as Schultz argues;

> "The world of nature as explored by the natural scientist does not 'mean' anything to molecules, atom and electrons. But the observational field of the social scientist – social reality – has a specific meaning and relevance structure for the beings living, acting, and thinking within it." (Schultz cited in Bryman 2012 p. 30)

An interpretivist stance privileges the individuality of humans directing attention to discovering the differences and particularities of human affairs by exploring "what people think, what happens and why" (Arksey and Knight 1999 p. 10). It contrasts with positivism as a theoretical perspective that emerges from an objectivist epistemology that suggests, "all genuine knowledge is based on sense experience and can only be advanced by means

of observation and experiment" (Cohen et al. 2011 p. 7). Positivism argues that knowledge exists independent of human consciousness and that by rigorous inquiry this knowledge can be uncovered and used to describe the world in terms of laws and generalisations (Arksey and Knight 1999). Studying the social world from a positivist perspective assumes that through observation and experiment, human behaviour can be explained allowing general theories of human behaviour to be developed and validated by the collection of empirical data (Bryman 2012). That is not to say that a positivist stance cannot be adopted in social science, Marx suggested that it is possible to establish universal definitions and laws that apply in society if you examine "the behaviour of millions of people over long period of time" (Arksey and Knight 1999 p. 10).

Chapter two illustrated that the approaches within published literature examining professionalism as a concept in pharmacy have been grounded in objectivist epistemologies framing understandings of 'professional' in positivistic terms. Framing understandings of professional in this way the authors of the literature have attempted to establish generalisations and universal laws about professionalism in pharmacy. This study challenges portrayal of these notions in positivistic terms by adopting an interpretive stance as a theoretical perspective for this study.

As established in chapters one and two, the phenomenon that is being examined in this study is the experiences of pharmacy students 'becoming' a pharmacist and therefore is essentially concerned with investigating the "sentient experience of being human" (Arksey and Knight 1999 p. 10); a

uniquely individual experience. Adopting an interpretivist perspective in this study provides a way of examining "culturally derived and historically situated interpretations of the social-life world" (Crotty 1998 p. 67) of pharmacy students. An interpretivist perspective attempts to understand the multiple social realities that individuals encounter thereby providing interpretations of the "multifaceted images of human behaviour" (Cohen et al. 2011 p. 17) which is viewed as intentional and not simply a response to external or internal stimuli.

The interpretivist stance adopted in this study recognises that the meanings that pharmacy students ascribe to their experiences of 'becoming' a pharmacist are constructed through their engagement with the world as they experience it and only they as an individual can share this personal knowledge of their experiences. By adopting an interpretive stance, this thesis will make an original contribution to knowledge and educational practice by privileging the individuality of pharmacy students' experiences, revealing uniqueness and personal experiences of pharmacy students as they undertake the required educational programme for registration as a pharmacist.

Methodological Considerations

Describing methodology as "the strategy, plan of action, process or design lying behind the choice and use of particular methods" (Crotty 1998 p. 3), Crotty argues that it is more than just an account of what was done, but provides a rationale for the choice of methods grounded in the underlying epistemological and ontological perspective adopted. Cohen et al. (2011)

suggests that there is no single framework for planning research and argues that the purpose(s) of the research should determine its methodology.

The purpose of this study was to explore the experiences of pharmacy students 'becoming' a pharmacist, inquiring "into the meaning individuals … ascribe to a social or human problem." (Creswell 2007 p.37). The 'social or human problem' that this study was concerned with was exploring the multiple and varied constructed worlds of pharmacy students 'becoming' a pharmacist. The interpretivist stance adopted in this study therefore requires that these worlds are explored through the eyes of pharmacy students and attempting "to understand, describe and sometimes explain social phenomena 'from the inside'" (Flick 2007 p. ix). Such an approach emphasises the collection and analysis of words over quantification (Bryman 2012) and is concerned with developing an understanding rather than with control and prediction (Pinnegar and Daynes 2007).

Narrative inquiry as a particular qualitative research approach (Chase 2011) was adopted because this study was specifically interested in narrated stories of lived experiences. A narrative inquiry approach to research privileges and explores the life of the individual, focussing on the stories that the individual narrates offering a way to "examine experience with an eye to identifying new possibilities within that experience" (Clandinin and Rosiek 2007 p. 55). Clandinin and Rosiek (2007) argue that human beings fill their world with meaning by telling stories and talking about the stories that they have told. This understanding of how individuals create meaning emerges from social

constructivist ways of viewing the world and is consistent with the

interpretivist stance adopted.

As alternatives to narrative research, ethnography and case studies are also

research approaches that can be employed to gain an understanding of social

phenomena from the point of view of the individual(s) experiencing the

phenomena. Ethnographic approaches to research focus on cultural groups

examining "shared and learned patterns of values, behaviours, beliefs and

language" (Creswell 2007 p. 68). Whilst pharmacy students could be viewed

as a cultural group, this study was concerned with individual experiences and

not with how the cultural group operates. Case study research is concerned

with examining how a system operates over a period of time, drawing on

multiple sources of information to develop an in-depth description and analysis

of the case(s) being studied (Creswell 2007). The case study approach can be

adopted with the individual as being the unit of analysis but Creswell argues

that this approach be adopted when it is considered that the context of the

case might be pertinent to the phenomenon being studied (Creswell 2007).

Interviewing

Interviewing can be used within different research designs as an approach to

answering research questions. Arksey and Knight (1999) argue that

interviewing should be viewed as a family of approaches that are based on

conversation between two people as opposed to a single method. They portray

interviewing approaches as a continuum, from a structured interview,

producing "simple descriptive information" (Arksey and Knight 1999 p. 4) to

an unstructured interview producing "findings that generate deep insights into

people's understandings of their social world" (Arksey and Knight 1999 p. 7). An unstructured interview in comparison to a structured interview provides the respondent with the opportunity to talk about the subject from their own frame of reference, using their own words and expressing their own ideas about it (May 2001). Allowing respondents to talk about a subject from their own frame of reference is consistent with a narrative approach because by telling stories and talking about the stories they have told, humans beings fill their world with meaning (Clandinin and Rosiek 2007). This approach, although time-consuming and adding a degree of complexity to transcription and analysis of the interview, provides the interviewer with the "stories and perspectives" (Arksey and Knight 1999 p. 8) of the respondents and thereby "challenges the 'truths' of official ways of seeing" (May 2001 p.124).

Unstructured interviewing therefore offers a way of exploring pharmacy students' experiences of 'becoming' a pharmacist because it is "a uniquely sensitive and powerful method for capturing the experiences and lived meanings of the subject's everyday world" (Kvale 2007 p. 11) and as such fits within a constructivist paradigm claiming that "perception, memory, emotion and understanding are human constructs not objective things" (Arksey and Knight 1999 p. 8).

As highlighted in chapter one, there were a number of 'selves' that I brought to the field. Whilst my familiarity with the field of study due to having been a pharmacy student, being a registered pharmacist and a lecturer in Pharmacy Practice is helpful in examining the field, it also challenged my ability to retain a degree of "qualified naïveté" (Kvale 2007 p. 12). There was a risk that by

asking questions I would be adding another frame of reference through which to view the responses from the interviews, to address this issue, a repertory grid technique was adopted as a method for conducting the interviews.

Repertory Grid Technique

A repertory grid technique (Cohen et al. 2011) is a conversational tool that enables an interviewer to obtain an in-depth description of an individual's view of the world with minimum observer bias (Canning and Holmes 2006). The technique is based on Kelly's Personal Construct Theory (Kelly cited in Norton and Morgan 1995) which was derived from his own clinical experience as a psychotherapist. Personal Construct Theory proposes that people make sense of the events around them via a set of dimensions called 'personal constructs' and that people differ from each other in their construction of events (Cohen et al. 2011).

Kelly is viewed as an influential figure for establishing a constructivist emphasis within psychology generally and psychotherapy in particular, and his own philosophy of constructive alternativism that Personal Construct Theory is built on states that;

> "We assume that all of our present interpretations of the universe are subject to revision or replacement … there are always some alternative constructions available to choose among in dealing with the world."
> (Kelly cited in Fransella 1995 p. 42)

In this statement Kelly prioritises the importance of the individual's interpretation of the universe and recognises that these interpretations are multiple and variable. Kelly's Personal Construct Theory shares much with constructivism as both "see the person as having no direct contact with

reality; we only know reality by the ways in which we impose our own meaning on it" (Fransella 1995 p. 130). Personal constructs are therefore the basis by which people understand their experiences of the world they encounter and these constructs can be elicited through the development of a repertory grid. In its simplest form a repertory grid is a framework of elements and constructs that describe an individual's view of the world. This is a process where a person "is invited to show the ways (constructs), in which he or she discriminates or construes the things or items of experience in his or her world; these are called elements." (Taylor and Hallam 2008 p. 287).

The Repertory Grid Technique has been adopted in a range of different disciplines. Although predominantly used in psychology research (Norton and Morgan 1995), it has also been used in management training (Easterby-Smith et al. 1996), market research (Marsden and Littler 2000), travel research (Coshall 2009) and educational research (Taylor and Hallam 2008). Norton and Morgan (1995) drew on a simplified process of the repertory grid technique to develop a new measure of self-esteem called the Ideal-Self Inventory (ISI). They identified that the traditional measures of self-esteem were reliant on content that was research-driven and may not necessarily reflect the experience of the person completing the measure. The use of the ISI reflected a change in perspective for psychology research from an observational to experiential perspective where the focus of the research is on understanding how the individual perceives reality.

In developing the ISI, the authors drew on the work of Button who used the construction of a repertory grid as a technique to allow the comparison of a

person's 'present self' to their 'ideal self'. Based on Kelly's Personal Construct Theory, Button used the element of the 'ideal self' to define the value of each bi-polar construct for that person. Norton and Morgan's (1995) ISI is a much simplified adaption of Button's approach, but it is still underpinned by the principle that the person completing the ISI is establishing the facets of their own self-esteem rather than the imposition of externally derived facets. Norton and Morgan's (1995) approach asked the participant to list ten characteristics that would describe their ideal self and for each characteristic to list its opposite. By describing the opposite to each characteristic the participants were describing a set of constructs that described their perception of self-esteem. The participants were then asked to rate themselves on a seven-point scale for each construct where seven was nearest to ideal and one was nearest to not ideal. This process provided an overall self-esteem score as well as a profile of characteristics that the individual felt best described how they conceived self-esteem as a concept and the constructs that they used to establish their own level of self-esteem. A completed repertory grid therefore presents an individual's self-constructed view of the world in both a qualitative and quantitative manner.

Recognising the ability of the technique to generate both qualitative and quantitative data, Canning and Holmes (2006) adopted the technique in a museums consultation project because it enabled local residents "to express their opinions candidly in their own terms thus producing high quality, detailed and insightful data" (p. 292). They also capitalised on the technique's visual representations (the production of repertory grids with scores) to present these opinion to policy-makers, participants and practitioners in a way that

was easily understandable. Using the repertory grid technique in their study Canning and Holmes (2006) identified that it encouraged participants to freely express in their own words the things that mattered most to them and that it has "significant potential to provide a structured and comprehensible method for discussing very complex and personal issues" (p.293).

Adopting the repertory grid technique to explore the meaning that musical skills had for eight older learners, Taylor and Hallam (2008) found that the construction of the grids "acted as a catalyst for discussion" (p.287). These discussions, due to the richness of conversation they produced, became increasingly important and the numerical scores generated by the grid became less so. Taylor and Hallam (2008) recognised that what was more important was how people think and feel and by using interpretive phenomenological analysis they were able to gain an understanding of how learners made sense of their instrumental musical learning without using detailed quantitative measures.

Critics of this technique cite the tension between individuality and commonality as problematic in employing this technique in research (Cohen et al. 2011). In accepting that the elicitation of a grid from an individual is the most valid representation of the individual's understanding of the concept(s) being studied, it makes comparison based on numerical scorings of grids between individuals difficult because the elements and constructs elicited from individuals are different and therefore there is no commonality for comparison. In explaining why the repertory grid technique has failed to reach its full potential in consumer research, Marsden and Littler (2000) argue that the

technique has been grafted onto the "dominant positivist paradigm in consumer research" (p. 817) rather than being deployed in an interpretive paradigm where Kelly's Personal Construct Theory has its origins.

Adopting The Repertory Grid Technique in this study

The use of the repertory grid technique as a basis for the generation of data in this study draws on Taylor and Hallam's (2008) use of the repertory grid technique as a 'catalyst' for discussion. Although Norton and Morgan (1995) adopted the scoring system to calculate an overall score for self-esteem and Canning and Holmes (2006) used the quantitative scoring as a tool for easily explaining the findings of the research to their audiences; the scoring of responses was not adopted in this study. The scoring of responses was not adopted because as established earlier in this chapter this study adopted an interpretivist stance and therefore was concerned with exploring "what people think, what happens and why" (Arksey and Knight 1999 p. 10). Taylor and Hallam's (2008) and Canning and Holmes' (2006) use of the technique has demonstrated its ability to generate relevant data to explore individual perceptions of reality, which is consistent with the interpretive stance taken in this study. This study was aimed at gaining an understanding of the worldviews of pharmacy students and embraced the repertory grid technique as an interpretive research framework as posited by Marsden and Littler (2000). By adopting this method the students participating in this study articulated a set of constructs they felt described their conception of an 'ideal pharmacist', they then positioned themselves within their own construction of an 'ideal' pharmacist. The repertory grid technique was used as an approach to interviewing as it provided a means for students to share their "experiences

and lived meanings of [their] everyday world" (Kvale 2007 p. 11) in their own words.

Approach to Analysis

Adopting an interpretivist stance this research acknowledges that the object of investigation is the world of lived reality and the situation specific meanings of social actors (in this case pharmacy students) that they construct "through prolonged complex processes of social interaction" (Schwandt 1998 p. 222). There are a number of different approaches to the analysis of the lived reality of individuals and all are committed to seeing "through the eyes of respondents and participants" (Gibbs 2007 p. 7), including a narrative approach to analysis which was adopted in this study.

Narrative analysis is an analytical approach that focuses on how people make sense of what happened to them and to what effect (Bryman 2012). Narratives are a natural way of conveying experience and give insight into the important themes for the narrator (Gibbs 2007) and as Cohen et al. (2011) states they enable "events to 'catch fire' as they unfold" (p. 554). In narratives people make sense of their past experiences and share these with others, they are one of the fundamental ways that people make sense of their world, therefore careful analysis of narratives can reveal the way in which people understand the meaning of key events in their lives and the cultural contexts in which they live (Gibbs 2007).

The definition of what constitutes a narrative varies between different investigators and methodological assumptions; the entire life story is viewed

as narrative in social history and anthropology but in a different approach they can be viewed more restrictively as specific topical stories in response to single questions (Riessman 2002).

Efficiently organising and reducing large quantities of data into categories, content analysis was not adopted in this study, due to the potential for reducing the variation and multiplicity of experiences that were captured in the generated data. Although the findings of this study will be grounded in the data, a Grounded Theory approach was not adopted in the analysis of this study. More accurately regarded as a method of qualitative inquiry rather than an approach to analysis, a Grounded Theory approach uses the analysis of generated data to develop a theory that is checked by the generation and analysis of further data (Silverman 2011). This approach utilises a process of coding of the data to produce a series of concepts that are then elaborated into categories that ultimately form the new theory. One of the criticisms of Grounded Theory is the resultant fragmentation of data that the process of coding creates and the loss of narrative flow of what people have said (Bryman 2012). The fragmentation of data and disembodiment of the text that can result from coding and retrieval exercises utilised in a Grounded Theory approach can be avoided by adopting a narrative approach to analysis.

As discussed earlier the interview as a research method allows the capture of "the experiences and lived meanings of the subject's everyday world" (Kvale 2007 p. 11) but what this produces is merely a representation of that world because it is not possible to directly access another person's experience, "We deal with ambiguous representations of it – talk, text, interaction and

interpretation" (Riessman 1993 p. 8). Accepting the premise that in interviews participants are providing representations of their experiences, it is necessary to accept that these representations are limited, as are all forms of representations. Riessman (1993) views meaning as being "fluid and contextual, not fixed and universal. All we have is talk and texts they represent reality partially, selectively, and imperfectly" (p. 15). However, Riessman also recognises that by telling about experiences people create a self – how they want to be known and therefore the narratives that are constructed are inevitable self-representations (Riessman 1993). In this study the transcripts of the interviews can be viewed as the students' self-representations of how they want to be known as a pharmacy student.

Arguing that humanist approaches to education provide only a partial understanding, Sørenson (2011) suggests that there is merit in expanding beyond just the human in education but to include the materiality of learning. A challenge taken up by Fenwick et al. (2011) who argue that socio-material approaches to educational research "interrupt understandings of knowledge, learning and education as solely social or personal processes" (p. 2), the point being, that "the material is enmeshed with the social, technical and human" (p. 3). Adopting a socio-material approach to understanding 'becoming', Mulcahy (2011) argues for viewing it as a material practice extending across a range of bodies, texts, objects and institutional contexts, as well as a process that individuals are caught up in. Embracing a socio-material approach in this study offers a way of examining the experiences of pharmacy students that extends beyond humanist understandings of learning, viewing "learning [as]

an effect of networks of material, humans and non-humans", in this sense learning is understood as being emergent as opposed to transmitted.

Drawing on actor network theory (ANT) as one socio-material approach, Gherardi and Nicolini (2000) examined how safety skills were learnt, conceptualising safety not as a body of knowledge which could produce safety by itself but as a system of entities that enact and perform safety through their interactions.

> "What we call 'safety' is the result of a set of practices shaped by a system of symbols and meanings which orient action but which consist of something more. Safety can therefore be viewed as a situated practice, an emerging property of a socio-technical system, the final result of a collective process of construction, a 'doing' which involves people, technologies and textual and symbolic forms assembled within a system of material relations." (Gherardi and Nicolini 2000 p. 333)

Drawing on Gherardi and Nicolini's approach to understanding safety through an actor network theory (ANT) lens, the notion of 'becoming' a pharmacist can also be viewed as a "set of practices shaped by system of symbols and meanings" (Gherard and Nicolini 2000 p. 333). Adopting a socio-material perspective in this study affords a way of thinking about 'becoming' a pharmacist that does not reduce learning to mechanistic and instrumentalist criteria and categories (Mulcahy 2012).

Fenwick (2010a) suggests that ANT studies are useful for "tracing the ways that things come together" (p. 111) offering "a way to sense and draw (nearer to) a phenomena" (Fenwick and Edwards 2011 p. 1). To draw nearer to the phenomena of 'becoming' a pharmacist, Law's conception of ANT as "a disparate family of material-semiotic tools, sensibilities, and methods of analysis …" (cited in Nespor 2011 p. 141) is taken-up in this study. These

concepts are being used as a 'metaphorical' toolkit to explore the micro-interactions and exchanges that students experience on the journey that is 'becoming' a pharmacist. Although individually they may seem inconsequential, when considered collectively these micro-interactions and exchanges expose the innumerable realisations of 'becoming' a pharmacist.

A central assumption of ANT is that "nothing is given or anterior, including 'the human'..." (Fenwick and Edwards 2011 p. 1), everything is therefore emergent, "perform[ing] itself into existence" (Fenwick 2010a p. 111). The aim of the analysis is therefore to examine what 'things' come together and how in this coming together they reveal insights about the experiences of pharmacy students 'becoming' a pharmacist.

Summary

This chapter has presented the conceptual framework that was constructed to frame this study outlining the epistemological and ontological considerations that underpin the theoretical perspective adopted. It has established that an interpretive stance was adopted in this study that informed the adoption of a methodological approach grounded in narrative inquiry, explaining the rationale for using a Repertory Grid technique for interviewing as a means of generating the data for the study. It has also established that a socio-material perspective was adopted in the analysis of the generated data using ANT as a particular lens through which to view the transcripts.

Furthermore, this chapter has established that this study is not concerned with being able to make generalisations based on findings, but is concerned

with exploring the lived experience of pharmacy students 'becoming' a pharmacist at one higher education institution. It accepts that knowledge is a construction which reflects the world as being constructed by our deliberations and not independent of them (Pring 2004). Therefore the central assumption of this thesis is one of non-uniformity of locally constructed meanings with variable constructions (Erickson 2011).

The next chapter describes and justifies all the steps taken in conducting this study within the conceptual framework constructed.

Chapter 4 - Conducting the Study

Chapter three presented the conceptual framework for this study. It established that the experiences of pharmacy students 'becoming' a pharmacist were being explored from an interpretive stance and that a methodological approach grounded in narrative inquiry was adopted. This chapter begins by outlining the design of the study and continues by providing an account of how the ethics of this study were considered; as all the decisions that were taken in conducting the study were underpinned by these considerations. In so doing it answers, in the context of this study, the question of "How I will be as a moral person in the world?" (Denzin and Lincoln 2011b p. 91). The chapter continues by providing an overview of the research process, including participant recruitment, generating the repertory grids, conducting the interviews and transcribing and analysing the interviews.

Introducing the Research Design

A research design reflects the relative importance that has been placed on different aspects of the research process, providing a framework that guides the collection and analysis of data (Bryman 2012). These aspects include the relevant importance attached to:

- Expressing causal connections between variables
- Generalising findings beyond the participants that were part of the investigation
- Understanding behaviour and its meaning in specific social contexts
- Having a temporal appreciation of social phenomena and their interconnections

(Adapted from Bryman 2012 p. 46)

Different research designs place greater or lesser importance on these aspects. A longitudinal design aims to provide some insight into the time order of variables (temporal appreciation) and therefore to allow some causal connections to be made (Bryman 2012) by collecting data from a sample of cases on more than one occasion. An experimental design is also concerned with the identification of causal connections. As stated in the research questions this study was concerned with gaining an understanding of the experiences of pharmacy students 'becoming' a pharmacist and not with establishing causal connections between or a temporal appreciation of variables. Therefore a longitudinal and experimental design were rejected in favour of a cross-sectional design because it is not evident what variables it would be valid to investigate in a longitudinal study and over what time period these variables should be studied, particularly given that it takes a minimum of 5 years from the start of the Master of Pharmacy course to final registration as a pharmacist.

As this study was aimed at exploring the multiple and varied experiences of pharmacy students, case study and comparative designs were not adopted because they are more intensive investigations of a small number of cases, lacking the ability to uncover the multiplicity of experiences of pharmacy students that this study was aimed at revealing. Collecting data over a much shorter time period and from a larger number of cases, a cross-sectional design offered the ability to uncover multiple and varied experiences of pharmacy students (Bryman 2012).

Adopting a Narrative Inquiry Approach

Framing this study in a constructivist paradigm, chapter three rejected positivistic notions that findings from participants can be generalised beyond those who participated in the study. Pinnegar and Daynes (2007) view that a shift from a positivist, realist perspective towards a perspective that is concerned with interpretation and understanding of meaning is an important shift towards the narrative turn. This study was concerned with understanding the experiences of pharmacy students 'becoming' a pharmacist at a single higher education institution. It rejects what Pinnegar and Daynes (2007) describe as the "... positivistic dream of control, prediction, objectivity, and generalisability ..." (p. 15) and as such is focussed on gaining a local understanding of the experiences of pharmacy students at this particular higher education institution within which the study was conducted.

Pinnegar and Daynes (2007) argue that a shift towards a narrative turn can be identified by 'four turns':

- A change in the relationship between the researcher and the researched

- A move from the use of numbers towards the use of words as data

- A change from a focus on the general and universal towards the local and specific

- A widening of acceptance of alternative epistemologies or ways of knowing.

Adapted from (Pinnegar and Daynes 2007 p. 7)

They do not suggest that these turns happen in a particular order, but that they evolve as a researcher experiences different stages of designing,

studying and engaging in inquiries. I will use these four turns as suggested by Pinnegar and Daynes (2007) to describe the collection and analysis of the data in this study and thereby illustrate that this study can be viewed as a narrative inquiry. I will return to these notions again in the final chapter to review the extent to which this thesis reflects my embrace of narrative inquiry and to frame a discussion of the trustworthiness (Riessman 2008) of this thesis.

