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The Role of Leadership in Empowering Nurses' Professional Identity to Achieve Research Utilization: A Grounded Theory Study

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Thesis presented in fulfilment of the requirement degree of Doctor of Philosophy

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Background: Research utilization in nursing practice has shown to improve quality of care (Dufault and Sullivan 2000; Rutledge and Bookbinder 2002), however, the extent to which nurses use research in practice remains questionable (Squires et al 2011). It is known that leadership is crucial in nurses’ research utilization (Newhouse 2007; Gifford et al 2011; Reichenpfader et al 2015) yet the dimensions of this vital leadership are largely unknown. Consequently, in this grounded theory study, I aimed to develop a middle range theory on the role of leadership in nurses’ research utilization.

Design: I used a constructivist grounded theory (Charmaz 2014) methodology with Clarke’s (2005) situational analysis as an analytical tool within a constructivist framework. Beginning with purposive sampling and later progressing to theoretical sampling, I conducted 20 semi-structured interviews of healthcare professionals in various roles within one health board in Scotland from September 2017 to August 2018. Interviews were audio-recorded, transcribed, and NVIVO was used to manage data during the analysis.

Findings: The findings of this study illuminate the links between leadership in the form of empowering constructs and nurses’ professional identity to achieve research utilization. The resulting theoretical model show three main categories – integrating research into the nursing role; building relationships; and shifting culture – that leadership can empower nurses structurally as well as psychologically in affecting the understanding of their own professional identity. Additionally, the theoretical model was informed by two other processes from using situational analysis in this study: a social world/arenas map of nurses’ research utilization and a positional map indicating the various stances within my data on nurses’ empowerment and subsequent research utilization.

In this thesis, I have found support for recent contentions in the leadership literature of leadership as empowering others rather than focused on power-based individuals (Dambe and Moorad 2008; Kellerman 2013; Northouse 2016). Furthermore, I have opened new avenues for research in relating research utilization with professional identity, an assertion which is currently missing from the body of literature. This provides valuable guidance for nursing leaders at all levels of healthcare in understanding the role of professional identity in research utilization and the use of empowerment in affecting change. My use of situational analysis with constructivist grounded theory is also a novel research method and only done previously in
three other studies (Mills et al 2007; den Outer et al 2012; Khaw 2012), although none have incorporated the use of positional maps.
Background: It is known that nurses’ use of research in practice improves the quality of patient care, however, the extent of which nurses use research in practice is questionable. Leadership is important for nurses to use research in practice, yet the aspects of leadership needed in this respect is lesser known. Therefore, I aimed to gain a theoretical understanding on the role of leadership in nurses’ use of research in practice in this grounded theory study.

Design: Data were gathered from 20 interviews with various healthcare professionals in one health board in Scotland over one year.

Findings: It was found that leadership was key in empowering nurses’ professional identity to influence their use of research. Three main categories formed empowerment – integrating research into the nursing role; building relationships; and shifting culture – to impact nurses’ understanding of their identity as nurses. These findings were also informed by two other processes from a creative method of blending two types of grounded theory analysis.

From this study, I affirm recent assertions in the leadership literature of leadership in the form of empowering others instead of centring on persons of power. Additionally, I identify new avenues for research in relating nurses’ use of research with professional identity, a new notion in nursing knowledge. This raises the potential of providing guidance to nurse leaders at various levels of healthcare to understand the role of professional identity in using research in practice and using empowerment to affect change. My use of situational analysis with constructivist grounded theory is also a novel research method, having been done previously in just three other studies, although none have used positional maps.
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CHAPTER ONE

Background

1.1. Introduction

Nurse education was historically located in hospitals as apprenticeships and first moved into higher education at the Yale School of Nursing in the United States in 1923 (Yale School of Nursing 2019). Following on, a World Health Organization (WHO) group study on nurse education recommended that at least one pilot school of nursing was to be established in each country (Medical News 1956). Correspondingly, Nursing Studies at University of Edinburgh was founded in 1956 as a teaching unit and offered its first nursing degree program four years later in 1960, the first to be part of a British university (Wright and Gilmore 1979).