The 'Researcher and Researched' Relationship

In this first turn towards narrative inquiry (in calling this the first turn, no hierarchy is implied or imposed) Pinnegar and Daynes (2007) suggest that "narrative inquirers recognize that the researcher and the researched in a particular study are in a relationship with each other and that both parties will learn and change in the encounter" (p. 9). My role as a lecturer in pharmacy practice within the School, and the participants of this study as students of the course that I teach on, recognises that a relationship exists between the researcher and the researched. The acknowledgement of this relationship as one where both the researched and researcher can learn and change as a result of the encounter is problematic when viewing research from a positivist, realist perspective. But from the constructivist, interpretive perspective from which this study is conducted, the relationship is helpful in providing multiple understandings of specific social settings. Whilst this relationship could be viewed as being positive towards my role as a researcher and what I gain from the relationship, at the same time it could be viewed as a less positive one for the participants. Therefore, whilst this relationship was important and essential for providing the understandings that were gained from this study, I was particularly concerned with ensuring that there was no negative impact

for students by agreeing to participate in this study. Denzin and Lincoln's (2011b) question of "How I will be as moral person in the world?" (p. 91) was a useful question to guide the design and execution of the data collection, analysis and the production of this thesis. In providing a response to this question, I will foreground a description of how the data was collected and analysed with a description of the ethical considerations that were taken in this study and how they shaped the design and how the study was conducted.

Ethical Considerations

Ethics of social research can be considered from a deontological or consequentialist approach (May 2001). A deontological approach considers that certain acts are "wrong (or good) in and of themselves" (Bryman 2012 p. 134) and is viewed as a position on research ethics that is concerned with the application of a set of principles to guide the conduct of the research (May 2001). In contrast, a consequentialist approach is more concerned with the situations that researchers may encounter and the outcomes of their actions directing the researcher to consider "the consequences of an act for guidance as to whether it is right or wrong" (Bryman 2012 p. 134). In accommodating both a deontological and consequentialist approach to ethics as part of the research process in a narrative inquiry, Josselson (2007) encourages researchers to develop an "ethical attitude" (p. 538) in each research situation as opposed to simply complying with a list of specific rules for ethical practice. Josselson views this approach to ethics as a balancing act of honouring and protecting the research participants whilst ensuring responsible scholarship.

To 'honour' and 'protect' the participants of this study, Josselson's notion of an 'ethical attitude' that considers and adopts both a deontological and consequentialist approach was adopted in this study. This 'attitude' underpins the design and execution of this study, including the production of this thesis. In addition the study was conducted with reference to the Revised Ethical Guidelines published in 2004 by the British Educational Research Association (BERA) and was approved by the University of Stirling School of Education Research Ethics Committee. In adhering to the BERA guidelines study participants were provided with an information leaflet about the study (Appendix I). The information leaflet explained the purpose of the study, why the individual had been invited to participate, what will happen if they agree to participate and the possible benefits of taking part. The leaflet informed participants that there was no perceived benefit to them from participating in the research and their decision whether or not to participate in the research would have no impact on their progression through the Master of Pharmacy course. In addition the information leaflet also provided contact details for the Head of the School of Education at the University of Stirling, should the participants have concerns about the research process and their participation in the study.

Furthermore, as the research was conducted within the Robert Gordon University, approval from the School of Pharmacy & Life Sciences Ethical Review Panel was sought and granted. In complying with the Robert Gordon University (RGU) Research Governance Policy (Robert Gordon University 2004) this study was also conducted in accordance with all appropriate legislation, including The Data Protection Act 1998, Disability Discrimination Act 1996,

Race Relations Amendment Act 2000 and the Human Rights Act 1998. In addition this research also conformed to all RGU policies, including Health and Safety and the University's Research Ethics Policy.

Dual-Role Conflict

My role as researcher and educator in the institution raises the issue of what Hammack (1997) calls "dual-role conflict" (p. 249), where my role as an educator has potential to conflict with my role as researcher. As a researcher I have an obligation to the field to which I wish to contribute by ensuring responsible scholarship (Josselson 2007). As an educator I have a responsibility to my students.

The dual-role conflict also questions the decision to research my own practice, which from a positivistic perspective would be viewed as introducing bias. However, as is consistent with the interpretivist approach taken in this study I adopt a position similar to Miles and Huberman (1994):

> "As researchers we do have background knowledge. We see and decipher details, complexities, and subtleties that would elude a less knowledgeable observer. We know some questions to ask, which incidents are embodied in the field. Not to 'lead' with your conceptual strength can be simply self-defeating" (Miles and Huberman 1994 p. 17)

Miles and Huberman's position supports a case for researching pharmacy education as both lecturer and pharmacist and for researching my own institution, as it recognises that my dual-role conflict also offers insights that would have not been possible by a researcher who was not a lecturer within the institution or a pharmacist. However, at the same time this was also a challenge because I had to ensure that I was 'bracketing' my experience in terms of generating and analysing data.

In ensuring that my obligation to the students as an educator was not compromised, the study participants were informed in the information leaflet (Appendix I) that their decision to participate or not, would have no bearing on their progression on the Master of Pharmacy course. Reflecting on Pinnegar and Daynes (2007) acknowledgement of the relationship between the researcher and researched as one in which both parties learn and change, I considered that any learning or change experienced by the participants could be negative as well as positive. By asking the students to talk about their experiences of becoming a pharmacist I was concerned of the potential risk that they might question their choice about wanting to 'become' a pharmacist. Whilst this risk exists for all students on the course whether they participated in this study or not, the BERA Ethical Guidelines (British Educational Research Association 2004) place an obligation on the researcher to ensure that support for research participants is available where they experience unexpected detriment as a consequence of their participation in a study.

In the School of Pharmacy and Life Sciences all students are allocated a member of academic staff on enrolment on the course who acts as a personal tutor for the duration of their time with the School. The role of personal tutor within this institution is one of providing pastoral care and not directly related to course delivery. In assuming that all pharmacy students would be able to talk about their experiences of being a student and in the absence of any a priori information to inform the selection of interviewees, I invited my own group of personal tutees to participate in the study. Researching my own personal tutees could be viewed as potentially problematic. Students could be unsure about my dual-roles as interviewer and personal tutor, but at the same

time they could have felt confident with my role as interviewer and that they would be listened to because of our existing relationship as tutor and tutee and therefore more candid and open during their interview (Arksey and Knight 1999).

By selecting my personal tutees to participate in this study I was in a position to provide support if participants experienced any 'unexpected detriment' without breaching the confidentiality and anonymity of the researcher and researched relationship. Whilst recognising that this approach was a compromise, I considered it to be the 'least wrong' option, when adopting a consequentialist approach to the ethics of this study. If participants were concerned about the conduct of the study, they also had access to contact details for the Heads of School of the Institute of Education, Stirling University and School of Pharmacy and Life Sciences, Robert Gordon University, should they wish to raise these concerns.

Confidentiality & Anonymity

Participants were assured in the information leaflet (Appendix I) and reminded at all stages of the study that their participation in the study and any personal information they disclosed during the study would remain confidential. At all times throughout the production of this thesis, care has continued to be taken to protect the identity of the individuals who participated. This protection is not just limited to their participation in the generation of the data but also recognises that they could read this thesis (Erickson 2011). Therefore, not only has their identity been protected by assigning them pseudonyms (the gender of each participant was maintained in assigning pseudonyms), this

thesis does not indicate the academic session during which the data was generated and therefore readers of this thesis cannot determine which students would have been in each stage of the course at the time the data was generated. These measures were important to employ as blinding the reader to the institution within which the study was undertaken is not possible by my presence as the author; I remain an employee of the institution. The nature of the discipline of pharmacy also makes it impossible for the institution to remain anonymous, as there are only two providers of the Master of Pharmacy course in Scotland.

Power Relations

Power dynamics exist in any interview study by the nature of the fact that it is the researcher who asks the questions of the interviewee. The conflict of having a dual role of educator and researcher in this study also raised issues of power. In this study the pharmacy students undertaking the Master of Pharmacy course can be considered as a local community of elites. Invoking Harold Lasswell, Hunter (1995) views a community of elites as being "those who have more of whatever scarce values there are in a society, while the rest, who get less, are the masses" (p. 151). In this study students enrolled on the Master of Pharmacy course can be considered as a community of elites because they have local knowledge of what it means to be a pharmacy student at this particular institution during this particular period of history. In having access to more of this local knowledge than I do as a member of academic staff, there is a power relationship between us. Hunter further suggests that this power relationship cannot be ignored and views the study of elites as

being an "attempt to acquire knowledge from and about elites and to distribute it more broadly in a public domain" (Hunter 1995 p. 151).

Local communities of elites are not isolated; they are embedded in wider ecological, social and cultural contexts. Hunter suggests that rather than viewing these contexts as constraining, they can be used to structure fieldwork and analysis in order to elucidate what brings these communities together.

Cited in Hunter (1995), Goffman argues that there are "front stage and backstage settings for social behaviour" (p. 153). Hunter (1995) views that whilst the front stage is a reflection of the power of local elites, the backstage settings are the area where power is often wielded. He cautions that whilst researchers may be given access to these 'backstage settings', the researcher must always be cynical regarding the revelations of participants never underestimating "the elites' capacity for secrecy" (p. 153). Throughout this study I retained a degree of cynicism regarding the accounts that were provided by the participants in this study, recognising that the narratives and stories provided by participants were there own experiences and thus are unverifiable as truth or lie.

My status and role as a pharmacist and as an academic member of staff afforded a more 'subtle' exploration of the interview transcripts in this study than may have been possible by a non-pharmacist researcher who was not an academic member of staff. It was made clear to the participants at every stage of the research process that the research was being undertaken as

personal study for a doctorate of education and that the progression and performance of participants on the Master of Pharmacy course would not be affected by their decision to participate or not in this study. Hunter (1995) acknowledges that in undertaking fieldwork the status and role of a researcher undoubtedly enters into the on-going relationships of participants. Whilst from a positivistic perspective this would be viewed as "intrusive measurement error" (Hunter 1995 p. 158) it can be conceptualised from an interpretive perspective as a helpful effect "that can elucidate subtle aspects of power relationships among participants in a setting" (p. 158).

Rather than being problematic, researching one's own community has the potential to offer unique insights into the community by bringing to the study all the subtleties that living in the community affords (Hunter 1995). This view point is criticised by some as it "raises innumerable ethical and political issues or that is unduly restricting and parochial" (Hunter 1995 p. 161), however in this study I have demonstrated that ethical and political issues have been at the forefront of consideration of all stages of the design, planning and execution of the project. The intention of this study was not to make generalisable claims or to develop a grand theory, but rather to provide an in-depth exploration of the issue under study within a local context.

Informed Consent

Informed consent was sought from all participants prior to their participation in the study. The provision of the information leaflet (Appendix I) allowed participants to be fully informed about the research process. Participants were given the opportunity to ask any questions after reading the information

leaflet and if they were willing to participate they were asked to sign a consent form (Appendix II). Although all participants completed consent forms, they were also reminded of their right to withdraw from the research at any time for any or no reason.

Generating the data

The generation of data in this study was performed in two stages. Stage one involved the participants constructing their repertory grids which then became the focus of an individual interview with each participant in stage two. This approach to generating data in this study reflects Pinnegar and Daynes' (2007) second turn towards narrative inquiry as a move from the use of numbers to the use of words as data.

<u>Selecting and recruiting the participants</u>

Selection of potential participants for any study should be guided by the research questions (Bryman 2012) and can be identified using a range of different methods (Warren 2002). The important factor that governs this process is ensuring that those who are selected will have something to say that is relevant to the research questions posed. The research questions of this study are directed towards understanding the experiences of pharmacy students as they become pharmacists, therefore pharmacy students were selected and recruited to participate in this study.

Gaskell (2000) advises that for the individual researcher the number of interviews that it is necessary and possible to analyse is somewhere between fifteen and twenty-five. This limit recognises that interviews generate

significant quantities of data and also that there is a limit to the number of interpretations that can be made on a particular subject. The wider literature also presents a consistent answer to the question of 'how many interviews are required?'; "Interview as many subjects as necessary to find out what you need to know" (Kvale 2007 p. 43). Whilst some authors suggest ten to fifteen is sufficient other studies have used from six to twenty-five participants (Ganeson and Ehrich 2009). Gaskell (2000) further advises that for qualitative inquiries there is no single method for selecting participants and instead "the researcher must use his or her social scientific imagination to inform the selection of participants" (p. 42).

In using my 'social scientific imagination' I decided that it was important to speak to students from each of the five years of education and training that are required to become a registered pharmacist. By interviewing students from across these five years I was able to gather narratives and stories from pharmacy students that reflected their experiences of 'becoming' a pharmacist. Chase (2011) adopted a similar approach in her study and acknowledged that "by interviewing people and groups that are differently situated on campus" (p. 425) she was able to gain different views of the narrative environment.

During an academic session, I emailed all of my personal tutees and invited them to participate in the study. In addition a group of Robert Gordon University graduates who were undertaking their preregistration training year in Aberdeen were also invited to participate. A copy of the information leaflet about the study was attached to the e-mail. Following the first e-mail, all but

five students responded and agreed to participate, a further e-mail invitation was sent to the non-responders. No response was received and they were not contacted again. Twenty-one students from across the five years of education and training required for registration with the GPhC as a pharmacist agreed to participated thus maximising "the opportunity to understand the different positions taken by members of the social milieu" (Gaskell 2000 p. 41). This approach reflects a third turn towards narrative inquiry as proposed by Pinnegar and Daynes, that being a focus on the local and specific as opposed to the general and universal.

For the purposes of this study, pre-registration pharmacists were also classed as pharmacy students as they are not yet registered as pharmacists with the General Pharmaceutical Council (GPhC).

Stage 1 - Constructing the Repertory Grids

Construction of a repertory grid is an individual task. As described in chapter three, the repertory grid technique is a method that allows individuals to record their own constructs on a particular topic under investigation. Twenty-one participants attended this stage of the study. They were provided with a paper copy of the information leaflet regarding the project (Appendix I) and if they were happy to participate they were asked to read and sign a consent form (Appendix II). All participants attended an initial session at the same time where they were asked to complete two tasks in order to construct a repertory grid that represented their conception of an ideal pharmacist. This ensured that participants did not have the opportunity to discuss their thoughts about the grid as they were constructing the grid, therefore ensuring

that what was produced by the participants was as far as possible their own thoughts and ideas.

Task 1

The first task required the participants to generate pairs of constructs that they felt described an ideal pharmacist. Participants were provided with a template (Appendix III) on which to record their thoughts. This template also provided written instructions on what was required in this task. Participants were asked to write down single words or phrases that they felt best described an ideal pharmacist and the opposite to that i.e. the less than ideal pharmacist. Participants were told that these pairings did not need to be literal opposites e.g. hot and cold, but could be contrasting qualities e.g. warm and hostile. Verbal instruction from the researcher was also provided on an individual basis if any aspect of the task required clarification. There was no time-limit placed on the completion of task one and participants were asked to complete the task on their own without discussing with anyone else and to inform the researcher when they had completed the first task.

Task 2

Once participants had completed task one they were asked by the researcher to transfer their constructs on to a blank repertory grid (Appendix IV). If a participant had identified more than ten pairs of constructs they were first asked to select ten pairings that they felt best described an ideal pharmacist. The number of pairings was limited to ten in order to provide some boundary for the duration of the subsequent interview that would be based on the grid constructed by the participant.

Participants were then asked to transfer their selected pairings to the blank repertory grid template listing them in a decreasing order of priority i.e. their most important construct was listed first on the repertory grid. This produced an individual repertory grid for each participant that captured the constructs they felt best described an 'ideal pharmacist' and provided a framework within which the participant could position themselves in relation to their own conception of an 'ideal' and 'less than ideal' pharmacist. For each pairing participants were asked to position themselves between the poles of 'ideal' and 'less than ideal' pharmacist. Once each participant completed the repertory grid the researcher collected the complete grids and a suitable date and time was arranged for the participant to be interviewed about their grid.

Stage 2 - Interviews based on Repertory Grid

Participants were provided with a photocopy of their repertory grid, which confirmed an agreed time and date for their individual interview. These interviews were conducted approximately four weeks after the initial session. Interviews were conducted over a period of three weeks towards the latter half of the academic session.

Interviews were conducted in a shared student-staff space that was frequently used by both the researcher and the participants. This provided a natural context for the interviews that Eder and Fingerson (2002) suggest minimises any power differential between interviewer and interviewee.

All but two participants (one stage 1 and one stage 4 student) who constructed repertory grids participated in the subsequent interview. Two

attempts were made to arrange an interview with these two participants. After no response was received following the second attempt it was assumed that the participants had decided to withdraw from the study. As this study was about exploring experiences of students and no attempt was to be made at generalising beyond those interviewed, further participants were not recruited to replace the two who withdrew. This gave a total of nineteen participants who were interviewed, this number was still within the range that the literature guides as being an appropriate number of interviews (Gaskell 2000; Ganeson and Ehrich 2009).

Permission to audio record interviews was sought from each participant prior to commencing the interview. All participants granted permission for their interview to be audio recorded. Participants were informed that they could ask for the recorder to be switched off at any time during the interview and that they were also reminded they were free to withdraw from the project at any time. A digital audio recorder was used to record each interview and once each interview was completed the recording was transferred to the researcher's H:drive (a password protected networked storage area only accessible to the researcher) from the digital audio recorder. Once successful transfer had been confirmed the recording was deleted from the digital audio recorder.

As discussed previously, this study adopted Taylor and Hallam's (2008) approach to the repertory grid technique as a 'catalyst' for discussion, each participant's repertory grid was used as the basis for their interview. Starting with the first pairing on their grid the participants were invited to speak about their choices, sharing their thinking behind what they meant by each of the

pairings and their thinking behind how they positioned themselves against each of their own constructs. This process was continued for each of the constructs that participants included on their repertory grid. No time restriction was placed on the interviews allowing the participants to discuss their constructed repertory grids. Interviews ranged from 20mins to 45mins in duration. At the end of each interview participants were invited to make any further comments they felt relevant that they may not have captured in constructing their repertory grid.

Analysis

> "I might say that analyzing data is like peeling an onion. Every layer that is removed takes you that much closer to the core." (Corbin and Strauss 2008 p. 231)

In the chapters that follow, I intend, as in Corbin and Strauss's metaphor, to metaphorically peel away the layers of the students' experiences to move closer to the core. As Corbin and Straus (2008) state it is important to be clear at the beginning what a study is setting out to do. Therefore, before proceeding further with the analysis it is appropriate to state that this study is not attempting to build a theory. Rather the intention is to provide a theoretical understanding of the experiences of pharmacy students 'becoming' a pharmacist, and use this understanding to discuss, debate and "build a professional body of knowledge and enhance practice" (Corbin and Strauss 2008 p. ix).

> "With narrative, people strive to configure space and time, deploy cohesive devices, reveal identity of actors and relatedness of actions across scenes. They create themes, plots, and drama. In so doing, narrators make sense of themselves, social situations, and history." (Bamberg and McCabe cited in Riessman 2002 p. 698)

Through conducting and transcribing interviews in this study it was evident that the 'talk' that was happening in the interviews could be viewed as narratives. The students were describing their experiences of being a pharmacy student in terms of space and time. They were talking about 'actors' that they had encountered and described these encounters in terms of 'plots'. By telling their story they were making sense of their experiences of 'becoming' a pharmacist.

The analysis of this study began during the interviews themselves. In using the repertory grid technique I was able to focus on what was being said by the participants as they talked about their grid and the constructs they had identified. The process of transcribing was also part of the analysis of the interviews because it allowed for immersion in the data by listening and re-listening to the recordings to provide accurate transcriptions of the interviews. As this study was not concerned with the details of the expression and language used, verbatim transcription was adequate to provide an accurate transcript of the interviews (Gibbs 2007). Although transcription of data is not always necessary in order to analyse it (Gibbs 2007), all interviews in this study were transcribed verbatim and pseudonyms (as described previously) were allocated to each interviewee at this stage to assure their anonymity.

Heritage (cited in Bryman 2012) suggests that transcription of interviews allows a "more thorough examination of what people say" (p. 482) permitting multiple examinations of the responses provided by an interviewee. Once the interviews were transcribed and prior to the publication of this thesis the

participants were contacted and offered the opportunity to view their transcript. No participants accepted this offer.

In not only viewing the pharmacy students as constructing their own understanding of their lived world, I am also reminded that my understanding of their world is also a construction.

> "The inquirer must elucidate the process of meaning construction and clarify what and how meanings are embodied in the language and actions of social actors. To prepare an interpretation is itself to construct a reading of these meanings; it is to offer the inquirer's construction of the constructions of the actors one studies." (p. 222)

In preparing this interpretation it is therefore important that my reading of the students' meanings is grounded in the data that was gathered from the interviews. In being true to the epistemological underpinnings of this study it should be pointed out that the findings generated by this analysis can only be interpreted within the context of this study, this school of pharmacy, during this academic session. In other words, the study can only demonstrate how some pharmacy students represented their experience(s) of becoming a practitioner of pharmacy.

Pilot Study

A pilot study was conducted with pharmacy students at Strathclyde University prior to data collection being undertaken at Robert Gordon University to test the Repertory Grid technique as an interview tool. Pharmacy students from the School of Pharmacy at Strathclyde University were recruited for the pilot study as they experience the same process of education and training as pharmacy students at the Robert Gordon University (RGU). Conducting the pilot study with students from another institution allowed RGU students to remain 'blind'

to data generation process and therefore ensured that they could not discuss this process with each other prior to their participation in the study. The pilot study indicated that the instructions given were understandable and the tasks asked of the students were achievable. It confirmed that construction of the repertory grids in stage one required approximately twenty minutes and that the interviews in stage two would take around thirty minutes.

Summary

This chapter has provided a description of the research process adopted in this study. It articulates each step of the research process and illustrates that these steps are consistent with the conceptual framework constructed in chapter three. It demonstrates a concern for participants who agreed to participate in this study, demonstrating that the repertory grid technique acted as a supportive framework for generating data that minimised my presence as researcher in the study, but also recognising that my presence could and should not have been entirely neglected in this process.

Chapter 5 – Introducing the Student Narratives

"With narrative, people strive to configure space and time, deploy cohesive devices, reveal identity of actors and relatedness of actions across scenes. They create themes, plots, and drama. In so doing, narrators make sense of themselves, social situations, and history." (Bamberg and McCabe cited in Riessman 2002 p. 698)

The purpose of this chapter is to introduce the data that was generated in this study and to explore what themes and patterns emerge as pharmacy students represent their experiences of 'becoming' a pharmacist. The aim of this chapter is to reveal that through an iterative process of repeated listening to interview recordings and reading interview transcripts, characteristics of the students experiences were identified, observed and grouped so that data exhibiting similar characteristics emerged, and merged as patterns, revealing how the participants in this study made sense of themselves as 'becoming' pharmacists.

Analysis of the data demonstrates that whilst a range of individual experiences were shared by the participants, a number of common themes, patterns and stories emerged from all the interviews revealing a tension between experiences that appeared to give a sense of certainty about becoming a pharmacist and those that created uncertainty.

This chapter will contribute to answering the following research question outlined in chapter three:

- What themes and patterns emerge as student represent their identity?
- In what ways do pharmacy students represent their experiences of 'becoming' a pharmacist?

Introducing the Student Interviews

As described in chapter four, interviews were conducted with 19 of the 21 participants who completed a repertory grid. Interviews ranged in duration from 20 minutes to 45 minutes and as a result around eight hours of conversation was amassed during the data generation phase of this study. Each of the 19 interviews conducted in this study therefore represents the individual opinions of 19 pharmacy students on how they conceptualise the 'ideal' and 'less than ideal' pharmacist as described by a set of constructs. Whilst identification of these constructs was not the aim of this study, the elicitation of these constructs created a space for participants to discuss their personal constructions of an 'ideal' pharmacist and how they positioned themselves within this personal construction. The interviews therefore provided a space for the participants to construct and share a personal narrative of their experiences of 'becoming' a pharmacist.

A thematic analysis approach was adopted in this study and a number of themes have been identified from the analysis of the interview transcripts. Narratives can serve many purposes and as such can be analysed from a number of differing perspectives (Riessman 2002). Structural, interactional, performative and thematic analyses are all approaches that can be adopted in the analysis of narratives. Thematic analysis was adopted in this study because it is concerned with the content of a narrative rather than the way it is told, as is the concern of a structural analysis (Riessman 2005). A thematic approach to analysis of the narratives was used to identify themes and patterns that emerged from close listening to the audio recordings of the interviews and close reading of interview transcripts.

To illustrate the analysis, extracts of individual interviews have been selected from the eight hours of recordings of conversation with the participants. Ellipses have been used to indicate where quotes have been reduced for purely presentational purposes within this thesis or where a statement was preceded by further talk. Square brackets are used to denote insertions that have been made by the author to add clarity for the reader to what was being conveyed in the interview. The participants will be referred to using their pseudonyms and their year of study is indicated in brackets beside their name, although no attempt is made to draw conclusions based on year of study. To ensure anonymity of those not involved in the research process, pseudonyms have also been used where participants refer to other individuals or organisations.

Before presenting the themes and patterns that emerged from the analysis of the narratives that were constructed during the interviews there are a number of observations from the construction of the repertory grids and conducting the interviews that are worthy of mention.

Firstly, construction of a repertory grid as adopted in this study was an achievable task for the participants, with most participants identifying ten pairs of constructs that described their conception of an 'ideal' and 'less than ideal' pharmacist. Secondly, many of the constructs identified were expressed in generic terms such as friendly, approachable, good listener, good communicator. In most cases simply by viewing the constructed grids it would be impossible to identify the discipline or professional grouping that is being described. Thirdly, when positioning themselves within their own

constructions, only in a few cases did participants position themselves on a construct as being 'ideal'. In those cases where participants did position themselves as 'ideal', these constructs were related to being friendly or approachable, and participants considered these to be pre-existing personal attributes that they have always had. Although when discussing their constructs and their positioning against them, participants frequently explained that they did not position themselves as 'ideal' as they were only a student and not yet a pharmacist.

During the interviews participants talked about their experiences of pharmacy revealing a range of experiences. Some like Robina, Rachel and Donald worked in a pharmacy, whilst some like Neil, Olivia and Lucy had no experience of pharmacy and others like Nigel had only a limited experience of pharmacy prior to starting the course; mostly from work experience at school. Participants talked about the things they had learned as part of the course, they talked about what they expected to happen, they also talked about how they interpreted their own identity and position within the profession. They talked about things they knew and could do and the things that they didn't know and couldn't do, but talked with a degree of certainty that any gaps in their perception of their own body of knowledge and abilities would be addressed by the time they had finished at University or during their pre-registration year. They were certain about the things they knew and the things they didn't know or didn't need to know yet. The participants portrayed an overall sense that the pre-registration year was when you started to 'become' a pharmacist and University was a hurdle to get through to get to that point.

This chapter will continue by drawing on all 19 interviews to illustrate the themes, patterns and stories that emerged from the interviews.

Having a Good Knowledge

Many of the participants talked about having good knowledge as being a construct of an 'ideal' pharmacist. Participants talked about what they considered to be 'the knowledge' required by a pharmacist, that this knowledge is acquired at university, and is acquired cumulatively and hierarchically.

For Lucy, having knowledge and maintaining and updating that knowledge is key to the identity of a pharmacist,

> "... kind of the whole point of the job is that you supposed to have a knowledge of drugs and medicines and you need to keep up to date because it is always changing. You can't just learn what you learn in college and you never do any more reading or paying attention to what happens after that, you always have to keep current." (Lucy stage 1).

Olivia (stage 1) also expressed a notion of the pharmacist as being knowledgeable, but furthermore she considered that the knowledge provided patients with a sense of confidence regarding the pharmacists ability, "... if you go into a pharmacist and you meet a pharmacist who doesn't know anything you are not going to have much confidence in them." (Olivia stage 1). Participants described 'knowledge' in terms of the things they think a pharmacist needs to know, "knowledge of drugs and their interactions ..." (Olivia stage 1) or in relation to performing tasks, " ... knows everything about the PCS, ordering, eMAS, just everything how the pharmacy runs ..." (Susan stage 4). Rita talked about knowledge as being related to products, "I'm still learning about all the products ..." (Rita stage 1). For Rita these products

represent a series of facts that she has to learn before she can independently advise a customer, "... I don't have the knowledge of what to say to the customer yet, I'm still learning ..." (Rita stage 1). Products present knowledge as discrete objective facts such as what the product can be used to treat, how much of and how often it should be taken and who can use it and who can't.

Nigel (stage 2) and Susan (stage 4) also portrayed an idea that a pharmacist was a possessor of knowledge but they expressed this idea by listing what they considered as 'the knowledge' to be acquired to 'become' a pharmacist

> "...just know your drugs, know your side-effects, have a sound level of understanding, ehm, across all areas so that you are able to perform tasks whether that be hospital or community pharmacy." (Susan stage 4)

Nigel, however, articulated his list in more depth, by structuring the 'knowledge' into topic areas,

> "A pharmacist should know about everything, everything that is involved with medicine and stuff like that, like the laws, their clinical knowledge, about kinetics, drug manufacture stuff like that, they should have it all together and just being able to bring it all together day to day ... they shouldn't just be 'here is the drug, take it' they should be able to know about everything." (Nigel stage 2)

Nigel went onto acknowledge that it is just not about the accumulation and acquisition of knowledge but that a pharmacist also needs to apply this knowledge within a practice. A point that Rachel made in her interview, "... it is good practice to know that the information was always in my head anyway it is just having to say it to another person" (Rachel stage 2).

Although some participants expressed a sense of certainty about the knowledge they needed to acquire, Tracey seemed uncertain about some of

that knowledge, "I'm at uni and there are some modules that seem irrelevant

…" (Tracey stage 3). She continues to explain what she means by irrelevant,

> "Not irrelevant but not directly relevant like biotherapeutics right now or say if you are going to work in community some of the modules, I guess they all still tie up but they are not directly relevant say if you are going to work in community something like PLAP and SPAP and MIHI they are all interesting so you do them with enthusiasm, things like I don't know, sterile products, you'd be less enthusiastic." (Tracey stage 3)

Tracey reveals a strong sense of certainty that there are some topics that she considers as definitely important and other topics that are less so. At this point she is not aware that she needs to know about these topics, her understanding of what is required of a pharmacist is limited by her experiences, but yet she conveys a sense of certainty about what is or is not relevant in 'becoming' a pharmacist. This notion that some topics are less relevant is commonly encountered on the MPharm course. Some students view the 'science' based topics like biotherapeutics and sterile products as less relevant because they do not see how they can be applied in practice, unlike Rita's concern for learning about products. Rita can easily see how this knowledge can be applied in practice because once she learns the information she can use it directly with a patient in a tangible way. As Tracey indicates, she accepts the modules have some relevance but they are "… not directly relevant …" (Tracey stage 3) when working in community pharmacy. This notion suggests a concern for how knowledge of a particular topic can be applied. The application of topics such as biotherapeutics and sterile products are not readily visible in community pharmacy practice, unlike Rita's product knowledge. The application of the facts and theories that construct these topics are imperceptible and therefore can be difficult for students to imagine a 'real-world' application of these topics, therefore they consider these to be

less relevant. These topics contrast with other modules that Tracey mentioned "... something like PLAP and SPAP and MIHI they are all interesting ..." (Tracey stage 3), these topics are more discernible and identifiable as reflecting the 'real-world' roles and responsibilities of a pharmacist; students can observe these roles being performed.

Describing knowledge in terms of topics such as product knowledge, knowledge of interactions, side effects, portrays knowledge as being codified and written down. This understanding of knowledge is what Eraut (1994) refers to as "book knowledge" (p. 42) and which he considers to be only one form of professional knowledge.

In addition to viewing knowledge as being hierarchical, participants also talked about the acquisition of knowledge as being cumulative, where each year builds on the acquired knowledge of the previous year. In her interview, Lucy conveyed a sense of knowledge as being hierarchical,

> "... I'm a first year and I don't know much at all yet, I know very, very little ehm I mean I only know what we learned in first year which is very basic stuff ..." (Lucy stage 1).

Charles also suggested a notion that level of knowledge is related to year of study, "... your pre-reg is meant to be your building block, it's your final hurdle after you graduate from college" (Charles stage 4). Portraying the pre-reg as a 'final hurdle' suggests that Charles views progression through the MPharm course as about overcoming hurdles.

Olivia (stage 1) also expressed a similar notion, that as a first year pharmacy student she does not need to have the same level of knowledge as a

pharmacist, "… at the minute, seeing as I'm first year my knowledge base isn't as advanced as an actual pharmacist would be" (Olivia stage 1). This quote conveys a sense from Olivia that knowledge is conceived of hierarchically, there is a level of knowledge that is basic and appropriate for a first year student and there is knowledge that is advanced and therefore appropriate for a pharmacist. For Olivia, university is just about establishing a knowledge base, "… on graduation you just know your knowledge base from university …" (Olivia stage 1).

Nigel also expressed the notion that knowledge is hierarchical but also conveyed a sense of it being cumulative, "I'm only in second year and I've another two years to go" (Nigel stage 2), suggesting that he has more knowledge to acquire. Nigel continued by expressing his belief that "by the end of pre-reg year I'll be there … I'd say after pre-reg I'll be as knowledgeable as you can get" (Nigel stage 2).

Susan considered that her level of knowledge is acceptable for a fourth year student and she views that the pre-reg will help with developing her learning "It will get better you know through pre-reg or more experience in dealing with more patients" (Susan stage 4).

The certainty that the pre-registration year would provide an opportunity to address any lack of knowledge was also a viewpoint shared by Sally (stage 3),

> "… they [the university] kind of lead you to believe that is when it will happen 'oh you'll learn in pre-reg you will be fine if you don't understand now you'll see it then' …" (Sally stage 3)

Whilst participants talked about what they thought they needed to know as a pharmacist, some participants also talked about the limits of what they know. Lorna (stage 3) appears to be comfortable with not knowing everything and justifies this on the basis that she does not need to know everything as a pharmacy student because she is just learning,

> "It is more important when you are a pharmacist isn't it because you have the exams and stuff, just now you are just learning, I don't know everything to be able to know that I've made a mistake … whereas when I'm a pharmacist I should know everything" (Lorna stage 3).

Whilst Lorna expresses a sense of awareness of the limits of what she knows, she also expressed a sense of certainty that one day she will know everything. However, as Mary (stage 5) illustrates this was not the case for her,

> "I'm not going to pick up in everything, I don't know enough yet and I'm always going to be learning, so I think that it is a safe prescription as far as I can see, maybe a more qualified pharmacist may be able to pick up on other things which would be better for the patient" (Mary stage 5)

Mary reveals a belief that she will never know everything and that she will always have a degree of uncertainty about what she does as a pharmacist. She reveals a sense of being confident about ensuring a prescription is safe, but is open to accepting that there could still be modifications made that might make the prescription better for the patient. Modifications that she does not or cannot identify but a more qualified pharmacist might be able to. At the end of her interview Mary also shared her view that university was about acquiring knowledge,

> "… indemnity was something that we were never taught about at university and obviously every pharmacist need to have when they finish so therefore you should be equipped with this knowledge …" (Mary stage 5)

This section has illustrated that the participants in this study considered having a good knowledge as important for an 'ideal' pharmacist, furthermore, they viewed that being at university is about acquiring this knowledge. Propositional and procedural notions of knowledge dominate in the participant's narratives and appear to contribute to providing a degree of certainty about 'becoming' a pharmacist as about acquiring "book knowledge" (Eraut 1994 p. 42). This notion is perhaps understandable as Eraut (1994) acknowledges that presenting a knowledge base with an "aura of certainty associated with established scientific disciplines" (p. 14) is something that professions seek to do. Pharmacy is no different, the knowledge base of pharmacy draws on multiple scientific disciplines, chemistry, physics, biochemistry, pharmacology, formulation, drug analysis to name but a few. These scientific disciplines create an aura of certainty as the facts and theories, which construct them, are written down in textbooks, evidence bases, guidelines, policies, and procedures. The practice of pharmacy is therefore understood by the students as the application of this knowledge base to individual situations or patients, the practice of pharmacy remaining rooted in the domains of scientific (episteme) and technical (techne) knowledge, the knows and knows how to. In remaining rooted to these domains, students do not seem to express an understanding of practical wisdom or phronesis. Edward in his interview did tell a story that revealed he had experienced a situation where the pharmacist had demonstrated practical wisdom or phronesis in action;

> "... the pharmacist I've worked with have refused patients over the counter medications or even prescription medications ... we had a patient come in and say that she was suicidal in confidence, but the pharmacist decided to break the confidence ..." (Edward stage 3)

This chance occurrence demonstrated to Edward that at times it is necessary to go beyond the rulebook, but this kind of knowledge is not reflected in what we see in the domains of scientific (episteme) and technical (techne) knowledge. Phronesis or practical wisdom, can be understood as a form of knowledge "that can never be equated with or reduced to knowledge of general truths" (Flyvbjerg 2001 p. 57), it goes beyond just knowing or knowing how, and requires an individual to consider situations, to make judgements about what is good or bad in a given situation and ultimately to make a choice. In talking about knowledge in their narratives the students were only revealing notions of knowledge as being scientific and technical. This notion of being an 'ideal' pharmacist as about possessing a good knowledge will be explored further in chapters six and seven.

Focusing on the Technical

A number of the participants focused on technical tasks as being a component of the 'ideal' pharmacist.

Dispensing and Checking Prescriptions

The title of this thesis was inspired by one quote in which this became evident where Donald referred to himself as, "… I'm just the Sunday boy that goes in and dispenses" (Donald stage 4). At the time Donald was interviewed he was a matter of weeks away from completing his degree and commencing his pre-registration training year, yet he only viewed himself as 'The Sunday Boy' who dispensed; a technical task that can be described in a set of standardised, repeatable instructions with little or no requirement for independent decision making. Medicines are requested on a prescription, the prescription is read,

the appropriate items are selected to fulfil the request, they are labelled with instructions for the patient, the dispensed items under go a 'final check' against the original request.

Donald continued in his interview to share his approach to dispensing, "... I'll look at it [the prescription] and think well that is just aspirin, simvastatin and metformin, they are a fat diabetic and that's it, I don't try and get any background out of them..." (Donald stage 4). This comment from Donald is interesting because it demonstrates that he has an understanding that extends beyond the role that he has. He is aware that he should try and obtain background information but admits to not even trying. As a stage four student Donald would have been capable of talking to the patient to get background information and he would have been able to distinguish between patients that might need more information from those who do not. He demonstrates a nuanced understanding of drug choice; the choice of metformin does suggest the patient is overweight. Yet he refers to the combination of drugs as 'just', portraying a sense of familiarity with this situation, that it is routine and somehow unimportant or irrelevant to his current role. Donald focuses on the completion of the technical task of dispensing the prescription rather than focusing on the patient and the drugs they are prescribed.

In her interview Robina also focused on the process of dispensing and checking prescriptions, amongst other tasks, as a component of an 'ideal' pharmacist, "... checking prescriptions, going out the front, manager jobs, speaking to different types of patients, methadone patients" (Robina stage 1). Although for Robina checking prescriptions was the main task of a pharmacist,

"Well, I think in community pharmacy, prescriptions is mainly what you do …" (Robina stage 1). Similarly, Sally (stage 3) also focused on checking prescriptions as a component of an ideal pharmacist, "I think because well it is quite a main part of the pharmacists job is to check prescriptions and what has been dispensed", as did David "thorough checking technique ensures that patients will hopefully receive what was prescribed, so right label on the right box right amount of tablets, right strength".

For Sally dispensing and checking are two processes that she approaches differently, "I think dispensing is different because you get a box in your head and you see it and you just go to it, where as you just read the name and the strength and tables or capsules, as the pharmacist you are checking the names and the signatures and dates as well as the drugs and strengths and everything else" (Sally stage 3). Sally is still describing two different technical tasks, but expresses a view that being the pharmacist is just about adding another layer of technical checks to an already familiar process rather than about any independent decision-making. In her approach Sally 'blanks out' what to her appear as irrelevant information for the particular task she is completing, that is the dispensing of the prescription, "… I don't look at the names and things I just blank them out, too busy being fast just trying to get it all done" (Sally stage 3).

By separating the two tasks, Sally reduces these tasks to the simple execution of a technical task; a prescription is dispensed and then it is checked, there is a separation between the two tasks. She continues by saying "I do make dispensing errors but then dispensing is different from checking things" (Sally

stage 3), there is no recognition that dispensing is a skill that can be built upon to develop the necessary skills for checking a prescription. She has developed a mind-set of a dispenser, and does not treat the task any differently as a pharmacy student.

The process of dispensing and checking prescriptions that Donald, Robina and Sally talked about in their interviews sits within the domain of technical knowledge; the dispensing and checking of prescriptions is a technical task. These processes were historically viewed as the role of the pharmacist as discussed in chapter one, however, with the development of the technician role within pharmacy, this role has increasingly been undertaken by pharmacy technicians or dispensers with pharmacists focusing more on the 'final check'. The prescription is revealed through the student narratives of dispensing and checking of prescriptions as being central to their experiences as it recurs and appears in a number of different student narratives. The prescription as a non-human actor will be explored in more depth from a socio-material perspective in the next chapter, examining how it emerges as an actor in the socio-material ordering of things.

Focusing on technical tasks also emerged in more general terms, such as in Karen's (stage 1) interview where an 'ideal' pharmacist was conveyed as knowing how to do a job, "they are like competent at their job that they know what to do and they know how to do it". Karen is focusing less on specific tasks such as the dispensing and checking of prescriptions, but expresses a similar notion that an 'ideal' pharmacists is competent in the performance of technical tasks.

Communicating with patients

Being able to communicate with patients was also portrayed as a component

of an 'ideal' pharmacist by some students but again this was conceptualised as

the performance of a technical task.

Neil expresses a confidence in his ability to communicate

> "... I thought I'd be pretty good at being able to relate to the patient and be able to talk to them about everyday stuff ..." (Neil stage 1)

Frank and Rachel also talked about being able to do multiple tasks at the same

time, trying to juggle communicating with patients or colleagues whilst still

performing the technical tasks of dispensing and checking prescriptions.

> "... I'm doing my job just now I can't chat to you and sometimes it isn't always easy to strike up a conversation when you are trying to check a really horrible prescription or whatever ..." (Rachel stage 2)

> "... so you've different people asking different questions while you are also trying to check a prescription, while you've a doctor on the phone to check something is valid ..." (Frank stage 4)

Although portraying these in a matter of fact manner as a routine operation,

Frank (stage 4) also recognises that performing the technical tasks is not a

routine endeavour,

> "... every patient that comes in is a new situation, it is never exactly the same as the last you often don't have long to make decisions on whether you think it is a false prescription or you think it is the wrong prescription you have to think logically and make the right decision ..." (Frank stage 4)

Mary (stage 5) considers that the main role of a pharmacist is patient safety,

> "I think that a pharmacist's job is patient safety first, and that's really what we are there for, if a doctor prescribes something then we need to make sure that that is safe for the patient to take with their medical conditions, with the other medicines that they are on and yeh to make sure that they are safe to take" (Mary stage 5)

and the technical task that pre-occupied her was not dispensing and checking

prescription, but checking drug histories,

> "we have new medicine reconciliation forms to make sure that when a
> patient comes from home to hospital what they are prescribing when
> they come in is what they've been on when at home and to make sure
> there is no discrepancies and it's a national thing so I think it is pretty
> important" (Mary stage 5)

Frank, Rachel and Mary's narratives all still reveal this focus on the technical,

although not about the dispensing and checking of prescription. The checking

and dispensing of prescriptions still does appear in their narratives, but more

peripherally, Frank and Rachel talk about having to communicate whilst still

performing these tasks. The dispensing and checking of prescriptions is

revealed as a strong presence in their experiences as pharmacy students.

There is an equally strong presence in Mary's narrative too. The medicines

reconciliation form that Mary talks about in her narrative is very present and

appears to be an object that Mary's practice centers around. The 'national

thing' that Mary talks about is a Scotland-wide patient safety initiative that

requires all patients admitted to hospital to have their drug history checked

and verified by a pharmacist. Whilst this practice reflects the philosophy of

pharmaceutical care discussed in chapter one, it is also appears as a

controlling factor in how Mary constructs her practice. She does not appear to

embrace the form as a way of implementing pharmaceutical care but appears

to be responding to the presence of the form. The form takes on a power

coercing Mary into completing it because "it's a national thing so I think it is

pretty important" (Mary stage 5).

Multiple Identities as a Pharmacist

Students talked about differing identities of a pharmacist, the pharmacist was

viewed as manager, as businessman, as caregiver, and as an expert in

medicines.

Pharmacist as Manager and Businessman

Sasha talked about being a pharmacist as being a manager,

> "I think to run a pharmacy and to be pharmacy manager you've got to
> be approachable to your staff and for customers …" (Sasha stage 3)

For Lucy being a pharmacist was also about being a businessman versus a

carer of patients.

> "… thinking more of a pharmacist as a business … opposed to a treating
> patients and not all pharmacists are great business people …" (Lucy
> stage 1)

Nigel rejected notions of being a pharmacist as being a businessman,

> "… it is not about making money, it is not like, you don't see the people
> as something that you are going to make money out of, you are going
> to treat them and make them better, give them a better quality of life …
> I don't like the way, like some companies give targets to people to seek
> so much …" (Nigel stage 2)

In his interview Nigel very clearly was rejecting notions of being a pharmacist

as being about being a businessman. I will return to Nigel in chapter 6, where

his story about 'the pill' provides an interesting insight into why he expressed

this viewpoint quite so emphatically.

In his interview Edward shared his notion of a pharmacist as being an 'expert'

in medicines.

"I just feel that the pharmacist is the expert in medicines and everyone who talks to him should be clear that this man or lady is an expert in medicines." (Edward stage 3)

Pharmacist as Expert in Medicines

This notion of the pharmacist as an expert in medicines also links back to the notion of 'having a good knowledge' and attempts to persuade Edward that 'becoming' a pharmacist is about acquisition of knowledge and by acquiring 'knowledge' a pharmacist acquires a particular status as an 'expert' in medicines.

"This is obviously something that I'm focussing on at the moment, especially with exams coming up, definitely have to sharpen that skill, that is my main priority at the moment ... I think I'll come out my pre-reg razor sharp on scientific knowledge ..." (Edwards stage 3)

For Edward possessing this knowledge is where a pharmacist can draw confidence from.

"The strong scientific knowledge I hope will give the pharmacist confidence and a professional attitude and strengths ... without this confidence the pharmacist might stand back from making decisions or stand back from putting his point firmly across so even also to avoid errors, dispensing errors, contraindications, cautions it is ideal that the pharmacist isn't referring to the BNF every two minutes that he is only referring for specific details as opposed to re-learning subjects every time he gets a new medication he hasn't seen for a while." (Edward stage 3)

The BNF (British National Formulary) object that Edward refers to in his interview is a reference book that contains information about all the medicines that are available in the United Kingdom. Inscribed in the BNF are facts about individual drugs that are presented in a framework. This framework is designed to guide practitioners about how these drugs should be used to treat disease. These facts convey how much of the drug should be given, how often the drug should be given, who the drug should and should not be given to,

and what might be the unwanted effects of using the drug. The BNF as an object re-enforces a notion of certainty, facts can be known, and as such they can be inscribed into a textbook that he can refer to when required but also a sense that a pharmacist can acquire all of this knowledge.

Pharmacist as Re-assurance

In her interview Rachel expressed a notion that pharmacists are responsible for creating and maintaining a relationship with patients and that as a pharmacist behaviours that could compromises this relationship should be avoided.

> "… I've seen a couple of pharmacists get a little bit flustered and they have to say right hold on and they have to take a minute to get their thoughts, and it is not that I don't expect to be just an encyclopaedia of knowledge just flow out of me, but I think it puts a little bit of doubt in the patient and I've seen the patient take a step back and say alright do you actually know what you are talking about … but I think it is important for them [the patient] to know that their problems are in safe hands rather than you are just panicking or floundering a little bit." (Rachel stage 2)

This suggests the notion that pharmacist needs to present certain behaviours. Pharmacists cannot get 'flustered'. There is some unwritten rule that you have to present an image of being in control all the time and that performing a role as a pharmacist should be one of re-assurance. The patient should expect a confident pharmacist, who knows what they are doing.

Pharmacist as Trustworthy

Both Karen and Charles considered a pharmacist as in a position of trust. For Karen this trust reflects a societal perspective where society has placed trust in pharmacists to perform a specific role.

> "... they [patients] need to trust you because you are giving them their drugs, they might not understand everything about the drugs, ... you need to honestly tell them what they'll do or what will happen to them if they take the drugs you also need to be an honest person because you are responsible for all these drugs that can like potentially kill people and things if they are in the wrong hands so you need to have responsibility and honesty" (Karen stage 1).

Karen touches on a more nuanced aspect of the pharmacist-patient relationship. She recognises that this relationship is more than just a relationship between individual patient and pharmacist, but can be viewed on a societal level too. Pharmacists, by virtue of being recognised as pharmacists, are allowed and required to perform certain restricted functions and roles within society. Only pharmacists are permitted to supply medicines to individuals. This resonates with the discussion in chapter one that demonstrated how a role as a gatekeeper to medicines was constructed by the establishment of NHS, reducing the role and responsibility of a pharmacist to a more technical role. The pharmacist is therefore constructed by the enactment of legislation that controls who gets access to drugs and how that access should be mediated.

Charles viewed the notion of being trustworthy from an individual perspective relating to a relationship of trust between pharmacist and patient

> "Obviously I haven't worked as a pharmacist yet, so hopefully after my pre-reg I'll be one step up, but I think its, I suppose it is hard to say your 100% honest, but trustworthy at this stage but I felt that maybe where honesty is concerned you may sometimes have to tell a customer something which might not seem 100% correct, but you know you are making your own professional judgment so in that sense it might just be easier to not necessarily tell the truth straight-off ..." (Charles stage 4)

For Charles there is awareness that as a pharmacist he might need to adopt behaviours, such as not telling the truth, but as yet for him this has been

untested. Whilst Charles is imagining an identity as a pharmacist and how he might act in specific situations there is a sense of uncertainty about what being a pharmacist might mean for him. Charles seems to be recognising that there is a limit to the knowledges and practices that he has been acquiring. He recognises that in becoming a pharmacist he will be making his own 'professional' judgements and this appears unsettling to him at the moment as a student but hopes that this will become clearer as part of the pre-registration year.

These experiences that the students have shared here reveal pharmacy students encountering and attempting to reconcile many different discourses about the nature of being a pharmacist. Sasha, Nigel, Edward, Karen and Charles' narratives reveal multiple differing identities as a pharmacist. A pharmacist is expected to know about drugs, they are supposed to be trustworthy they are supposed to project an image of confidence and assuredness. What remains hidden in these narratives are the actors, both social and material, that come together and perform these notions. Chapter six will explore these actors in more depth.

Abstract Notion of Patients

Patients are mentioned frequently throughout the narratives of the students. Students convey the notion of the patient in abstract ways, not referring to individual people as patients but expressing more a notion or an idea of a patient being someone who is important or relevant. Some students seemed uncertain in how to relate to 'the patient'; they recounted struggles with 'knowing' how to deal with them and how to reconcile their own thoughts and

beliefs about patients with how they should act as a pharmacist. At times there was conflict between what they felt they should do and what they had experienced in practice.

In his interview David shared a number of struggles that he experiences with relating to patients. One of the struggles is about his age and how that might affect how patients relate to him and them to him,

> "... I still find it a little bit awkward for myself, things like dealing with requests for the morning after pill, I've still not got enough confidence in that ... dealing with young women coming in for that ... I'm still quite young myself, I feel sometimes, I just feel a bit embarrassed, which is a bit strange ..." (David stage 5)

David also share his struggles with judging patients,

> "I do still find that with certain patients, although, it is just mainly when they have left, I think about some of the choices that they made, I do judge them on perhaps, well mainly income side of things ..." (David stage 5)

But reconciles this with explaining that "... well I know that there is a huge amount of pharmacists do it as well" (David stage 5).

In his interview, Donald expressed conflicting views about patients; in one respect he considered them to be the most important part of the job,

> "I think patients are the most important part of the job, I think that is what you are there for ehm and I know a lot of people would disagree but I think to me patients are the biggest part of the job ..." (Donald stage 4)

Later in his interview however, Donald tells a story that undermines this assertion as he just focuses more on dispensing the prescription and thinks little about the patient. Donald's story will be explored in more detail in chapter six, but his later statement that,

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> *"... compared to a lot of people that I know, I would say that I put patients first. I know a lot of people are quite business minded and sort of quite figures and you need to have this many dispensed items this week ..."* (Donald stage 4)

reveals other actors that influence how he views patients, revealing a degree of uncertainty and inconsistency about how he relates to them. On one hand he has a theoretical understanding of how he thinks he should relate to patients but on the other hand, in practice he does not apply this thinking.

Donald and David's narrative reveal conflicting accounts of how they felt they should relate to patients and how they actually relate to or view patients. These notions will be explored in more depth in chapter six, but what is being revealed is that they are influenced by others. Their experiences of other actors relating to patients is creating a sense of uncertainty for their emerging identities as a pharmacist. They have a notion of the ways in which they should or should not relate to patients, but are conflicts are emerging as they attempt to reconcile these experiences.

Summary

Using the repertory grid approach as a 'catalyst' for discussion provided a way of conducting interviews with the participants that afforded them a space to construct and share their ideas about an 'ideal' and 'less than ideal' pharmacist. Through constructing and sharing their ideas participants narrated their experiences of 'becoming' a pharmacist revealing a richness and diversity to these experiences. The richness and diversity of these narratives revealed students drawing on experiences from working in a pharmacy, from being a

customer in a pharmacy, from interacting with family members and from interacting with patients.

Many of the participants considered 'becoming' a pharmacist was about acquiring knowledge and focussing on technical tasks. The analysis demonstrates the dominance of procedural and propositional knowledge as being important to the participants. What appears to be absent from the narratives is an understanding that practising as a pharmacist will not solely require procedural and propositional knowledge but that as a professional, pharmacists will be required to develop and use practical wisdom (or phronesis).

The themes and patterns that emerged from analysis of the narratives related to having a good knowledge, focussing on technical tasks, multiple identities of a pharmacist and relating to patients.

Chapter six will approach the analysis of a selection of narratives from a socio-material perspective. Analysis of the narratives from a socio-material perspective will reveal multiple social and material actors shaping the emerging identities of 'becoming' pharmacists.

Chapter 6 – Student Narratives: A socio-material perspective

The purpose of this chapter is to explore the themes and patterns that emerged from the analysis of the narratives in chapter five from a socio-material perspective. Chapter five revealed that having a good knowledge, focusing on technical tasks, multiple identities of a pharmacist and relating to patients, emerged as patterns from the analysis of the narratives, revealing a number of human and non-human actors.

Having introduced in chapter five the themes and patterns that emerged from the interviews with pharmacy students, this chapter adopts a socio-material perspective to examine and explore the coming together of the human and non-human actors in the assembly of actor-networks. As discussed in chapter three, Actor Network Theory (ANT) is used in this study as theoretical lens to "trace the mess, disorder, and ambivalences" (Fenwick 2010b p. 118) that shape the experiences of pharmacy students 'becoming' a pharmacist. Analysis of the narratives from an ANT perspective will reveal multiple social and material actors shaping the emerging identities of 'becoming' pharmacists. Callon's (1991) notion of intermediaries will be used to expose, untangle and explore the actor-networks shaping the emerging identities of pharmacy students.

Using the tools of ANT to analyse the narratives of the pharmacy students invites consideration of a number of questions that challenges the

conventional view of education as a humanist approach (Sørensen 2011) and these questions have been used in this chapter as an additional analytical tool.

- What practice is constituted through this socio-material arrangement?

- What knowledges come about?

- What kinds of pharmacy students are created?

- What learning is achieved?

Introducing an ANT perspective

According to Latour it is the role of the ANT scholar to make visible the work of intermediaries in making human and non-humans act (Latour cited in Thompson 2010). Callon describes an intermediary as "anything passing between actors which defines their relationship between them" (Callon 1991 p. 134). Intermediaries are both the visible product of the assembling of a network and the work of that network in producing an effect (Gherardi and Nicolini 2000). As a way of revealing the specific and local sets of intermediaries that define networks, Thompson (2010) proposes following the actors, studying how intermediaries break down, untangling tensions and examining how humans and non-humans act together as coagents to produce patterns of connections.

Drawing on Thompson's approach and Callon's notion of intermediary this chapter continues by illustrating the local and specific set of intermediaries that emerged from the student's narratives. Callon (1991) talks of four main types of intermediaries:

- Texts, which are anything that is written or recorded and the medium in which it is recorded such as reports, textbooks, articles;
- Artefacts which are the non-human entities within a network;

- Human beings that include the skills and knowledge they create and reproduce; and
- Money in all its different forms

The intermediaries that emerged from the students narratives can broadly be aligned with the first three of Callon's types of intermediaries listed above. Text type intermediaries include objects such as the prescription that emerged as a powerful intermediary from the students' narratives. There was also reference to the BNF (British National Formulary), a standard reference book that is not only used by students but by practising pharmacists. The patient as an artefact type intermediary is talked about in many of the student interviews. Whilst Callon describes artefacts as non-human entities within a network, in this thesis the patient is taken to represent the concept of a patient as a product of other actor-networks rather than any specific individual. However, patients are also included within the human-being type intermediary and many different human beings such as other pharmacists and relatives also emerge as powerful intermediaries in the assembly of networks.

Texts as intermediaries

Emerging from the themes of having a good knowledge and focussing on technical tasks introduced in chapter five, one of the many student narratives around which much questioning, challenging and learning took place was the dispensing of prescriptions.

These narratives revealed the prescription as a powerful intermediary in making students act and shaping their emerging identity. In his interview Frank revealed his opinion that dispensing of prescriptions was an organising force within a pharmacy,

> "When you have one patient's prescription and you are dispensing that you have to be, like, orderly you can't be mixing things up and when you are taking in prescriptions, make sure you give them out in the order you take them in and you don't have people coming up annoyed saying they got theirs ahead of me and just being able to work in an organised fashion I suppose." (Frank stage 4)

Robina's account of working in a pharmacy also demonstrates a common understanding of working in a pharmacy as being about the dispensing of prescriptions,

> "Well I think in community pharmacy, prescriptions is mainly what you do and it is high up on the agenda, you are sending everything out like waiters, you have 3 minutes to get it out, if you are taking half an hour to get it out because you are checking up something I think you know the patient will be unhappy" (Robina stage 1)

Robina's narrative introduces 'the prescription' and 'the patient' as actors in this 'plot-line'. The prescription is a system of symbols and material. It is material in the sense that it is a piece of paper. Inscribed on that piece of paper are details about an individual; their name, their address, their date of birth. There are details about a drug; the name of the drug, the dose of the drug, the frequency that it should be taken, the physical form in which it should be supplied, an amount that should be supplied.

This system of symbols is itself produced by another network of actors. The person who wrote it, the individual who visited the prescriber seeking assistance with symptoms they were experiencing and now presenting the prescription in a pharmacy. This network enrols technologies such as a computer, a printer, pads of paper. Through its inscription the prescription enacts rules and regulations about who can and cannot supply, possess and administer objects referred to as 'drugs'. It enacts the individual whose name is inscribed on the prescription as a patient, a product of innumerable other

actor-networks. Networks of entities that produced symptoms, that performed tests, that provided a diagnosis.

Setting the context of this narrative in community pharmacy suggests the presence of actors that Robina does not directly mention. The dispenser is not directly mentioned by Robina, but becomes visible through her account of the pharmacist checking a prescription.

The prescription as an assemblage of multiple actor-networks forces the dispenser and pharmacist to decode it to reveal a set of instructions from the author (the prescriber) of the prescription. These instructions guide the dispenser to select a drug that conforms to the description of drug name, physical form and quantity inscribed on the prescription. The enactment of rules and regulation governing the supply of drugs directs the dispenser to produce a computer generated label that is attached to the drugs. This label constrains how the patient uses this drug by providing specific instructions on how much, how often and when to take the drug.

Edward (stage 3) also places the prescription in a network of relations with the doctor, pharmacist and patient,

> "When patients get a new prescription they may have a lot going on in their mind, especially if it is say a new prescription for a newly diagnosed condition they might have heard a lot during that day or day previously, perhaps if everything wasn't clear with the doctor it would be terrible if the pharmacist ended up confusing the patient more and it would be great if the pharmacist could clear up some issues make things simple, describe what each medication is for and help put the patient at ease." (Edward stage 3)

From Robina's point of view the time period is seemingly important to the

patient and that there is a time-period which is acceptable and a time-period

that is not. Robina's narrative continues, introducing a further actor; the

pharmacist.

> "I know a pharmacist that isn't comfortable just putting out one item
> that is quite regular without having someone to check it, even if it is
> just one item and the pharmacist isn't confident that she has dispensed
> the right thing. … I do understand that it is important that they get
> everything checked but I think sometimes a pharmacist needs to take
> their own initiative, think this is simvastatin 20, it goes out all the time,
> they get it all the time, why can't I just sign it off. But sometimes there
> are pharmacists that take a long time to check a prescription that is
> quite standard and the patient has had for a while and is on the repeat
> slips …" (Robina stage 1)

'The pharmacist' is introduced as playing a part in this process of giving out

the prescription. The prescription once dispensed demands that it must be

checked, a routine Robina portrays as a simple procedure, "this is simvastatin

20, it goes out all the time". Robina's experience of being a dispenser has

provided a familiarity with the process of dispensing a prescription and made

her feel confident in her abilities, "as the dispenser I don't make too many

mistakes".

The prescription enacts Robina as a dispenser and partially obscures her form

the next part of the process. Enacting the pharmacist as the checker of the

prescription, the prescription is excluding the dispenser from the checking of

the prescription. This creates a tension for Robina where she encounters a

pharmacist who takes longer than she deems acceptable to check a

prescription. Robina's relationship with the prescription is as a dispenser not as

a pharmacist.

Robina's narrative presents the prescription as a "thing[s] that draws actors into a relationship" (Callon 1991 p. 134). The dispensing of the prescription involves a whole series of actors establishing their identities and the link between them. The prescription forges a relationship between the pharmacist and the patient into a relationship of producer (the pharmacist) and consumer (the patient). The prescription constrains the dispenser as a technician. Enacts an individual as a patient. It coerces the pharmacist and dispenser to enact rules and regulations around the supply of drugs.

Sally (stage 3) also refers to this plot-line of dispensing and checking of prescriptions.

> "Well it is quite a main part of the pharmacists job is to check prescriptions and what has been dispensed to make sure they do match with what the doctor has asked for the patient to get, because it would prevent major interactions and side-effects and adverse effects that you don't want from medication." (Sally stage 3)

Sally's perspective views the prescription as enacting the pharmacist as a checker, a person who is there to prevent 'bad' things from happening. It introduces a sense that the pharmacist identifies these things. What is hidden and invisible in this rendering of an actor-network is the use of technology, both the act of prescribing (inscribing the required drugs on the prescription) and dispensing a prescription. A prescriber uses a keyboard to input instructions into a computer, the computer uses these instructions to produce a prescription. This production is constructed in such a way to check these intended instructions against information that is stored for the patient in the computer e.g. other drugs prescribed, other medical conditions the patient may have. When the prescription is presented for dispensing, a similar process also happens, the computer can check for any possible interactions with other

drugs the patient may have been given. In both these scenarios, the computer

signals to the operator that there is combination of objects that needs

investigating further. The computers produce signs to the pharmacist that

requires them to adopt different practices i.e. suggest that these drugs not be

used, that they be used but doses changed, or used and extra monitoring

takes place. This then draws other actors to the network, some previously

enrolled in the network and some new.

Sally's narrative continues as she explains how she views dispensing and

checking a prescription as being different.

> "I think dispensing is different because you get a box in your head and
> you see it and you just go to it, where as you just read the name and
> the strength and tablets or capsules as the pharmacist you are checking
> the names and the signatures and dates as well as the drugs and
> strengths and everything else. Because when I'm dispensing I don't
> look at the names and things I just blank them out too busy being fast
> just trying to get it all done" (Sally stage 3)

Sally's narrative suggests that whilst displaying an understanding of the role of

a pharmacist in the dispensing of a prescription she consciously chooses not to

adopt that identity. Her concern is for 'being fast' and 'getting it all done',

reducing the task to simple completion of a technical activity.

For David the prescription again becomes a focus for the practice of a

pharmacist but from a differing perspective.

> "... thorough checking technique ensure[s] that patients will hopefully
> receive what was prescribed, so right label on the right box right
> amount of tablets right strength. Obviously patients, the majority of
> patients, some patients anyway would see pharmacists as that being
> their only job, it is obviously important from a patient safety point of
> view that patients do receive the right medicine all the time ... I don't
> think that is a skill of an ideal pharmacist, I think pharmacists are better
> placed to be doing pharmaceutical assessments of prescriptions rather
> than intricate checking of right label on right box, so in my opinion I

don't think it is as important as other things because I think there are other staff that could be trained to do a job like checking and leaving you to do, leaving pharmacists to use their expertise a bit better but I do understand that the majority of time that pharmacists spend is checking prescriptions." (David stage 5)

David adopts a different stance to the other students, and whilst accepting that dispensing and checking of a prescription is viewed as a central role of a pharmacist, it is not necessarily what he considers should be the focus of a pharmacists' practice, recognising the dispensing and checking of a prescription as an inherently technical task.

Through their narratives the students have revealed the dispensing of prescriptions as having some meaning for them. These accounts introduce a number of different actors in the process, although from an ANT perspective this is not limited to the social but introduces the prescription as a material actor within the emergence of these socio-material arrangements. It is interesting to note that Robina, Frank, Sally and Edward appeared to identify more with the role of the dispenser rather than as a pharmacist. Clearly, the actors within these networks have a mobilising or constraining effect on the emerging identities of the students.

The emergence of these socio-material assemblages serves to remind pharmacy students that they are students. The checking of a prescription is traditionally the responsibility of the pharmacist and these assemblages remind the students they are not a pharmacist because they cannot check the prescription. The assemblages also remind students that they are not dispensers either, as one day they will be able to check the prescription in their role as a pharmacist.

These assemblages construct notions of knowledge as being scientific and technical. There are rules and procedures to follow and they are followed each and every time; they are predictable and the outcome is predictable. Conceptualising knowledge as scientific and technical seduces pharmacy students into understanding 'becoming' a pharmacist as being certain. The scientific and technical knowledge that represents the dispensing and checking of a prescription is certain and predictable.

The assemblages persuade individuals to adopt pre-constructed identities; as student; as dispenser; as pharmacist; who are coerced by the scientific and technical knowledge that are a part of this assemblage to perform a technical task. The task can be predicted, codified and represented by standard operating procedures which all contribute to affording a sense of certainty to these practices. Such approaches then construct notions of learning in acquisitional terms, as knowledges and practices can be documented, codified in textbooks, demonstrated and assessed against known verifiable standards.

Human Beings as intermediaries

Predominantly emerging form the multiple identities as a pharmacist theme introduced in chapter five, this section uncovers how human beings are revealed as intermediaries in the student's narratives. Sharing a story about an argument with her mother, this seemingly throw-away story at the beginning of Rachel's interview, reveals the richness of the lived experience of a pharmacy student 'becoming' a pharmacist.

> "I have to apologise I was in a funny mood the day I did this mainly because I had had an argument the night before with my mum, I had kind of got it in my head that I'm desperate to have a tattoo but of course being mum she is dead against it she then played the card of

that I wouldn't trust a pharmacist that had a tattoo, which got my goat up a little bit. Em so I think that was my main thought in my head that whole day that it shouldn't, the way I am as a person shouldn't affect my job, how good I am at my job, em so that was one of the main things that was in my head em and just pharmacists can have faults as well I suppose and should be able to see that in other people as well. That general type of thing that they can't always control absolutely everything but as long as you approach it the right way it is going to be okay." (Rachel stage 2)

Forgetting for a moment that Rachel is a pharmacy student becoming a pharmacist, this story appears unremarkable. A mother is disapproving of an act that her daughter wishes to undertake. The daughter views her mother's disapproval as predictable.

Yet focussing on the tattoo as an intermediary in this story reveals contrasting interpretations of social expectations of a pharmacist. The tattoo brings forward from other networks socially and culturally constructed ideas about tattoos and what having a tattoo says about an individual. To Rachel's mother these ideas are inconsistent with a notion of being a pharmacist. Temporarily, mother and tattoo become coagents tracing a particular pattern of connections that attempts to persuade Rachel that having a tattoo is not acceptable for a pharmacist. As coagents they attempt to constrain Rachel's ideas about what a pharmacist is and is not. A pharmacist with a tattoo is not someone to 'trust', but a pharmacist without a tattoo is.

The significance of this story is not in whether Rachel did or did not get a tattoo, as she narrates in her story she just had an idea that she wanted one and shared this idea with her mother. The significance in this story for Rachel, is Rachel's transformation by the actor-network represented by her mother and the tattoo into an altered understanding of her identity as a 'becoming'

pharmacist. Rachel has become aware that she will have to negotiate different expectations that are external to her.

In his interview David shared how at times he struggles to relate to some patients.

> "I think every patient should be entitled to receive the same amount of care so whether they are for example a millionaire or whether they are on income support or just coming in to get their methadone prescriptions or whatever ... I do still find that with certain patients, although it is just mainly when they have left, I think about some of the choices that they made I do judge them on perhaps well mainly the income side of things, I always seem to find myself judging patients who come in with income support patients and it is not ideal, it is not good at all but I just can't, it is just a problem I've got I think, I just do it I think there is quite a lot, well I know there is a huge amount of pharmacists do it as well." (David stage 5)

David's story reveals a cognitive dissonance. David states that he believes every patient should be provided the same level of care whether they are a "millionaire or ... on income support". But he also admits to "judging patients who come in with income support". This section of his narrative reveals a number of entities that can be traced as intermediaries within this actor-network; patients on income support, a methadone prescription, other pharmacists.

The income support patient as an artefact is a product of society. It obscures the individual human that this label is applied to, attempting to distribute a universal understanding of who an income support patient may be. It takes with it political, cultural and social ideas about what income support is, who it represents and who receives income support.

In one sense a methadone prescription is identical to any other prescription. It is a system of symbols that encodes a set of instructions from an author (a prescriber) to be deciphered by another individual (a pharmacist). A set of coded symbols that obscures a disease that an individual is being treated for. But at the same time also distributes that disease in a system of symbols that can be made visible if the symbols are understood. The disease is hidden and made visible in the same space and time. It transforms the individual into a patient; someone who has a disease that needs treating. The disease itself another intermediary produced by another actor-network.

The attachment of 'methadone' to the prescription (methadone is a drug used in the treatment of substance misuse), transforms the patient in this actor-network differently. The individual is no longer just a patient being treated for a disease, but someone being treated for a condition that was, to a certain extent, a product of their choices. A 'methadone prescription' carries with it socially constructed notions of drug misusers.

David reveals an attempt at reconciling his cognitive dissonance by asserting that, "a huge amount of pharmacists do it as well", but he continues by reassuring himself that it doesn't change the ways he treats them.

> "I don't think I've really changed the way I would treat them, it is just myself I'm always judging them as in thinking should this, is this the best use of my time and NHS's money and things like that I do judge it for the fact that say we are spending X amount of pounds on this group of patients who then aren't contributing something back but I don't think at the end of the day it affects the way that I would treat them I think I just do sometimes judge them in my own head" (David stage 5)

David's conceptions of what practice is and how he would be as a pharmacist are challenged by his experiences. He is encountering a reality that is different

to what he has experienced. He questions a reality where resources are provided to a group of individuals within a society whom he perceives as not contributing to society. He has become aware of a different reality which leads him to question his role as a pharmacist and whether it is "the best use of my time and NHS's money". In a sense there is a political naivety that is being revealed here. There is an assumed egalitarian notion of society, that as an individual you contribute to a society and in return you are rewarded in some way for that contribution, which resists notions of a welfare state.

In her interview Mary also expressed struggles in relating to patients.

> "I can be a bit uncompassionate some times, and well I kind of think you know I'm a human being and I didn't get myself into that situation and so really maybe you can get through life without getting yourself into certain situations and especially when people come back with the same condition over and over again and you know when they are doing themselves harm and it's just hard to understand why someone would do that but yah I'm not as understanding as I could be." (Mary stage 5)

Mary's story reveals naive conceptualisations of patients being challenged giving rise to a cognitive dissonance. Mary has moved from the cloistered environment of education where patients are case studies, constructed with intention. The case studies are deliberately constrained and used to persuade pharmacy students to act in particular ways at particular times, to produce particular responses. In this sense Mary's experiences of patients have been stylised enactments. Patients are now living, breathing, thinking, feeling beings, who can be affected by the decisions that Mary makes. They have their own intentions, their own actions, their own will, and their own realities. They are produced by different actor-networks mobilise different identities within different realities.

In ANT terms, Mary attempts to persuade patients to perform particular acts. She is an actor coercing another actor to perform an activity thereby making them an actant. But the actor resists Mary as an actor and Mary herself becomes the actant (being uncompassionate) a feeling that makes Mary uncomfortable. This on-going negotiation between actor and actant contributes to Mary's cognitive dissonance. She struggles to understand why people who know their behaviour is harming them, can't or don't want to change.

These socio-material assemblages constitute less certainty than was revealed by the socio-material assemblages configured by the prescription as discussed earlier. There is less certainty about the knowledges that are constructed in these assemblages. The actors that constitute these socio-material assemblages appear more diverse and unpredictable. Rachel's mother and the idea of a tattoo are two particular examples, these could not be predicted but can be seen to be shaping Rachel's emerging identity as a pharmacist.

The diversity in these actors create situations that are uncertain, unpredictable, transient and potentially inconsequential, but never the less still powerful in shaping the emerging identities of the students. The learning that is achieved in such assemblages is also uncertain. The students were reconciling competing notions of what they believed and what others believed. The knowledges and practices that they were attempting to reconcile were uniquely personal and individual.

Revealing 'actors'

Drawing from themes identified in chapter five of multiple identities as a

pharmacist and relating to patients this section reveals some actors that

played a part in the narratives of the students. Sharing a story about a retired

pharmacist in his town who was replaced by a new pharmacist, Nigel

introduced the characters of 'the Pill' and 'Kathleen'. The new pharmacist to

the town was given the nickname of 'the Pill' by the townspeople because he

was hard to deal with. The character of 'the Pill' was contrasted with another

character Kathleen who, not being a pharmacist, was the preferred person that

the locals wanted to deal with.

> "He [the pill] is there and he was rushing around getting the labels done
> just giving them out the bag where as she [Kathleen] was just there
> talking, giving medicines, explaining stuff, asking how they are getting
> on with their illness and they were telling her about all their ailments
> and stuff … the guy that was there before there could be a queue out
> the door along the street and he would just stroll in and he'd take his
> time dealing with the prescriptions and he would go down and talk to
> Mary whoever, ask her how her husband is doing and how her mother is
> doing and stuff like that and if anyone complained he would say 'I'm
> dealing with this customer wait your turn' and they'd wait their turn
> because they know they'd get the same treatment. Where as he [the
> pill] was just giving out the medicines, 'take it'." (Nigel stage 2)

In his story Nigel is faced with competing discourses of what is expected of a

pharmacist. The actors in this network mobilise these alternate notions. The

Pill as actor in this network attempts to persuade other actors within the

network that a pharmacist is a technician, prioritising the dispensing of

prescriptions over speaking to the recipients of the prescriptions. The

character of the retired pharmacist resists this notion of a pharmacist by

taking the time to speak to everyone who wanted to speak to him. This notion

of a pharmacist is taken-up by Kathleen and also by the people of the town.

The locals in the town are also actors in this network, their preference to

interact with Kathleen (a non-pharmacist) over 'the pill', carries forward into other networks a notion of a pharmacist as being someone who talks to individuals rather than acts as a technician.

In recounting this experience Nigel revealed that he wanted to be like Kathleen and not 'the pill'.

> "... pharmacy isn't for me, it is not about making money, you don't see the people as something that you are going to make money out of, you are going to treat them and make them better, give them a better quality of life and really that is what I think is the most important thing about being a professional in a pharmacy" (Nigel stage 2).

Notions of quality of life are produced by other networks that attempt to persuade, seduce, coerce actors into doing particular actions. In Nigel's story they attempt to persuade him that he should view people not as a source of income, but as entities that he should care for. Following the actors in this network traces how notions of what a pharmacist is and does emerge in multiple ways and from multiple actors.

The patient as an 'actor' in the 'plots' of the participants' interviews is also a recurring theme. In his interview Donald shared his conception of what patients represent.

> "I know a lot of people are quite business minded and you need to have this many dispensed items this week and all that, they come across as patients are just numbers & medications ... where as if it is me I'd be more inclined to worry about making sure the patients were okay and yes maybe you didn't do as many items that day because you were too busy talking to the patients but at least the patients you talked to were happy." (Donald stage 4)

From Donald's interactions with patients and people that he has worked with emerges a notion of patients as intermediaries, not as a 'human being' type intermediary but an understanding of an intermediary as an 'artefact (Callon

1991). Conceptualising patients as an artefact provides a way to understand the notion of a patient not in individualistic terms but as an idea of a patient in a more abstract sense. Patients themselves do not exist; they can be understood in ANT terms as a network effect. A patient is the result of a network of actors both social and material. Patients emerge as a network effect through the interaction of a set of signs, symptoms, diagnosis, tests. Signs and symptoms are translated by examination and tests into a diagnosis. A diagnosis moves forward in a network recruiting more actors from which a prescription may or may not emerge. Donald is faced with a choice, he can view patients as 'just numbers & medications' or he can view them as people. However, as Donald continues he explains that he does not always adopt an approach that views the patient as being the most important part of the job.

> "I know when they come in, I'm doing it less now, I'll look at it [the prescription] and think well that is just aspirin, simvastatin, metform, they are a fat diabetic and that's it there is no, I don't try and get any background out of them I don't try and talk to them or anything about why they are on metformin or anything like that I just assume." (Donald stage 4)

Donald's reflection on how he deals with patients viewing them as three drugs and as a fat diabetic reveals an inconsistency about what he says he would do and what he actually does do. Donald is struggling with reconciling two ways of being, being 'business minded' and concerned with number of items dispensed and being concerned for patients as a first priority. Donald appears to struggle with undertaking a task in a way that he thinks it should be undertaken, i.e. where the patient is considered to the most important aspect, but is struggling with an environment where this approach is not viewed as being productive and does not meet targets for number of items dispensed.

These socio-material assemblages reveal pharmacy students being faced with the simultaneous performance of multiple ontologies of being a pharmacist through their engagement with multiple networks. These multiple networks reveal the presence of non-pharmacists in this process of 'becoming', presenting pharmacy students with competing discourses of what it means to be a pharmacist. Pharmacy students are troubled by this as it contrasts with the certainty of scientific and technical notions of knowledge and unlike these notions of knowledge clarity or certainty cannot be achieved by acquisitional metaphors of learning.

Summary

As discussed in chapter three, ANT was taken up in this study as theoretical lens to "trace the mess, disorder, and ambivalences" (Fenwick 2010b p. 118) that shape the experiences of pharmacy students 'becoming' a pharmacist. Callon's notion of intermediaries was used to expose, untangle and explore the actor-networks shaping the emerging identities of pharmacy students. The analysis of the experiences narrated during the interviews reveals a series of micro-interactions, incidents, experiences, realisations that combine to contribute to the process of 'becoming'. They make the students aware of things they did not know, they create ideals that they wanted to aspire too, they become conscious of things they did not know before.

The analysis reveals the 'becoming' pharmacist as being held in tension between understanding the world from institutional, professional and legal viewpoints and from a more personal, social, cultural and political viewpoints.

Pharmacy students experience a state of cognitive dissonance, where what was once certain now seems uncertain.

In terms of understanding learning, the analysis in this chapter illustrates that when examining 'becoming' from a socio-material perspective, conceptualising knowledge in terms of scientific and technical notions of knowledge are troublesome for learning. These notions coerce students into relying on acquisitional metaphors for learning which fail to address the individual and personal learning required when pharmacy students encounter competing notions and discourses of a pharmacist.

Chapter 7 - Discussion

This chapter discusses how the data generated, and analysed in chapters five and six provides new understandings about 'becoming' a pharmacist. This chapter will demonstrate that experiencing uncertainty is a central feature of the landscape for pharmacy students in 'becoming' a pharmacist. Indeed it is suggested that far from being just a component, it is an ever-present feature. The discussion in this chapter is an attempt at sense-making to examine the impact and implications of the findings from this study on pharmacy students and from a curricular perspective. In keeping with the constructivist stance taken in this thesis as discussed in chapter three, I acknowledge at this juncture that this is but one attempt at sense-making, accepting that alternative interpretations from the data generated and presented in this thesis are possible.

A pharmacy student perspective

This section considers the impact and implications of the findings at the level of the individual pharmacy student.

The Multiplicity and Diversity of Experiences

Chapters one and two illustrated that there are multiple ways of understanding notions of 'professional' and 'professionalism', but the ways in which they are taken-up in pharmacy attempt to hide this multiplicity and present a universal definition of 'professional' and 'professionalism'. Attempts to present definitions in such universal deterministic terms risks framing these notions in positivistic terms suggesting that 'becoming' a pharmacist and developing a sense of 'professionalism' can be predicted, structured, controlled and

ultimately assessed. Analysis of the interviews in chapters five and six revealed a diversity and multiplicity in the experiences of the participants that contributed to them developing an understanding of 'becoming' a pharmacist. For some students 'becoming' a pharmacist was about acquiring and accumulating knowledge, for some it was about focussing on learning technical tasks, and for others it was about caring for patients. These findings challenge understanding notions of 'professional' and 'professionalism' in pharmacy in positivistic terms, suggesting that a more fluid and dynamic way of framing these notions in pharmacy which accommodates the multiplicity and diversity of experiences that were shared by the participants in this study is required.

Faced with a seemingly universal and stable definition of anaemia as a disease state, Mol and Law's (1994) study of how tropical doctors handled anaemia revealed that anaemia was understood differently depending on location, how haemoglobin levels were determined and how standards of haemoglobin levels were deployed to characterise an individual as having or not having anaemia. Mol and Law discovered that, "it is possible to create a regional map of anaemia. This is a map depicting a homogenous field divided by boundaries which distinguish between regions where anaemia is abundant and those in which it is scarce" (p. 647), disrupting universal and stable definitions of anaemia. Mol and Law's metaphor of 'the region' is taken up in this thesis with a similar intent, to disrupt the imposition of a positivist framework on notions of 'professional' and 'professionalism' and to resist the urge to stabilise a definition of 'professionalism' in pharmacy that was articulated in the literature reviewed in chapter two.

The notion of 'becoming' a pharmacist can be understood as a homogenous field, similar to the way in which Mol and Law (1994) encountered anaemia as a disease state. Framing the notion of 'becoming' a pharmacist in this way offers a way of understanding how the diversity and multiplicity of experiences shared by the participants in this study can be understood as a feature of the landscape of 'becoming' a pharmacist. The multiple and diverse experiences then become regions within "a homogenous field divided by boundaries" (Mol and Law 1994 p. 647). The regions emerge as assemblages of social and material actors and through their emergence and relationship to each other create the boundaries that divide the field. For Sørensen (2011) 'the region' takes "the shape of a container or field in which objects are located, where people act, or where entities belong" (p. 97) and is defined by what is in it. The boundaries then act as a means to determine what is in and what is outside of the region or as Mol and Law argue, "What is similar is close. What is different, is elsewhere" (Mol and Law 1994 p. 647). The boundary is a duality, conferring a regional identity on its inhabitants but also being created by the performances of the actors within it. The boundary confers stability, and therefore inhabitants of these regions are viewed as performing a regional identity.

Expressing a regional identity as a student

Conceptualising 'becoming' a pharmacist as the expression of a regional identity provides an understanding of why some students in their interviews expressed an identity as being a student of a particular year of study. Chapter five revealed Lucy, Olivia and Nigel all defining themselves and what they know by their year of study.

The university organises its courses around year groups, it is therefore perhaps not surprising that the interviewees made these distinctions about being a student and belonging to a specific year group. A number of symbols within the university and MPharm course perform the idea of different year groups that students associated themselves with. Modules of the course are identified by numbers which indicate the year of study, different colours of paper are used to print class lists for each year group, timetables are organised by year groups. Through a socio-material lens these objects, the modules, the class lists, the timetables, the colour of the paper are understood as non-human actors within an actor-network. The non-human actors are symbols that orient action. These symbols are reminders to students about their role within the institution, they are a student, as they are listed on a class list. They reinforce the relations between student and the University as the University issues a timetable that tells the student what they are doing and when. Modules constantly remind the student that they are in a process of 'becoming', they re-enforce the notion that 'becoming' is a hierarchical, unidirectional and structured process, each module is delivered at a specific stage of the course and the University specifies the order in which they are studied. The student has no control and simply has to follow the instructions they are given.

Whether the students are responding to external structures and expectations placed on them by the University and the MPharm course or whether they are articulating an emerging regional identity is perhaps less important, it is likely to be a combination of both and also perhaps different for each student. What is revealed however by adopting a socio-material perspective is the messiness

of local practice, illuminating seemingly unimportant objects such as class lists and timetables as playing a role in the formation of student identities. From this perspective what is revealed is the assemblage of these actors performing boundaries between different regions which the students related to their year of study. The students are identified as belonging to year 1 or year 2 or year 3, which superficially may not be unexpected. The boundaries which give a sense of stability to the regions, not only re-enforce the students identity as a student they also reinforce or remind the student that they are not a pharmacist, a point Charles consistently expressed in different ways:

> "Obviously I haven't worked as a pharmacist yet …" (Charles - stage 4)
> "…After my pre-reg I'll be one step up…" (Charles - stage 4)
> "… I haven't practised as a pharmacist…" (Charles - stage 4)

Sørenson (2011) acknowledges that regions are "rather firm structure[s]" (p. 98), stable and unchanging and therefore the regions themselves are perhaps less critical to the understanding of how students transform from student to pharmacist, because to a certain extent some of the regions are pre-determined and others are personal and unique to each individual student. By pre-determined I mean that someone who wants to become a pharmacist has to first 'be a student', they then have to 'be a pre-reg' before they can then seek to be registered as a pharmacist. They have to inhabit each of these regions; it is part of the 'becoming' of a pharmacist as viewed from a structured, hierarchical, unidirectional perspective. This suggests then that 'becoming' a pharmacist is not so much about passing through pre-determined stages in a pre-specified linear uni-direction, but about the ability to accept and negotiate the tensions that are created by passing through these stages, about having an identity that is not fully-formed or developed. The stages become about acquiring knowledge and developing skills, they are about

developing as a practitioner, someone who is able to practise a skill. Part of that transformation from student to pharmacist then also becomes about being on the outside of those regions too, when they are a pharmacy student they are not a pharmacist and as Wenger (1998) argues; "We not only produce our identities through the practices we engage in, but we also define ourselves through practices we do not engage in." (p. 164), what then becomes more important is how students accept and deal with the tensions they experience across these boundaries. Conceivably students are both inside and outside of multiple regions concurrently and therefore are in constant process of assembling and negotiating identities appropriate for the situation they find themselves in (Sørensen 2011).

Donald - an example of identities in tension

Donald's interview is an example of where differing identities were revealed as being held in tension. His interview stands out as the first interview where it became evident that something was being revealed about the process of 'becoming' a pharmacist; Donald's interview was in fact the sixth interview that was conducted. It stands out because from an extract of Donald's interview, five words "… I'm just the Sunday boy …", provides an insight into how he views his position within the profession and his identity as 'becoming' a pharmacist. It was surprising that after four years of University and a matter of weeks from finishing his degree in Pharmacy, Donald only viewed himself as being someone who dispenses, no suggestion that he was a pharmacist in training or that he was soon to commence pre-registration training.

The quote comes from a section of the interview where Donald talked about his part-time job working in a pharmacy at a weekend (hence the reference to Sunday Boy) and was clear that his role was just to do a job that he got paid to do and no more.

> "Like just now, I'm just the Sunday boy that goes in and dispenses, whereas once I'm a pre-reg there will obviously be more clinical involvement … I'll do time in wards and things like that as well … and when you are the pharmacist you are the last point of call usually unless there is a manager or anything to your team, you will be the last point of call so you need to adjust to being the one in charge of the team and not the one taking the orders." (Donald stage 4)

Donald appears to be positioning himself in a sub-ordinate position within a hierarchy that is taken-for-granted, he is the 'Sunday Boy', then he will be the pre-reg and then the pharmacist. He also suggests that within this hierarchy there is a transactional arrangement too, by being a pre-reg you are required to undertake different tasks. As a pharmacist you again take on different tasks and by being 'the last point of call' you have more authority by being the one that gives the orders rather than follows them and ultimately the professional that makes the judgement about what to do. In Donald's case he acknowledges that he acts in a way that is more related to his role as a dispenser, he appears to exhibit a learned helplessness he both knows what to do and what not to do, but is constrained, not moving beyond the external structures that construct him as a dispenser.

> "… I'll look at it [the prescription] and think well that is just aspirin, simvastatin and metformin, they are a fat diabetic and that's it, I don't try and get any background out of them, I don't try and talk to them or anything about why they are on metformin or anything like that, I just assume …I would hope that once I qualify and I begin to know a wee bit more in a practice environment I would begin to sort of see differences in prescriptions and see differences in patients and sort of the differences between them and I'd be able to distinguish between patients that might need more information on their medicines from people who wouldn't …" (Donald stage 4)

This comment from Donald is interesting because it demonstrates that he has an understanding of what he should do as a pharmacist and seems to indicate that he would do, yet he expresses an ambivalence. Why this is interesting is because at the stage Donald was at in his course, he would have been able to examine the prescription and not make assumptions. He would have been able to talk to the patient to get some background and he would have been able to distinguish between patients that might need more information from those who didn't. He is certain of what he knows, that someone taking that combination of three drugs is likely to be a diabetic. He demonstrates a nuanced understanding of drug choice; the choice of metformin does suggest the patient is overweight. Yet he refers to the combination of drugs as 'just', portraying a sense of familiarity with this situation, that it is routine and somehow unimportant.

He is demonstrating recognition of a common pattern, that individuals taking that particular combination of drugs does indicate that they might have diabetes and are likely to be overweight. His use of the knowledge does not recognise that this is a new situation that needs interpreting and considering before make a judgement. It appears to be the recognition of a pattern that then dictates a pre-specified action, the application of a 'rulebook'.

Referring to the patient as 'a fat diabetic' demonstrates a somewhat dismissive and uncaring attitude toward the patient that seems inconsistent with his expectation that once qualified he would appreciate differences between patients more. This raises the question of why he felt that he could not or perhaps that he should not undertake these tasks and perhaps his early

comment about just being the 'Sunday boy' who dispenses offers an possible explanation of why.

Donald was employed as a dispenser in a pharmacy, therefore he was recognised as a dispenser and was remunerated to fulfil this function for his employer. His contribution to practice was as a dispenser and not as a pharmacist and not as a pharmacy student who is transitioning to become a pharmacist. Therefore, he is also temporarily, perhaps selectively, inhabiting a region that is being a dispenser, for others that Donald works with this region is a place that they will remain, they are not in a transition as a 'becoming' pharmacist but will remain a dispenser. His identity can then be viewed as being in a state of flux. He is not yet a pharmacist but at the same time cannot be considered to be a dispenser either. He is a pharmacy student performing the task of dispensing but that does not necessarily make him a dispenser, therefore he can be seen to be experiencing a degree of uncertainty about his identity. The university and the course constantly remind him that he is a student.

Transitioning between regions

The course creates transition points, from year to year and from student to pre-registration pharmacist. These transitions points are recognised and acknowledged by all and are evident in the interviews, students frequently referred to their year of study as a means of defining their identity and by viewing pre-reg as the next step to 'becoming' a pharmacist. These transition points can be viewed as reflecting different levels of preparedness. Transition from one year to another year is controlled by assessments. Successful

completion of assessments allows a student to progress from one year to the next year reflecting a form of cognitive and behavioural preparedness where they have demonstrated a certain level of knowledge and a set of particular behaviours that have been deemed reflective of a particular stage of study. What they may not reflect is a psychological or emotional preparedness, an ability to deal with contradiction or uncertainty or to deal with the conflict of values that can arise when individual beliefs differ to the reality that is being experienced.

Tracing the prescription as an intermediary in chapter six revealed it as a powerful actor around which much questioning, challenging and learning could be observed. Like other symbols it reminded students that they are not a pharmacist, they are outside of a region that performs a regional identity of a pharmacist. It reinforces the relations between the individual student and other actors in the network that the student is a student. Emphasising that the student can't perform certain tasks strengthening a notion of being on the outside of a region of being a pharmacist.

Examining the interview transcripts through a socio-material lens uncovered a sense of uncertainty expressed by pharmacy students about their identities as 'becoming' pharmacists. Sørensen's (2011) metaphor of the region provides an interesting perspective on their uncertainty as arising from a struggle to reconcile differing regional identities. These experiences of struggles can be functional and dysfunctional. An ability to accept and learn from these tensions moves students into a new state of awareness. For example the story

regarding a tattoo in Rachel's narrative exposed her to what others believed was acceptable or not acceptable for a pharmacist to do.

The metaphor of the 'region' shares similar ideas to Nyström's (2009) conceptualisation of how psychology and political science students experienced the transition from higher education to working life. Her analysis revealed three forms of professional identity (non-differentiated identity, compartmentalised identity and integrated identity) that arise from the interplay of personal, professional and private aspects of life. A non-differentiated identity is characterised as an identity that has diffuse boundaries between different life spheres and suggests that individuals do not need to keep these spheres separate, contrasting with a compartmentalised identity where individuals do attempt to maintain a degree of separation between life spheres. An integrated identity is characterised by an ability to differentiate between different spheres and to see how they relate to each other and to a bigger picture.

Drawing on Wenger's ideas of multimembership of different communities of practice and reconciliation as a means to maintain an identity across boundaries between communities, Nyström (2009) observed that students expressed a strong identification of being a student. She argues that the identities of students as students had been integrated into who they are and their sense of self, implying a certain way of life as a student. This idea fits with Billet and Sommerville's (2004) conception of the subjugated self "where individuals are positioned as being subjected to social structures ... with agency being granted through these social structures." (p. 14), individuals

conform with structures that are created for them. Understanding the identities of pharmacy students in this study as being 'subjugated selfs', illuminates the human and non-human actors that come together in socio-material assemblages identified in this study as having influential roles to play in pharmacy students experiences of 'becoming' a pharmacist. This is important as it goes some way to explaining why some participants seem to lock themselves into levels, roles and expectations. To a certain extent they are subjugated, being positioned by the university as students, by employers as employees paid to undertake a particular role, and by the prescription as not being a pharmacist.

This thesis has revealed some socio-material assemblages that subject students to social structures of being a student. Timetables, modules and class lists, discussed earlier are all example of the socio-material ordering of higher education that subjugate students to conforming to social structures and goes some way to explain why students experience uncertainty in managing, accommodating, acknowledging the multiple identities they encounter in 'becoming' a pharmacist. Such an understanding fits with Nyström's (2009) finding that students had an identity that was a way of life. Students however will always be confronted with relational challenges, some present uncertainty and some do not and therefore how can students be supported to learning from these experiences of uncertainty.

Learning from Uncertainty

The narratives in this study demonstrate some students apparently able to learn from their uncertainty and others who appear to reject uncertainty as

unhelpful and instead rely on the propositional and procedural knowledge that they were acquiring. Through his narratives Charles revealed an appreciation of the complexity of practice through a consideration of the tension between how he should act in certain circumstances and what is in the best interests of the patient.

Sally and Robina through their narratives revealed a sense of uncertainty about their roles within the pharmacy, in one respect they were just fulfilling a role as a paid employee but simultaneously they were also performing the role of a 'becoming pharmacist'. Donald in stating "I'm just the Sunday Boy", revealed a sense of instability, he was both a 'becoming' pharmacist and a dispenser, performing simultaneously different and perhaps conflicting identities as dispenser and 'becoming' pharmacist.

David, Mary and Rachel all revealed examples of cognitive dissonance where their personal values came into conflict with a range of political, cultural and social ideas. Accepting that these experiences of complexity, uncertainty, instability and cognitive dissonance as portrayed by the participants in this study are their realities of 'becoming' a pharmacist, it then becomes important to consider how pharmacy students are supported to expect and to learn from these experiences. Whilst cognitive dissonance can be an uncomfortable emotion (Festinger 1957), it can also be a productive emotion that motivates the learner to learn. In this situation cognitive dissonance shifts from being a dysfunctional to a functional dissonance when it is acknowledged as normality and a routine experience of 'becoming' a pharmacist.

The experiences of uncertainty that were revealed by the participants in this study were all individually unique, occurring in different situations, involving different actors (both material and social) and outside the confines of the Master of Pharmacy course. Rachel's discussion with her mother about a tattoo and Karen's experience of observing how a customer was treated poorly in a pharmacy whilst she was a customer too, are only two examples of learning points that both Rachel and Karen recognised and absorbed into their notions of how they would be as a pharmacist. For these students their learning was being 'shaped by the social world' suggesting that the uncertainty engendered by multimembership of competing regions can be viewed as a requisite for the transformation of pharmacy students in the process of 'becoming' a pharmacist.

The question of how to support students develop a capacity to learn from these experiences of uncertainty and to value them as normal can appear incongruent with a highly regulated and structured programme for the initial education and training of pharmacists.

A curricular perspective

This section considers the impact and implications of the findings at the level of the individual pharmacy student. In this thesis Schön's (1991) notion of the reflective practitioner is helpful in illuminating how the notions of complexity, uncertainty, instability and conflict of values that emerged from the student's narratives can be appreciated as normal and routine experience in 'becoming' a pharmacist. Arguing that these ideas "... are increasingly perceived as central to the world of professional practice" (Schön 1991 p. 14), the notions

of complexity, uncertainty, instability and conflict of values that emerged from the students' narratives can be understood as indicators of developing professional activity by a reflective practitioner. What becomes important for practice and specifically pharmacy education is not how to resolve these situations or to identify ways to 'fix' the uncertainty, but to encourage in the students a capacity to learn from uncertainty. Based on an assumption "that competent practitioners usually know more that they can say" (Schön 1991 p. viii), Schön argues that reflection-in-action is the process that is "central to the 'art' by which practitioners sometimes deal well with situations of uncertainty, instability, uniqueness, and value conflict" (p. 50), therefore developing a capacity to deal with and accept situations of uncertainty is from Schön's (1991) perspective central to 'becoming' a professional or in the case of this thesis central to 'becoming' a pharmacist.

As discussed in chapter one, it is in the role of the General Pharmaceutical Council to regulate the Master of Pharmacy course. The GPhC standards suggest that a Master of Pharmacy course be structured as a spiral curriculum (Harden and Stamper 1999). Drawing on the work of Jerome Bruner, Harden and Stamper (1999) described a spiral curriculum for medical education, they considered that the value of the spiral curriculum lay in the notion that the spiral constantly returned to and reinforced subject material as it built from the simple to the complex. The spirality forced the breakdown of barriers between subject areas within a stage presenting material in a logical manner that encouraged the attainment of higher-level objectives. Applying this notion becomes difficult when you are dealing with the experiences of uncertainty that the participants shared in this study. By its very nature uncertainty is

uncertain, it can not be described in terms of subject areas within different and perhaps multiple stages of a course. The presentation of uncertainty will not be logical, if it was logical it would not be uncertainty and therefore no learning points to absorb or reflect on.

The standards also articulate the assessment of the curriculum using Miller's Triangle (Miller 1990). Structuring the assessment of competence within a curriculum, Miller's Triangle assesses competence in a hierarchical manner from knows, knows how, shows how and does (Miller 1990). The GPhC acknowledge Miller's Triangle was developed for assessing clinical competence but consider that it can be equally applied to science. Learning from uncertainty does not fit neatly into such a structured strategy for assessment. This approach to assessment, like the spiral curriculum, fails to take account of "... the 'art' by which practitioners sometimes deal well with situations of uncertainty, instability, uniqueness, and value conflict" (Schön 1991 p. 50).

Suggesting a pre-determined learning trajectory, both the notion of a spiral curriculum and Miller's Triangle represent learning as beginning at a particular point, progressing hierarchically to a pre-determined end-point, passing through further pre-determined assessable waypoints en-route. The experiences of the pharmacy students who participated in this research did not reflect this pre-determined nature, the experiences that the participants shared in the interviews were non-linear, non-hierarchical, often experienced concurrently and developed iteratively rather than in a pre-determined sequential manner. These experiences that the students revealed as important

to them, are not adequately acknowledged by the external, institutional frameworks that construct and shape pharmacy education.

The General Pharmaceutical Council's (General Pharmaceutical Council 2011) standards for the initial education and training of pharmacists require that Master of Pharmacy courses are constructed to be progressive with increasing complexity until the correct level of understanding is attained. Notions of a course as being progressive with increasing complexity until a required level of understanding is attained, construct the learning experience as being linear, uni-directional and hierarchical. This uni-directional notion of linearity is not how life is experienced or how we learn from our experiences. The notion of life-long learning that has been adopted by many professional groupings, including pharmacy, portrays learning as a never-ending endeavour, a complete and full understanding can therefore never be attained, as Scanlon (2011a) concludes "there are therefore no experts, only some are more expert than others ... for now" (p. 29).

Whilst the spiral curriculum maybe helpful for organising and administering a curriculum, it fails to take account of how learning can occur from the randomness and uncertainty of individual personal experience. Dismissing or failing to recognise the importance these individual experiences of uncertainty have for students' learning, risks framing a notion of 'becoming' a pharmacist as "a programmatic account" (Mulcahy 2011 p. 223) emphasising the acquisition of knowledge and skills as described in the GPhC's Standards for the initial education and training of pharmacists. The standards attempt to persuade individuals that there is a specific pathway to 'becoming' a

pharmacist with little or no acknowledgement that each individual's experience of this 'pathway' will be different and unique to them. What is needed then, is a way of more faithfully representing this notion of 'becoming'.

The incongruence between learning from personal experiences of uncertainty and the regulation of pharmacy education as viewed through the GPhC's standards, only appears as such when viewing the standards as "a-contextual, abstract disciplinary regime[s]" (Fenwick 2010b p.129). Unsettling such disciplinarian notions of educational standards, Fenwick (2010b) argues that the notion of standards travelling through networks imposing their authority is an inadequate description of educational practice. Instead she suggests that using an ANT approach, "... urges a focus on [the] mess and particularly on the materialising processes it accomplishes. The trick is to follow the interplay that occurs at the most local levels of practice ..." (p. 130), therefore in the context of this thesis the GPhC standards can be viewed not as a disciplinary regime that must be adhered to but another actor within a network which in itself is a network effect of innumerable other networks. In this sense the GPhC standards are not ignored, but viewed as just another component of the emergence of social-material ordering and attention can be drawn towards the messiness of local practice and the interplay that occurs.

Contribution of the Findings

This final section discusses the importance and impact of this research in terms of its contribution to the preparation of pharmacists. It begins by responding to the original research aim and questions articulated in chapter three, clearly signposting how these have been addressed in the thesis. It will

conclude by considering the importance and impact of the findings in relation to the enhancement of competency development and the improvement of healthcare delivery.

Addressing the Aim

As stated in chapter three, this study aimed to explore the experiences of pharmacy students as they progress towards 'becoming' a pharmacist. In responding to the research questions this thesis has explored the experiences of pharmacy students at one higher education institution revealing a diversity of experience of 'becoming' a pharmacist. Some of these experiences where related to studying at university, other experiences were drawn from working in pharmacy and in some cases some experiences were unrelated to pharmacy and based on personal experiences, such as in the case of Rachel's narrative about a tattoo discussed in chapter six. Analysis of these experiences from a socio-material perspective in chapter seven revealed a number of social and material actors in the micro-interactions and exchanges that were revealed in the student's narratives. Collectively these interactions and exchanges revealed the highly individualised, complex and uncertain experience of 'becoming' a pharmacist that was shared by the students who participated in this study.

Addressing the Research Questions

<u>In what ways do pharmacy students represent their experiences of 'becoming' a pharmacist?</u>

The themes and patterns that emerged from the student's narratives analysed in chapter five, revealed diversity in the experiences of pharmacy students

'becoming' a pharmacist. Some students had experience of working in a pharmacy whilst others did not. Those that had experiences of working in a pharmacy referred to these experiences during their interviews revealing how what they observed in practice influenced their own ideas of 'becoming' a pharmacist. Some students recounted experiences of being a customer of a pharmacy and observing how the pharmacist treated them and other customers, these experiences too were influential in shaping their ideas of 'becoming' a pharmacist. Some students also revealed personal experiences that were unrelated to pharmacy, these were also revealed as influential in shaping their experience of 'becoming' a pharmacist.

These findings are important to pharmacy education as they demonstrate that students' sense of 'becoming' a pharmacist is shaped and influenced by experiences from inside and outside of the discipline of pharmacy and from inside and outside the domain of higher education. These findings challenge the dominance of the Master of Pharmacy course and the domain of higher education as being a central component of 'becoming' a pharmacist; instead it frames them as only one experience within a wide range of experiences that are constantly shaping and re-shaping pharmacy students experiences of 'becoming' a pharmacist.

What themes and patterns emerge as students represent their identity?
Chapter five revealed having a good knowledge, focussing on technical tasks and multiple identities of pharmacists, as themes and patterns that emerged from an analysis of student narratives. For students that participated in this study 'having a good knowledge' was viewed as being important to the

process of 'becoming' a pharmacist. Through their narratives, students communicated a notion that studying the Master of Pharmacy course at university was about acquiring this knowledge. They expressed a degree of certainty about what knowledge they had acquired and knowledge that they had yet to acquire, however at the same time expressed a certainty that they would acquire this remaining knowledge by the time they had finished university.

Linked to this notion of 'having a good knowledge', 'focussing on the technical' was another theme that emerged from the analysis of the student's narratives. Some participants focussed on the execution of technical tasks as a component of an 'ideal' pharmacist. They talked about the dispensing and checking of prescriptions, portraying them as technical tasks that they would be undertaking and responsible for as a pharmacist. Likewise being able to communicate with patients was also represented as being a component of an 'ideal' pharmacist and again was conceptualised by students as the execution of a technical task.

The emergence of these themes as patterns in the students narratives illustrate the episteme and techne domains of knowledge (knows and knows how) reinforcing what Eraut (1994) refers to as "book knowledge" (p. 42). These domains portray to the student a degree of certainty. The knowledge is codified in textbooks, it is written down and can be referred to when needed. Similarly the technical tasks that students talked about in their interviews are also standardised and codified in texts such as standard operating procedures. The findings of this research reveal reliance by students on these propositional

and procedural forms of knowledge. Whilst these forms of knowledge have a role to play in practice, they create a sense of security and certainty, which is not always the case in the practice of a pharmacist. The ability to make decisions in the absence of or with incomplete information, however, is what is required of a pharmacist, requiring the pharmacist to draw on practical wisdom (phronesis). Relying on propositional and procedural forms of knowledge risks inhibiting the development of pharmacy students into pharmacists as they become locked into routine practices where they remain operating as an executive technician who follows rules, protocols and procedures, rather than drawing on practical wisdom.

Another theme that emerged from the student's narratives that challenges the sense of security and certainty that the students were expressing was that of the multiple identities of a pharmacist. Students conceptualised the pharmacist as manager, as businessman, as caregiver, as an expert in medicines. For some students these differing conceptualisations were competing conceptualisations, such as in Nigel's story he told about the characters of 'the Pill' and 'Kathleen' that was analysed in chapter six. These differing conceptualisations of a pharmacist that students expressed contribute to a landscape of uncertainty that students encounter in the process of 'becoming' a pharmacist and echoes the concern expressed by Hepler and Strand (1990) that pharmacy is "a profession unable to choose from a bewildering variety of functions" (p. 534).

How do pharmacy students position themselves within the 'profession'?

Chapter seven discussed how Mol and Law's (1994) metaphor of 'the region' provided a way of understanding the student's experiences of 'becoming' a pharmacist as the expression of a regional identity. Throughout the interviews students referred to themselves as being a student. The students in this study viewed being a student as different and separate from being a pharmacist, as in the case of Charles in chapter seven who expressed the notion that when he became a pre-registration pharmacist he would be one step closer to being a pharmacist. Donald's narrative discussed in chapter seven illustrated the tension that some students experience when they adopt differing roles for differing purposes. For Donald because he was employed as dispenser this distracted him from approaching patients and prescriptions in the way that he would as a pharmacist. He adopted a position as being outside of the profession adopting a subordinate position to the pharmacist. These findings are important as they reveal that pharmacy students in this study did not consider themselves to be a part of the profession. They positioned themselves on the outside of the profession, viewing studying at university as a hurdle to overcome in order to 'become' a pharmacist resulting in a fragmented conceptualisation of their preparation as a pharmacist.

In what ways are the identities of pharmacy students represented as they transition from student to pharmacist?

The analysis of the student's interviews in chapters five and six illustrated their transition from student to pharmacist as characterised by experiences of certainty and uncertainty. Chapter six revealed that pharmacy students encounter competing discourses of what it means to be a pharmacist. Their

identities are shaped by the tensions that arise from experiencing certainty and uncertainty. The notions of 'having a good knowledge' and 'focussing on the technical', discussed previously, serves to re-enforce notions of certainty, whilst the notion that pharmacists have a multiple identities presents experiences of uncertainty. Chapter seven drew on Sørensen's (2011) metaphor of the region as a way to conceptualise the student identities as being multiple and diverse, illustrating a resonance between the findings in this thesis with those of Nyström's (2009) where students have an identity as a student as a way of life.

Importance and Impact of the Findings

Understanding the preparation of pharmacists as a process of 'becoming' as articulated in this thesis recognises the individual and uniquely personal nature of this process. It recognises that different people experience this process differently, as was the case with the students in this thesis. Recognising that students' experiences of 'becoming' a pharmacist are held in tension between experiences of certainty and uncertainty offers opportunities for educators to support students in 'becoming' a pharmacist.

This thesis showed that students who embraced experiences of uncertainty moved beyond reliance on the procedural and propositional knowledge that characterises the domains of episteme and techne. They were able to move beyond the 'rulebook', and make judgements, and to learn from making those judgements. This finding makes an important contribution to the preparation of pharmacists as it illustrates that experience of uncertainty is an important feature of 'becoming' a pharmacist, these experiences force individuals to

develop and to make judgements about what is good or bad in a given situation moving them beyond the application of a 'rulebook'. These experiences of uncertainty they need to be accepted and embraced by individuals 'becoming' a pharmacist.

Chapter seven discussed the incongruence between articulating learning in the language of educational standards and the individual experiences of participants in this study. This thesis has highlighted the importance of ensuring these personal experiences are valued in the process of 'becoming', despite such notions being resisted by the language of educational standards, which are written in particular ways for specific regulatory purposes. The importance for educators is in recognising that uncertainty is an essential experience in 'becoming' a pharmacist and that these experiences hold the potential to resist the sedimenting potential of viewing the preparation of pharmacists through the lens of the General Pharmaceutical Council's (2011) standards for initial education and training of pharmacists. From this perspective, the findings of this thesis can have an impact on the discipline of pharmacy education by persuading educators to ensure that learning opportunities are developed to encourage and support the pharmacy student to embrace and accept experiences of uncertainty as critical to their 'becoming' a pharmacist. Failure to embrace these experiences of uncertainty risks sedimenting students in routine practices where they remain as executive technicians, following rules, protocols and procedures, rather than developing as independent thinking decision makers who interpret each situation anew and construct new responses to each situation encountered.

The findings of this thesis therefore suggest that as educators we need to create space for pharmacy students to encounter and reflect upon experiences of uncertainty. Through supporting students to embrace and reflect upon these experiences of uncertainty educators would create an environment where the student could be guided to learn from their own experiences and how they could take this learning forward into future practice. In this way learning would be truly student centered and the individual would be guided and supported in addressing his or her own learning needs. Such an approach resonates with the work of Schön (1991) who argues that competent practitioners are able to reflect-in-action to deal with situations of uncertainty.

Recognising that the potential of the NHS to improve healthcare delivery and patient safety lies in its ability "to be a learning organisation" (Department of Health 2013 p. 24), the Berwick Review underlined the importance of having practitioners who are able to reflect-in-action. The review recognised that the best learning happens when it is the individual who determines his or her own learning priorities. The Royal Pharmaceutical Society has also highlighted a link between experiences of uncertainty and competency. In speaking to recently qualified pharmacists during the first 1000 days of their practice, many of these pharmacists reported feeling "*abandoned, fearful, inexperienced, a lack of support, a fear of the unknown*" (Duggan 2015). These pharmacists have completed their Master of Pharmacy degree, completed their pre-registration training and are registered with the General Pharmaceutical Council as a pharmacist. Yet they still express a sense of uncertainty about their practice and express discomfort about what to do in given situations. Whilst acknowledging that this was not part of the data

collected in this thesis it highlights the importance of ensuring the initial education and training of pharmacists in higher education prepares them for encountering and being able to deal with uncertainty in practice.

Developing students to be more reflective of their experiences of practice at all stages of their preparation to be a pharmacist has the potential to support the development of more reflective practitioners. As Scanlon (2011) notes, "knowing where we are going is partly dependent on where we have been" (p. 246), therefore as educators we need to more explicitly articulate and conceptualise the preparation of pharmacists as a continuum from pharmacy student through to registered pharmacist as opposed to the more fragmented notion that emerged from the students in this research. Developing pharmacy students to be reflective practitioners from the beginning of their course and developing their ability to reflect-in-action, should as Schön (1991) argues, produce competent practitioners who are able to deal with situations of uncertainty and therefore more able to deal with the realities of practice as they emerge into the continually uncertain space of healthcare delivery.

Summary

This chapter has illustrated that experiences of uncertainty are a feature of the landscape of 'becoming' a pharmacist. These experiences of uncertainty are important and essential to the experience of 'becoming' a pharmacist as they provoke, force and encourage individuals to learn from those experiences adding to a reservoir of experiences that they can draw upon again. Failure to embrace these experiences of uncertainty risks sedimenting students in routine practices where they remain as executive technicians, following rules,

protocols and procedures rather than developing as independent thinking decision makers who interpret each situation anew and construct new responses to each situation encountered.

The chapter has re-visited the original aims and research questions outlined in chapter three illustrating how these have been addressed by the analysis and discussion of the findings presented in this thesis. It has concluded by considering how pharmacy education can embrace the experiences of uncertainty that pharmacy students experience as a part of 'becoming' a pharmacist and the potential that these might have for contributing to the enhancement of competency development and healthcare delivery.

Chapter 8 – Reflecting on the Study

In this final chapter, I take the opportunity to reflect on undertaking this study as part of a Doctorate of Education and as another of my "journeys of iterative professional becoming other" (Scanlon 2011b p. 1) and return to Scanlon's metaphor from chapter one of "looking back, looking forward" (p. 1).

In 'looking back', I reflect on how the trustworthiness and authenticity of this study can be considered. I reflect on adopting a narrative inquiry approach in this study, the findings that have emerged from this study, the use of theory that has informed many aspects of the study and in 'looking forward' I reflect on the question of 'what next'.

Trustworthiness and Authenticity

There are a number of perspectives and approaches that have been adopted to validate qualitative research (Creswell 2007). Mason (cited in Bryman 2012) argues that the concepts of reliability, validity and generalisability which dominate in quantitative approaches can be assimilated in to qualitative approaches to research. Arguing that "qualitative research is endlessly creative and interpretive" (Denzin and Lincoln 2011a p. 14), Denzin and Lincoln reject positivist notions of reliability and validity as being inappropriate for examining qualitative research. That is not to say that the veracity of qualitative research accounts are not important, as Charles Bosk (cited in Maxwell 1992 p. 279) asks about field work undertaken by a single field worker, "Why should we believe it?". Trustworthiness and authenticity are two criteria that can be used for assessing qualitative studies (Lincoln and Guba

cited in Bryman 2012) and I adopt them in this study as a means to answer Charles Bosk's question of 'why should we believe it?'.

Trustworthiness

Credibility, transferability, dependability and confirmability are four criteria that account for the trustworthiness of a qualitative study.

Credibility of an qualitative study can be assured by following good practice in research and by subjecting the findings of the social world to the participants. Whilst the findings of this study that emerged from the analysis have not yet been shared with the participants, as noted in chapter four all participants were offered an opportunity to view their interview transcript. Also as outlined in chapter four good research practice was ensured by adopting the British Educational Research Associations (BERA) Ethical Guidelines for Educational Research.

The findings in this study are contextually unique and specific to the social world that was studied, that is pharmacy students at this particular Higher Education Institution. Geertz (cited in Bryman 2012) suggests that providing "rich accounts of the details of a culture" (p. 392) can permit judgements about the "transferability of findings to other milieux" (p. 392). Chapter five provides an overview and introduction to the data that was generated by interviewing the students and therefore offers an opportunity to consider the transferability of the findings from this study. As noted in chapter one and throughout the thesis, this study was concerned with exploring the local experiences rather than an attempt to make any generalisable claims and as

such transferability of findings was not essential to the research design adopted in this study.

Chapter four provides a complete account of the research process covering the research design, ethical considerations, participant recruitment, data generation, conducting interviews, transcribing and analysing the interviews. This account allows the reader to judge for themselves the dependability of this study. The criteria of dependability suggests that the research process be audited, with peers acting as auditor to verify the findings of any analysis. But as noted by Bryman (2012), auditing has not become an approach that has been adopted in qualitative research. As the analysis of the interview data in this study was an interpretive approach, it was deemed that confirmation of the emergent themes and patterns from the interviews by a third party would serve no purpose in assuring the dependability of the findings. This recognises that as a researcher in a narrative inquiry I "[do] not find narratives but instead participate[s] in their creation" (Neander and Scott cited in Riessman 2008 p. 21). I will reflect further on this issue in the next section where I reflect further on adopting a narrative inquiry approach in this study.

In chapter three of this thesis I provided a reflexive account of my theoretical positioning in terms of the conceptual framework of this study. The articulation of the conceptual framework of the study began in chapter one as I discussed the personal context to this study and my interest in undertaking this particular study. Whilst recognising that complete objectivity is not possible in interpretive approaches to research, by making clear my positions and selves within the study I have demonstrated that I have "acted in good faith"

(Bryman 2012 p. 392) in undertaking the research process outlined in this thesis, establishing the confirmability of this study.

<u>Authenticity</u>

The criteria of fairness, ontological authenticity, educative authenticity, catalytic authenticity and tactical authenticity are criteria suggested by Guba and Lincoln (cited in Bryman 2012) that can be used to consider the authenticity of a qualitative study.

Fairness is concerned with ensuring that the research fairly represents the viewpoints of the setting under study (Bryman 2012). As noted in chapter four, analysis of the interview was undertaken by a process of listening and re-listening to the audio recordings of the interviews, alongside reading and re-reading the transcripts of each interview. This ensured that the findings that were revealed by the analysis were grounded in the data generated via the interviews. I have drawn on the raw data by using quotes and extended excerpts from the interviews to illustrate and support the analysis and discussions presented in chapters five, six and seven, therefore demonstrating my commitment to fairly representing the viewpoints of the participants.

Ontological authenticity ensures that research contributes to a better understanding of social milieu and educational authenticity ensures that research helps others to appreciate the perspectives of fellow members of their social milieu (Bryman 2012). Articulating the conceptual framework in chapter three and framing this study in a social constructivist paradigm has helped ensure the ontological authenticity of this study. Framing the study in a

social constructivist paradigm informed the construction of it as an interpretive inquiry adopting narrative inquiry approaches. This approach has also ensured the educative authenticity of this study as it has afforded me as the researcher and member of the social setting a better appreciation of how pharmacy students experience 'becoming' a pharmacist whilst undertaking their educational programme.

The final two criteria of catalytic and tactical authenticity are difficult to assess in this study. Catalytic authenticity ensure that research has acted as an impetus to engage members in changing their circumstances and tactical authenticity ensures whether research has empowered members to take the steps necessary for engaging in action (Bryman 2012). These two criteria can only be assessed as the findings of this study are disseminated amongst the participants and the wider community of pharmacy education. I reflect further on how the findings in this study will be accepted by my community when I reflect on the use of theory in this study.

Reflecting on adopting a narrative inquiry approach

In chapter four I discussed the rationale for adopting a narrative inquiry approach as a way to privilege the voices of the students in this study. I outlined four turns that Pinnegar and Daynes (2007) suggest indicate a move away from positivistic notions of inquiry towards a concern for local understandings of experience. I return to these turns here as a means to reflect further on the design and execution of this study, considering further the authenticity of this study.

<u>A change in the relationship between the researcher and the researched</u>

This turn recognises that narrative inquiry approaches require a change in the relationship between the researcher and the researched. In chapter four I discussed my dual role as lecturer and researcher, and whilst this can be viewed as a limitation by introducing potential for bias, in terms of students telling me what they think I want to hear, I instead recognise this as evidence of my turn towards narrative inquiry. The steps that I adopted in this study demonstrate that I considered the potential implications of this and that I "… recognize and embrace the interactive quality of the researcher-researched relationship …" (Pinnegar and Daynes 2007 p. 7).

Chapter four clearly articulated how I managed this relationship, recognising that my position and multiple selves of lecturer, pharmacist, former student and researcher had the potential to influence positively and negatively the data that was generated and how I analysed it. As Fenwick et al. argue " [a] narrative is always somebody's narrative" (Fenwick et al. 2011 p. 44), from this perspective I therefore recognise that the experiences that students shared with me, are their own narratives, however at the same time the production of this thesis is my own narrative of what they revealed to me.

My reflexive account in chapter four that considered the ethics of the study, how I managed my dual role conflict and my appreciation of the power relations between me as the researcher and my students as the researched, demonstrates how in this study I have been able to "create an illuminating, empowering personal statement that attunes me to where self and subject are entwined" (Peshkin 1988 p. 20).

<u>A change from a focus on the general and universal towards the local and specific</u>

As noted throughout this thesis, this study was aimed at exploring the experiences of pharmacy students at one higher education institution. It was not the intention to seek generalisations beyond the students studied, instead this study has explored the unique and individual lived experiences of pharmacy students undertaking the required educational programme for registration as a pharmacist.

Chapter two reviewed literature on how becoming 'professional' has been conceptualised and researched. As noted much of the literature has been concerned with examining entire cohorts of students, such as year groups or entire Schools of Pharmacy. In searching for a consensus on a definition of how professionalism can be understood in pharmacy, the literature demonstrates a concern for being able to make generalisations that can be applied universally.

Recognising, "that there is no clear window into the inner life of an individual, any gaze is always filtered through the lens of language, gender, social class, race and ethnicity. There are no objective observations only observations socially situated in the worlds of and between the observer and the observed." (Denzin and Lincoln 2011a p. 12), the findings that were revealed in this study are applicable to the local and specific situation of one particular Higher Educations Institution (HEI), rather than generalisable to all HEIs. By examining in depth the experiences of pharmacy students at this HEI, this study makes a contribution to knowledge and educational practice by

revealing that pharmacy students experienced innumerable micro-interactions and exchanges with multiple social and material actors which all contributed to the shaping of their emerging identity as a pharmacist.

A move from the use of number towards the use of words as data

Adopting interviewing as a means to generate data in this study demonstrates another of the turns towards narrative inquiry. As noted in chapter one, from the beginning of this study I was clear that I wanted to present the voices of students loudly in this study. Previous research, whilst researching pharmacy students, was concerned for researching ways in which to teach, learn and assess professionalism rather than exploring the unique experiences of pharmacy students 'becoming' a pharmacist. Adopting a repertory grid technique for conducting the interviews afforded a method of generating student narratives in this study that was driven by the research participants rather than the researcher. This demonstrates a move towards the use of words as data recognising that narrative inquiry "primarily uses stories as data and analysis" (Pinnegar and Daynes 2007 p. 7).

A widening of acceptance of alternative epistemologies or ways of knowing

Adopting an interpretive perspective in this study has afforded new ways of understanding and conceptualising approaches to pharmacy education and 'becoming' a pharmacist. As discussed in chapter one, ways of conceptualising 'professional' in pharmacy practice are predominantly viewed from a societal perspective, examining the roles and functions that pharmacy practice fulfils for society and the characteristics that identify pharmacists as being considered a 'professional' group. Likewise the published literature in chapter

two illustrated that pharmacy literature exhibits a concern for how notions of 'professional' can be defined, taught, learnt, and assessed in a pharmacy context.

Adopting an interpretive perspective in this thesis has privileged the experience of becoming 'professional' from an individual perspective in pharmacy practice in comparison to the societal perspective discussed in chapters one and two, and offers what Clandinin and Rosiek (2007) describe as "an eye to identifying new possibilities" (p. 55).

Reflecting on Findings

In this section I reflect on the findings of this study, in particular I reflect on what might be the implications of these findings for students, for the course and for the practice of pharmacy education. I begin by revisiting the research questions provided in chapter three to consider how the findings contribute to answering these questions.

Chapter five specifically addresses the first two research questions:

- What themes and patterns emerge as students represent their identity?
- In what ways do pharmacy students represent their experiences of 'becoming' a pharmacist?

Chapter five revealed that having a good knowledge, focussing on technical tasks, multiple identities of a pharmacist and relating to patients emerged as themes and patterns in the narratives that were constructed in this study. The narratives revealed that students viewed knowledge and its acquisition as

central to the notion of the 'ideal' pharmacist. Furthermore they also focussed on technical procedures as another component of becoming a pharmacist and encountering multiple identities as a pharmacist.

Chapter six specifically addresses the remaining two research questions:

- How do pharmacy students position themselves within the 'profession'?
- In what ways are the identities of pharmacy students represented as they transition from student to pharmacist?

The participants represented themselves in their narratives as students defining themselves by their year of study. Sørensen's (2011) metaphor of the region afforded away of understanding the student identities as being constructed as multiple and diverse. This conceptualisation revealed the students as inhabiting multiple regions framing their learning as being about gaining increasing levels of awareness about the regions that they inhabit and how these regional identities may conflict. Predominantly, the students tended to position themselves outside of the 'profession' strongly expressing an identity as a student, which resonates with Nyström (2009) argument that students have an identity as being a student as a way of life, in a sense it is a 'rite of passage'.

Implications for Pharmacy Education

This study has illustrated that conventional notions of 'professional' in a pharmacy practice landscape are constraining, privileging pharmacy education approaches to teaching and learning that construct learning in acquisitional terms. Adopting an interpretive perspective in this study has encouraged approaches to and conceptualisations of 'becoming' a pharmacist in less static,

linear, hierarchical and deterministic terms. Using a metaphor of 'becoming' to conceptualise the learning that takes place in the transition from pharmacy student to pharmacist more authentically depicts the "evolutionary, processural nature of developing a professional self" (Scanlon 2011a p. 14) that was revealed by the socio-material assemblages analysed in chapter six. Framing pharmacy education in such conceptualisations of 'becoming' a pharmacist would embrace the multiplicity and diversity of individual experience that were revealed by the findings of this study. Different events stimulate different realisations for different people at different times, in un-imagined ways, therefore pharmacy education needs to conceptualise 'becoming' a pharmacist as "radically indeterminate" (Osberg cited in Fenwick et al. 2011). Rachel's story about getting a tattoo is one example of an interaction where a learning trajectory that unfolded for Rachel in unimagined ways yet coerced her in to considering the socio-cultural expectations that might be placed on her being a pharmacist.

Implications for students

The findings of this study have demonstrated that the experiences of pharmacy students of 'becoming' a pharmacist are unique, individual and unpredictable. Such experiences are not accommodated in external frames of reference that structure and regulate pharmacy education such as the General Pharmaceutical Council's standards for the initial education and training of pharmacists (General Pharmaceutical Council 2011). Analysis of the interviews revealed the process of learning that students experienced as an accumulation of micro-interactions and exchanges that gradually accrued into a reservoir of experiences which could drawn upon for future learning and decision making.

Students don't so much progress or transition, or continue up the spiral moving from a knows, knows how, shows, does, as the General Pharmaceutical Council's standards conceptualise learning, instead they become increasingly aware of complexity, of the limits and boundaries of what they know. Their boundaries become less distinct, blurred. The educational structures that are imposed upon learning don't recognise or acknowledge this learning as occurring or being important. What students need to be made aware of is that uncertainty is expected, is normal and can be learnt from. They need to be supported to help make sense of this uncertainty so that the experience of uncertainty can be functional rather than dysfunctional. Teaching and learning practices need to become a process that acknowledges uncertainty as a feature of learning.

Reflecting on Theory

In the previous sections I have reflected on the quality of this study, on adopting a narrative inquiry approach and on the findings of this study. In this section I continue by reflecting on the use of theory in this study.

Throughout the thesis I have drawn on a range of theories to guide and shape this study. In chapter one I stated that I was going to use my understandings of pharmacy and pharmacy education to inform but not direct my role as a "social theorist'' (Best 2003 p.10). It was never the intention that this study would generate new theory or to develop a grand integrative theory that could explain the transformation from student to pharmacist. This study has drawn on a range of theoretical underpinnings as lenses to expose and examine the

transformation from student to pharmacist in new, less predictable and deterministic ways.

As I reflected on in chapter one, my own education and training has been grounded in the natural sciences and therefore at various times throughout this study I experienced internal turmoil as my positivist thought processes tried to direct the research process. Throughout this study and the production of this thesis this has been an ever-present 'voice' over my shoulder that I have tried hard to ignore with some success, to a greater or lesser extent.

As discussed in chapter one and as was evident from the literature reviewed and critiqued in chapter two, pharmacy education research is predominantly framed in positivist terms, where generalisability, prediction and control are viewed as desirable. This study rejected these notions adopting an interpretive paradigm for this study. In a final act of 'looking forward' I wonder how the findings of this study will be accepted by my community of pharmacy practice educators as I reflect on the story of Cassie, an experienced elementary school teacher.

Cassie adopted new technologies in her classroom to teach maths to schoolchildren. Adopting student-centered pedagogies in her classroom that challenged traditional, teacher-centered pedagogies, Cassie adopted differing practices to her colleagues. These practices demonstrated benefit in terms of the achievement rates of Cassie's pupils, but at the same time set her on a trajectory that left her feeling distanced from her colleagues, reflecting that ''a prophet [is] never accepted by their own town.'' (Lim et al. 2008 p. 215).

Throughout this thesis I have highlighted the dominance of positivistic approaches in pharmacy practice and pharmacy education. Constructing notions of 'becoming' professional in socio-material perspectives may be challenging to my community and I wonder, if like Cassie, such notions will be met with resistance and if I will be left feeling like ''a prophet never accepted by their own town'' (Lim et al. 2008 p. 215) too.

Adopting a socio-material approach in the analysis of the interviews has afforded a way of viewing the educational programme required for registration as a pharmacist as a place where emerging student (professional) identities' are influenced through micro interactions that expose them to uncertainties. These uncertainties challenge what has been taught and learnt, rather than reinforce it. These interactions force students to move beyond theory and the rulebook, to make judgments, and learn from these judgments and to develop a reservoir of experience that will become a source for future judgement calls.

Adopting a socio-material perspective and understanding 'becoming' a pharmacist through a lens of ANT, has helped to trace the networks that students shape and are shaped by. These tracings reveal the multiple actors that contribute fully, partially, fleetingly to the performance of these networks. In examining these tracings what is revealed is the multiple powerful social and material actors that challenge taken for granted assumptions about what influences the students experiences of becoming' a pharmacist.

Future Research Directions

Finally before closing this thesis it is important to consider other areas of research and inquiry that have emerged from this study.

Using the repertory grid technique in this study provided a method for generating narratives of student experience, and it would be worthwhile considering how this technique can be used further in narrative approaches to inquiry.

A narrative approach in this study has provided new and interesting insights to the experiences of pharmacy students. Collecting and analysing more of their stories would be of interest in exploring other facets of pharmacy education.

This study has been concerned with examining the experiences of pharmacy students, whilst undertaking the educational programme required for registration as a pharmacist. The participants involved in this study only provided a snapshot of experiences at a moment in time. As yet and for obvious reasons related to timescales, no study has traced the experiences of a pharmacy student from day one of their pharmacy course, through to graduation, onto pre-registration training, registration as a pharmacist and into practice. It would therefore be interesting to undertake a more longitudinal study, where the experiences of students are traced over this extended time period.

In common with the published literature, this study focused purely on pharmacy students and their experiences of 'becoming' professional. It would

be interesting and revealing to undertake an ethnographic study of pharmacists in practice to articulate and explore the actors, social and material, that continue to shape the on-going negotiation and renegotiation of professional identities of pharmacists in practice. Especially since role models, both academic and from practice, were suggested as being an important element by Schafheutle et al. (2010) for the development of professionalism in students.

Final reflection

This study adds to knowledge and the practice of pharmacy education by arguing that 'becoming' a pharmacist should be viewed as an on-going process of developing professional selves, where notions of 'professional' move away from externally imposed conceptualisation of 'professional' that impose convenient structures. By examining some pharmacy students experiences of 'becoming' a pharmacist through a socio-material lens, this study has challenged and disrupted portrayals of 'becoming a pharmacist as a stable "self-contained and self-evident object" (Fenwick 2010 p. 123), illustrating that experiencing uncertainty is a normal facet of 'becoming' a pharmacist. Rather than a conclusion to the study of professionalism in pharmacy, this thesis is a first step in exposing pharmacy practice and pharmacy education to new ways of inquiry and thinking.

References

ABBOTT, A., 1988. *The System of Professions: An essay on the Division of Expert Labour*. Chicago: The University of Chicago.

ADAMS, K.E., O'REILLY, M., ROMM, J. and JAMES, K., 2006. Effect of Balint training on resident professionalism. *American Journal of Obstetrics and Gynecology*, **195**(5), pp. 1431-1437.

AMERICAN PHARMACEUTICAL ASSOCIATION ACADEMY OF PHARMACY STUDENTS and AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY COUNCIL OF DEANS, 2000. White paper on pharmacy student professionalism. *Journal of the American Pharmaceutical Association*, **40**, pp. 96-101.

AMIN, A. and ROBERTS, J., 2008. Knowing in action: Beyond communities of practice. *Research Policy*, **37**(2), pp. 353-369.

ANDERSON, D.R., 2004. The peril of deprofessionalization. *American Journal of Health System Pharmacy*, **61**, pp. 2373-2379.

ANDREW, N., FERGUSON, D., WILKIE, G., CORCORAN, T. and SIMPSON, L., 2009. Developing professional identity in nursing academics: the role of communities of practice. *Nurse Education Today*, **29**(6), pp. 607-611.

ARKSEY, H., and KNIGHT, P., 1999. *Interviewing for Social Scientists*. London: Sage Publications.

AUSTIN, Z., 2002. What is learnworthy? Lessons from group socialization theory for professional education and continuing professional development. *Pharmacy Education*, **2**(4), pp. 161-166.

AUSTIN, Z. and DUNCAN-HEWITT, W., 2005. Faculty, Student, and Practitioner Development within a community of practice. *American Journal of Pharmaceutical Education*, **69**(3), pp. 381-389.

BARNETT, R.A., BECHER, R.A. and CORK, N.M., 1987. Models of Professional Preparation - Pharmacy, Nursing and Teacher-Education. *Studies in Higher Education*, **12**(1), pp. 51-63.

BECK, D.E., THOMAS, S.G. and JANER, A.L., 1996. Introductory Practice Experiences: A conceptual framework. *American Journal of Pharmaceutical Education*, **60**, pp. 122-131.

BERGER, B.A., BUTLER, S.L., DUNCAN-HEWITT, W., FELKEY, B.G., TAYLOR, C., JUNGNICKEL, P.W., KRUEGER, J.L., PERRY, C.R. and TAYLOR, C., 2004. Changing the culture: An institution-wide approach to instilling professional values. *American Journal of Pharmaceutical Education*, **68**(1), pp. 1-9.

BERGER, P. and LUCKMAN, T., 1966. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. London: Penguin Books.

BEST, S., 2003. *A Beginner's Guide to Social Theory.* London: Sage Publications.

BILLETT, S. and SOMERVILLE, M., 2004. Transformations at work: identity and learning. *Studies in Continuing Education*, **26**(2), pp. 309-326.

BOYLE, C.R., BEARDSLEY, R.S., MORGAN, J.A. and RODRIQUEZ DE BITTNER, M., 2007. Professionalism: A Determining Factor in Experiential Learning. *American Journal of Pharmaceutical Education*, **71**(2), pp. 1-7.

BRANTE, T., 2011. Professions as Science-Based Occupations. *Professions & Professionalism*, **1**(1), pp. 4-20.

BREHM, B., BREEN, P., BROWN, B., LONG, L., WARREN, N.S., SMITH, R. and WALL, A., 2006. An interdisciplinary approach to introducing professionalism. *American Journal of Pharmaceutical Education*, **70**(4), pp. 1-7.

BRITISH EDUCATIONAL RESEARCH ASSOCIATION (BERA), 2004. *Ethical Guidelines for Educational Research.* Southwell: British Educational Research Association.

BROADBENT, J., DIETRICH, M. and ROBERTS, J., eds, 1997. *The End of the Professions?* London: Routledge.

BROWN, D.L., FERRILL, M.J., HINTON, A.B. and SHEK, A., 2001. Self-Directed Professional Development: The Pursuit of Affective Learning. *American Journal of Pharmaceutical Education*, **65**, pp. 240-246.

BROWN, D.L., FERRILL, M.J. and PANKASKIE, M.C., 2003. White coat ceremonies in US schools of pharmacy. *Annals of Pharmacotherapy*, **37**(10), pp. 1414-1419.

BRYMAN, A., 2012. *Social Research Methods.* 4th edn. Oxford: Oxford University Press.

BURR, V., 2003. *Social Constructionism.* 2nd Kindle edn. London: Routledge.

CAIN, J., SCOTT, D.R. and AKERS, P., 2009. Pharmacy Students' Facebook Activity and Opinions Regarding Accountability and E-Professionalism. *American Journal of Pharmaceutical Education*, **73**(6), pp. 1-6.

CALLON, M., 1991. Techno-economic networks and irreversibility. In: J. LAW, ed. *A Sociology of Monsters: Essays on Power, Technology and Domination.* London: Routledge, pp. 132-165.

CARTER, B.L., BRUNSON, B.J., HATFIELD, C.L. and VALUCK, R.J., 2000. Description of an introductory course designed to Socialize Pharmacy Students. *American Journal of Pharmaceutical Education*, **64**, pp. 166-173.

CANNELLA, G.S. and LINCOLN, Y.S., 2011. Ethics, Research Regulations and Critical Social Science. In: N.K. DENZIN and Y.S. LINCOLN, eds, *The Sage Handbook of Qualitative Research*. 4th Kindle edn. Thousand Oaks, California: Sage Publications.

CANNING, C. and HOLMES, K., 2006. Community Consultation in Developing Museum Projects: A Case Study Using the Repertory Grid Technique. *Cultural Trends*, **15**(4), pp. 275-297.

CHALMERS, R.K., ADLER, D.S., HADDAD, A.M., HOFFMAN, S. and WOODWARD, J.M., 1995. Essential linkage of professional socialization and pharmaceutical care. *American Journal of Pharmaceutical Education*, **59**, pp. 85-90.

CHASE, S.E., 2011. Narrative Inquiry: Still a Field in the Making. In: N.K. DENZIN and Y.S. LINCOLN, eds, *The Sage Handbook of Qualitative Research*. 4th Kindle edn. Thousand Oaks, California: Sage Publications.

CHISHOLM, M.A., COBB, H., DUKE, L., MCDUFFIE, C. and KENNEDY, W.K., 2006. Development of an instrument to measure professionalism. *American Journal of Pharmaceutical Education*, **70**(4), pp. 1-6.

CLANDININ, D.J. and ROSIEK, J., 2007. Mapping a Landscape of Narrative Inquiry. In: D.J. CLANDININ, ed, *Handbook of Narrative Inquiry: Mapping a Methodology.* Thousand Oaks: Sage Publications, pp. 35-75.

COHEN, J.J., 2006. Professionalism in medical education, an American perspective; from evidence to accountability. *Medical Education*, **40**, pp. 607-617.

COHEN, L., MANION, L. and MORRISON, K., 2011. *Research Methods in Education*. 7th edn. Oxon: Routledge.

CORBIN, J.M. and STRAUSS, A.L., 2008. *Basics of qualitative research: techniques and procedures for developing grounded theory*. 3rd edn. London: Sage Publications.

COSHALL, J.T., 2009. Measurement of Tourists' Images: The Repertory Grid Approach. *Journal of Travel Research*, **39**(1), pp. 85-89.

CRESWELL, J.W., 2007. *Qualitative Inquiry and Research Design: Choosing among five approaches.* 2nd edn. London: Sage Publications.

CRIBB, A. and BARBER, N., 2000. *Developing pharmacy values: Stimulating the Debate*. London: The Royal Pharmaceutical Society of Great Britain.

CROTTY, M., 1998. *The foundations of social research: meaning and perspective in the research process*. London: Sage Publications.

CUDDAPAH, J.L. and CLAYTON, C.D., 2011. Using Wenger's Communities of Practice to Explore a New Teacher Cohort. *Journal of Teacher Education*, **62**(1), pp. 62-75.

DAVIES, B., 2005. Communities of practice: Legitimacy not choice. *Journal of Sociolinguistics*, **6**(1), pp. 557-581.

DEPARTMENT OF HEALTH, 2007a. *Report of the working party on professional regulation and leadership in pharmacy*. London: Department of Health.

DEPARTMENT OF HEALTH, 2007b. *Trust, Assurance and Safety - The Regulation of Health Professionals in the 21st Century*. London: Her Majesty's Stationary Office.

DEPARTMENT OF HEALTH, 2013. *A promise to learn – a commitment to act: improving the safety of patients in England*. London: Department of Health.

DENZIN, N.K. and LINCOLN, Y.S., 2011a. Introduction: The Discipline and Practice of Qualitative Research. In: N.K. DENZIN and Y.S. LINCOLN, eds, *The Sage Handbook of Qualitative Research.* 4th Kindle edn. Thousand Oaks, California: Sage Publications.

DENZIN, N.K. and LINCOLN, Y.S., 2011b. Paradigms and Perspective in Contention. In: N.K. DENZIN and Y.S. LINCOLN, eds, *The Sage Handbook of Qualitative Research*. 4th Kindle edn. Thousand Oaks, California: Sage Publications.

DUGGAN, C., 2015. *Introduction to professional development frameworks: improving patient outcomes*. [lecture].The Royal Pharmaceutical Society, London.

DUKE, L.J., KENNEDY, K., MCDUFFIE, C.H., MILLER, M.S., SHEFFIELD, M.C. and CHISHOLM, M.A., 2005. Student attitudes, values, and beliefs regarding professionalism. *American Journal of Pharmaceutical Education*, **69**(5), pp. 1-11.

DUNCAN-HEWITT, W. and AUSTIN, Z., 2005. Pharmacy Schools as Expert Communities of Practice? A Proposal to Radically Restructure Pharmacy Education to Optimize Learning. *American Journal of Pharmaceutical Education*, **69**(3), pp. 370-380.

EASTERBY-SMITH, M., THORPE, R. and HOLMAN, D., 1996. Using repertory grids in management. *Journal of European Industrial Training*, **20**(3), pp. 3-30.

ECKERT, P. and WENGER, E.C., 2005. What is the role of power in sociolinguistic variation? *Journal of Sociolinguistics*, **9**(4), pp. 582-589.

EDER, D. and FINGERSON, L., 2002. Interviewing Children and Adolescents. In: J.F. GUBRIUM and J.A. HOLSTEIN, eds, *Handbook of Interview Research: Context & Method*. London: Sage Publications, pp. 181-201.

EDWARDS, R.M., 2011. Policy and Professionalism in Pharmacy Education. *Pharmacy Education*, **11**(1), pp. 209-211.

ERAUT, M., 1994. *Developing Professional Knowledge and Competence.* London: The Falmer Press.

ERICKSON, F., 2011. A history of Qualitative Inquiry in Social and Educational Research. In: N.K. DENZIN and Y.S. LINCOLN, eds, *The Sage Handbook of Qualitative Research.* 4th Kindle edn. Thousand Oaks, California: Sage Publications.

ETZIONI, A., ed., 1969. *The Semi-Professions and Their Organization.* New York: The Free Press.

EVETTS, J., 2003. The Sociological Analysis of Professionalism: Occupational Change in the Modern World. *International Sociology,* **18**(2), pp. 395-415.

EVETTS, J., 2006. Short Note: The Sociology of Professional Groups: New Directions. *Current Sociology*, **51**(1), pp. 133-143.

FENWICK, T., 2010a. Re-thinking the "thing": Sociomaterial approaches to understanding and researching learning in work. *Journal of Workplace Learning*, **22**(1), pp. 104-116.

FENWICK, T., 2010b. (un)Doing standards in education with actor-network theory. *Journal of Education Policy*, **25**(2), pp. 117-133.

FENWICK, T. and EDWARDS, R., 2011. Introduction: Reclaiming and Renewing Actor Network Theory for Educational Research. *Educational Philosophy and Theory*, **43**, pp. 1-14.

FENWICK, T., EDWARDS, R. and SAWCHUK, P., 2011. *Emerging Approaches to Educational Research.* Kindle edn. London: Routledge.

FESTINGER, L., 1957. *A Theory of Cognitive Dissonance.* Stanford: Stanford University Press.

FLICK, U., ed., 2007. *Designing Qualitative Research.* 1st edn. London: Sage Publications.

FLYVBJERG, B., 2001. *Making Social Science Matter: Why social inquiry fails and how it can succeed again.* Cambridge: Cambridge University Press.

FRANSELLA, F., 1995. *George Kelly.* London: Sage Publications.

FREIDSON, E., 1983. The Theory of Professions: State of the Art. In: R. DINGWALL and P. LEWIS, eds, *The Sociology of the Professions: Lawyers, Doctors and Others.* London: Macmillan. pp. 19-37.

FREIDSON, E., 2001. *Professionalism: the third logic.* Cambridge: Polity.

GANESON, K. and EHRICH, L.C., 2009. Transition into High School: A phenomenological study. *Educational Philosophy and Theory*, **41**(1), pp. 60-78.

GASKELL, G., 2000. Individual and Group Interviewing. In: M.W. BAUER and G. GASKELL, eds, *Qualitative Researching with text, image and sound: A Practical Handbook*. 1st edn. London: Sage Publications, pp. 38-56.

GENERAL PHARMACEUTICAL COUNCIL, 2011. *Future pharmacists: Standards for the initial education and training of pharmacists*. London: General Pharmaceutical Council.

GENERAL PHARMACEUTICAL COUNCIL, 2012. *Standards of conduct, ethics and performance*. London: General Pharmaceutical Council.

GENERAL PHARMACEUTICAL COUNCIL, 2013-last update. *About the General Pharmaceutical Council*. [online]. Available: http://www.pharmacyregulation.org/about-us [Accessed 3rd June, 2013].

GHERARDI, S. and NICOLINI, D., 2000. To Transfer is to Transform: The Circulation of Safety Knowledge. *Organization*, **7**(2), pp. 329-348

GIBBS, G., 2007. *Analyzing Qualitative Data*. 1st edn. London: Sage Publications.

GOLDIE, J., DOWIE, A., COTTON, P. and MORRISON, J., 2007. Teaching professionalism in the early years of a medical curriculum: a qualitative study. *Medical Education*, **41**(6), pp. 610-617.

GOODE, W.J., 1969. The Theoretical Limits of Professionalization. In: A. ETZIONI, ed, *The Semi-Professions and Their Organization*. 1st edn. New York: The Free Press, pp. 266-313.

GUBA, E., 1990. *The Paradigm Dialog*. California: Sage Publications.

HAGER, P. and HODKINSON, P., 2011. Becoming As an Appropriate Metaphor for Understanding Professional Learning. In: L. SCANLON, ed, *"Becoming" a Professional: an Interdisciplinary Analysis of Professional Learning.* London: Springer, pp. 33-56.

HAMMACK, F.M., 1997. Ethical Issues in Teacher Research. *Teachers College Record*, **99**(2), pp. 247-265.

HAMMER, D.P., 2000. Professional attitudes and behaviors: The "A's and B's" of professionalism. *American Journal of Pharmaceutical Education*, **64**(4), pp. 455-464.

HAMMER, D.P., 2006. Improving Student Professionalism During Experiential Learning. *American Journal of Pharmaceutical Education*, **70**(3), pp. 1-6.

HAMMER, D.P., MASON, H.L., CHALMERS, R.K., POPOVICH, N.G. and RUPP, M.T., 2000. Development and testing of an instrument to assess behavioral professionalism of pharmacy students. *American Journal of Pharmaceutical Education*, **64**, pp. 141-151.

HAMMER, D.P. and PAULSEN, S.M., 2001a. An innovative clerkship in pharmacy education. *American Journal of Pharmaceutical Education*, **65**(3), pp. 284-293.

HAMMER, D.P. and PAULSEN, S.M., 2001b. Strategies and processes to design an integrated, longitudinal professional skills development course sequence. *American Journal of Pharmaceutical Education*, **65**(1), pp. 77-85.

HARDEN, R.M. and STAMPER, N., 1999. What is a spiral curriculum? *Medical Teacher*, **21**(2), pp. 141-143.

HEPLER, C.D. and STRAND, L.M., 1990. Opportunities and Responsibilities in Pharmaceutical Care. *American Journal of Hospital Pharmacy*, **47**, pp. 533-543.

HIBBERT, D., BISSELL, P. and WARD, P.R., 2002. Consumerism and professional work in the community pharmacy. *Sociology of Health and Illness*, **24**(1), pp. 46-65.

HUNTER, A., 1995. Local Knowledge and Local Power. In: R. HERTZ and J.B. IMBER, eds, *Studying Elites Using Qualitative Methods*. London: Sage Publications, pp. 151-170.

JONES, V.A., 1999. The White Coat: Why not follow suit? *Journal of the American Medical Association*, **281**(5), pp. 478.

JOSSELSON, R., 2007. The Ethical Attitude in Narrative Research. In: D.J. CLANDININ, ed, *Handbook of Narrative Inquiry*. 1st edn. Thousand Oaks, California: Sage Publications, pp. 537-566.

KVALE, S., 2007. *Doing Interviews*. 1st edn. London: Sage Publications.

KELLEY, K.A., STANKE, L.D., RABI, S.M., KUBA, S.E. and JANKE, K.K., 2011. Cross-Validation of an Instrument for Measuring Professionalism Behaviors. *American Journal of Pharmaceutical Education*, **75**(9), pp. 1-10.

LAVE, J., 1996. Situating Learning in Communities of Practice. In: L.B. RESNICK, J.M. LEVINE and S.D. TEASLEY, eds, *Perspectives on Socially Shared Cognition.* Washington: American Psychological Association, pp. 63-82.

LIM, W., LEE, Y. and HUNG, D., 2008. "A prophet never accepted by their own town": a teacher's learning trajectory when using technology. *Asia-Pacific Journal of Teacher Education*, **36**(3), pp. 215-227.

MACDONALD, K.M., 1995. *The Sociology of the Professions*. London: Sage Publications.

MACKINNON, G.E., MCALLISTER, D.K. and ANDERSON, S.C., 2001. Introductory practice experience: opportunity for early professionalization. *American Journal of Pharmaceutical Education*, **65**, pp. 247-253.

MALLINSON, S., POPAY, J., KOWARZIK, U. and MACKIAN, S., 2006. Developing the public health workforce: a 'communities of practice' perspective. *Policy & Practice*, **34**(2), pp. 265-285.

MARSDEN, D. and LITTLER, D., 2000. Repertory grid technique: An Interpretive research framework. *European Journal of Marketing*, **34**(7), pp. 816-834.

MAXWELL, J.A., 1992. Understanding and validity in qualitative research. *Harvard Educational Review*, **62**, pp. 279-300.

MAXWELL, J.A., 2005. Conceptual Framework. What do you think is going on? In: J.A. MAXWELL, ed, *Qualitative Research Design.* 2nd edn. London: Sage Publications, pp. 33-63.

MAY, T., 2001. *Social Research: Issues, Methods and Process*. Buckingham: Open University Press.

MIDDLEHURST, R. and KENNIE, T., 1997. Leading Professionals: Towards new concepts of professionalism. In: J. BROADBENT, M. DIETRICH and J. ROBERTS, eds, *The End of the Professions? The restructuring of professional work*. 1st ed. London: Routledge, pp. 50-68.

MILLER, G.E., 1990. The assessment of clinical skills/competence/performance. *Academic Medicine*, **65**, pp. S63-S67.

MILES, M.B. and HUBERMAN, A.M., 1994. *Qualitative Data Analysis: An Expanded Sourcebook*. 2nd edn. Thousand Oaks, California: Sage Publications.

MOL, A. and LAW, J., 1994. Regions, Networks and Fluids: Anaemia and Social Technology. *Social Studies of Science*, **24**(4), pp. 641-671.

MONROUXE, L., REES, C.E. and HU, W., 2011. Differences in medical students' explicit discourses of professionalism: acting, representing, becoming. *Medical Education*, **45**, pp. 585-602.

MULCAHY, D., 2011. Teacher Professional Becoming: A Practice-Based, Actor-Network Theory Perspective. In: L. SCANLON, ed, "Becoming" a Professional: an Interdisciplinary Analysis of Professional Learning. London: Springer, pp. 219-244.

MULCAHY, D., 2012. Thinking teacher professional learning performatively: a socio-material account. *Journal of Education and Work*, **24**(1), pp. 121-139.

NESPOR, J., 2011. Devices and Educational Change. *Educational Philosophy and Theory*, **43**, pp. 15-37.

NESS, G.L., SHEEHAN, A.H., SNYDER, M.E., JORDAN, J., CUNNINGHAM, J.E. and GETTIG, J.P., 2013. Graduating Pharmacy Students' Perspectives on E-Professionalism and Social Media. *American Journal of Pharmaceutical Education*, **77**(7), pp. 1-6.

NORTON, L.S. and MORGAN, K., 1995. The ideal-self inventory: A new measure of self-esteem. *Counselling Psychology Quarterly*, **8**(4), pp. 305-311.

NYSTRÖM, S., 2009. The Dynamics of Professional Identity Formation: Graduates' Transitions from Higher Education to Working Life*. Vocations and Learning*, **2**, pp. 1-18.

PESHKIN, A., 1988. In Search of Subjectivity - One's Own. *Educational Researcher*, **17**(7), pp. 17-21.

PINNEGAR, S. and DAYNES, J.G., 2007. Locating Narrative Inquiry Historically. In: D.J. CLANDININ, ed, *Handbook of Narrative Inquiry*. London: Sage Publications, pp. 1-34.

POIRIER, T.I. and GUPCHUP, G.V., 2010. Assessment of Pharmacy Student Professionalism Across a Curriculum. *American Journal of Pharmaceutical Education*, **74**(4), pp. 1-5.

PRESCOTT, J., WILSON, S. and BECKET, G., 2012. Pharmacy students want guidelines on Facebook and online professionalism. *Pharmaceutical Journal*, **289**, pp. 163-165.

PRING, R., 2004. *Philosophy of Educational Research*. 2nd edn. London: Continuum.

RIESSMAN, C.K., 1993. Narrative Analysis. London: Sage Publications.

RIESSMAN, C.K., 2002. Analysis of Personal Narratives. In: J.F. GUBRIUM and J.A. HOLSTEIN, eds, *Handbook of Interview Research: Context & Method*. London: Sage Publications, pp. 695-710.

RIESSMAN, C.K., 2005. Narrative Analysis. In: N. KELLY, C. HORROCKS, K. MILNES, B. ROBERTS and D. ROBINSON eds, *Narrative, Memory and Everyday Life*. Huddersfield: University of Huddersfield , pp. 1-7.

RIESSMAN, C.K., 2008. *Narrative Methods for the Human Sciences*. Los Angeles: Sage Publications.

RISKA, E., 2001. Health Professions and Occupations. In: W.C. COCKERHAM, ed, *The Blackwell Companion to Medical Sociology*. 1st ed. Oxford: Blackwell Publishing, pp. 144-158.

ROBERT GORDON UNIVERSITY, 2004. *Research Governance Policy*. [Online]. Available: http://www.rgu.ac.uk/credo/staff/page.cfm?pge=9869&CFID=6446978&CFTOKEN=75515410&jsessionid=5031fdfbf21c4f6e237dTR [Accessed 7th January, 2008].

RUESCHEMEYER, D., 1983. Professional Autonomy and the Social Control of Expertise. In: R. DINGWALL and P. LEWIS, eds, *The Sociology of the Professions: Lawyers, Doctors and Others*. London: MacMillan, pp. 38-58.

RUTTER, P.M. and DUNCAN, G., 2010. Can professionalism be measured?: evidence from the pharmacy literature. *Pharmacy Practice*, **8**(1), pp. 18-28.

RUTTER, P.M. and DUNCAN, G., 2011. Pharmacy professionalism and the digital age. *International Journal of Pharmacy Practice*, **19**, pp. 431-434.

SAKS, M., 2012. Defining a Profession: The Role of Knowledge and Expertise. Professions & Professionalism, **2**(1), pp. 1-10.

SCANLON, L., 2011a. 'Becoming' a Professional. In: L. SCANLON, ed, *"Becoming" a Professional: An Interdisciplinary Analysis of Professional Learning.* London: Springer, pp. 13-32.

SCANLON, L., 2011b. Introduction: Looking back, looking forward. In: L. SCANLON, ed, *"Becoming" a Professional: An Interdisciplinary Analysis of Professional Learning.* London: Springer, pp. 1-12.

SCHAFHEUTLE, E., HASSELL, K., ASHCROFT, D., HALL, J. and HARRISON, S., 2010. *Professionalism in Pharmacy Education*. London: Pharmacy Practice Research Trust.

SCHÖN, D.A., 1991. *The Reflective Practitioner: How Professionals Think in Action.* Aldershot: Ashgate Publishing Limited.

SCHWANDT, T.A., 1998. Constructivist, Interpretivist Approaches to Human Inquiry. In: N.K. DENZIN and Y.S. LINCOLN, eds, *The Landscape of Qualitative Research: Theories and Issues.* 1st ed. London: Sage Publications, pp. 221-259.

SCOTTISH EXECUTIVE HEALTH DEPARTMENT, 2002. *The Right Medicine: A strategy for pharmaceutical care in Scotland.* Edinburgh: Scottish Executive Health Department.

SILVERMAN, D., 2011. *Interpreting Qualitative Data.* 4th ed. London: Sage Publications.

SOANES, C., WAITE, M. and HAWKER, S., eds., 2001. *The Oxford Dictionary, Thesaurus and Wordpower Guide.* Oxford: Oxford University Press.

SØRENSEN, E., 2011. *The Materiality of Learning: Technology and Knowledge in Educational Practice.* Cambridge: Cambridge University Press.

SYLVIA, L.M., 2004. Enhancing professionalism of pharmacy students: Results of a national survey. *American Journal of Pharmaceutical Education*, **68**(4), pp. 1-12.

TAYLOR, A. and HALLAM, S., 2008. Understanding what it means for older students to learn basic musical skills on a keyboard instrument. *Music Education Research*, **10**(2), pp. 285-306.

TAYLOR, K.M. and HARDING, G., 2007. The pharmacy degree: The student experience of professional training. *Pharmacy Education*, 7, pp. 83-88.

THOMPSON, T.L., 2010. *Assembly required: Self-employed workers, informal work learning in online communities*, University of Alberta.

TRAULSEN, J.M. and BISSELL, P., 2004. Theories of professions and the pharmacist. *International Journal of Pharmacy Practice*, **12**, pp. 107-114.

WAGNER, P., HENDRICH, J., MOSELEY, G. and HUDSON, V., 2007. Defining medical professionalism: a qualitative study. *Medical Education*, **41**(3), pp. 288-294.

WARREN, C.A.B., 2002. Qualitative Interviewing. In: J.F. GUBRIUM and J.A. HOLSTEIN, eds, *Handbook of Interview Research: Context & Method*. 1st ed. London: Sage Publications, pp. 83-101.

WATSON, T., 2002. Professions and Professionalism: Should We Jump Off the Bandwagon, Better to Study Where It Is Going? *International Studies of Management and Organisation*, **32**(2), pp. 93-105.

WENGER, E.C., 1998. *Communities of practice: learning, meaning, and identity.* Cambridge: Cambridge University Press.

WILSON, S., TORDOFF, A. and BECKETT, G., 2010. Pharmacy Professionalism: A systematic analysis of contemporary literature (1998-2009). *Pharmacy Education*, **10**(1), pp. 27-31.

WINGFIELD, J., 2006. Professionalism for Pharmacists. *The Pharmaceutical Journal*, **276**, pp. 169-170.

WOODWARD, B.W., 2004. The discontent of professionalism. *American Journal of Health System Pharmacy*, **61**, pp. 1779-1784.

Appendix I – Participant Information Leaflet

A study of Pharmacy Education

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

What is the purpose of the study?

The purpose of this study is to investigate what undergraduate pharmacy students think about the professional identity of a pharmacist.

Why have I been chosen?

This study is being undertaken at The Robert Gordon University and as a registered student on the Master of Pharmacy course you are being invited to participate.

Do I have to take part?

You do not need to participate, participation in the study is voluntary and your decision to participate will not influence any relationship with The Robert Gordon University.

What will happen to me if I take part?

You will be asked to attend two different sessions. In session 1 all students agreeing to participate will attend and will be asked to undertake a short preparatory task which will ask you to think about the professionalism. This task will take a maximum of 30 minutes. In session 2 you will be interviewed by the researcher about the task in session 1, the interview may last up to an hour.

What are the possible benefits of taking part?

There will be no direct benefit for you from participation in this study. However, it is likely that findings from this study might help us to identify potential training, development or support needs of pharmacy undergraduates at the Robert Gordon University, Aberdeen.

Will my taking part in this study be confidential?

All information collected will remain strictly confidential and your name will not appear in any written report.

What will happen to the results of the research study?

The results of the research study will be fed back to the research team and will be written up as a doctoral thesis for the award of Doctor of Education. All material will be preserved for the life of the research project and may be used in publication, education, lectures, broadcasting and on the internet.

Who has reviewed the study?

The study has been reviewed by the Institute of Education at the University of Stirling.

Contact for further information

If you have any questions or require any further information about the project, please contact:

Mr Brian Addison (b.addison@rgu.ac.uk) Telephone – 01224 262534 (Principal Investigator)
If you have any concerns about the project which you feel unable to address with the Principal
Investigator you may contact:
Professor Terry Healey (t.healey@rgu.ac.uk) Telephone – 01224 262500
In addition, under The Stirling Institute of Education ethics procedures, you have a formal right to complain to the Head of The Stirling Institute of Education, if you have any concerns about the research process.

Appendix II – Consent Form

Consent Form

Please initial box
I agree to take part in the above study.

Please
Initial Box

1. I confirm that I have read and understand the information sheet dated xx[th] November 20xx for the above study and have had the opportunity to ask questions.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my progression through the Masters of Pharmacy course being affected.

3. I agree to take part in the above study.

_____   _____   _____
Name of subject   Date   Signature

_____   _____   _____
Researcher   Date   Signature

Appendix III – Task 1

Task 1

Please do this task on your own and don't discuss it with anyone else. Write down single words or phrases that you think best describes an ideal pharmacist and the opposite to that i.e. less than ideal pharmacist. These do not have to be literal opposites e.g. hot and cold but can be contrasting qualities e.g. warm and hostile.
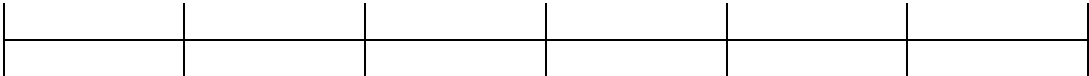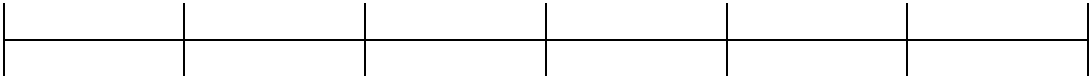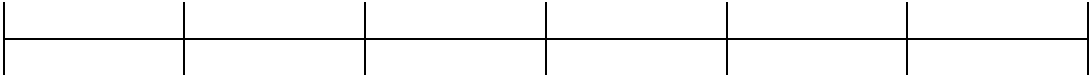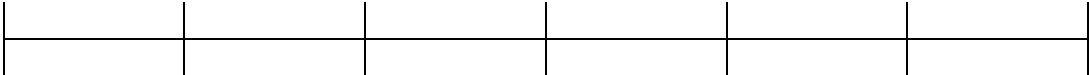
These might be characteristics, qualities, traits, behaviours and you might choose to think about a pharmacist you think exemplifies what it means to be the ideal pharmacist and think about what is it about them that makes you see them in that way.

Ideal pharmacist	Less than ideal pharmacist

Appendix IV – Task 2

Task 2

Again please do this task on your own and don't discuss it with anyone else. Select your top 10 items from task 1 and write them into the table below in your order of importance with the first item being the most important to you. Once you have completed the table, for each item rate your self on the scale.

Ideal Pharmacist   **Less than Ideal pharmacist**

1. _____ |—————|—————|—————|—————|—————| _____

2. _____ |—————|—————|—————|—————|—————| _____

3. _____ |—————|—————|—————|—————|—————| _____

4. _____ |—————|—————|—————|—————|—————| _____