For the rest of the United Kingdom (UK), nurse education formally moved into higher education institutes much later on in the early 1990’s as a result of recommendations from Project 2000 (United Kingdom Central Council for Nursing, Midwifery and Health Visiting, UKCC 1986), offering the majority of nurse education at diploma level rather than the traditional apprenticeship. Formalizing nurse education in the form of a 3-year diploma was one of the recommendations of Project 2000, a working group established by UKCC, later known as current day NMC, the UK nursing and midwifery regulator, in 1984 to determine the type of nurse education needed for future healthcare (Elkan and Robinson 1995). Other recommendations made by Project 2000 (UKCC 1986) for nursing reformation included the following:

1. Single level of registered nurses to replace the two-level professional nurse that existed at the time.
2. A 3-year training programme beginning with an 18-month Common Foundation Programme followed by an additional 18-month specialty branch to either care for adults, children, the mentally ill, or the mentally handicapped, and a trial branch in midwifery.
3. A lesser emphasis on acute hospital care settings and increased focus on provision of care in the community.
4. Academic recognition of professional qualifications.
5. Stronger links between schools of nursing and higher education institutes.
6. Supernumerary status for students 80% of the time with 20% on rostered contribution to practice as opposed to students filling in the needs of healthcare service that happened at the time.

The English National Board (ENB), established in 1976 to formulate a new statutory framework for nurse education, similarly suggested for the nursing curriculum to be founded on professional and academic knowledge that is based on research for both the theory and practice of student nurses (Ousey 2011). With an increased focus on academic attainment in nursing for safer delivery of quality patient care, most higher education institutes offering a bachelor degree in nursing included a research module in their curriculum although it was not until 2013 that nurses in the UK were formally required to have a degree at entry level (Ousey 2011).

Leading up to the preparation of nursing as an all-degree profession, the current regulatory body of nursing and midwifery in the UK, the Nursing and Midwifery Council (NMC), proposed a set of standards for registered nurses in 2010. These standards explicate the expected level of competency expected of new nurses at the point of registration and the following statement is found within the competencies listed in Domain 1: Professional values:

“All nurses must appreciate the value of evidence in practice, be able to understand and appraise research, apply relevant theory and research findings to their work, and identify areas for further investigation”.

(NMC 2010, pp. 14)

The requirement for nurses to be knowledgeable of both the conduct and utilization of research is imperative in addressing the prolonged theory-practice gap (Rolfe 1998) to improve the quality of healthcare provision and patient outcomes (Bahtsevani et al 2004; Levin et al 2011). Research in the world of nursing is vital for the impact it has on both nurses and patients, in addition to establishing the nursing profession as a scientific discipline (Rodgers 2005).

A review of the impact of nursing research showed a significant contribution to improving quality of care and patient outcomes in various clinical disciplines, particularly midwifery, mental health, community care, acute care, workforce issues, and chronic illness (Kelly et al 2016). The same review importantly argued the role of nurses in the vast majority of clinical research, especially in recruiting, consenting, supporting, and educating patients in these studies yet the impact of nurses in both nursing and clinical research remains almost completely
invisible. Similarly, research is essential for nurses to practice safely and competently as they work in complex healthcare settings where decision-making has to take into account individual patient circumstances, available resources and, ultimately, the nurses’ knowledge of best current practices (Parahoo 2014).

Research is central to higher education institutes for which nursing has been part of for nearly three decades, yet research exists on the periphery of the nursing profession (Björkström et al 2003; Ryan 2016). Recent studies have shown research utilization to be a complex issue, extending beyond individual nurses to encompass organizational contexts (Squires et al 2013; Prihodova et al 2018), pointing to leadership as essential (Gifford et al 2007; Reichenpfader et al 2015).

In this chapter, I will give an overview of the state of science in nurses’ research utilization and the place of leadership in achieving this essential aspect of nursing and healthcare. Accordingly, I will consider the debate on nursing evidence and its relevance to research utilization, underscoring the definition of research utilization in nursing practice. Subsequently, I will also discuss current knowledge in research utilization such as identified barriers and facilitators, moving onto scholarly assertions regarding leadership and organizational context. An integrative review of the literature focusing on leadership and research utilization will be the focus of the next chapter, Chapter Two: Literature review. This chapter, Chapter One, ends with an introduction to the context in which I conducted this study and the structure of this thesis.

1.2. Evidence-based nursing: A need for reconceptualization

It has been argued that evidence-based practice (EBP) is of higher quality and reliability compared to nursing practice steeped in tradition, improves patient outcomes and the overall health of a population, and these consequences result in reduced costs for healthcare (Melnyk et al 2016). However, there are important issues in EBP in nursing or, more specifically, evidence-based nursing (EBN).

First, it is vital to start with EBP from which EBN is derived. EBP is defined as clinical practice that takes into account the best evidence from well-designed research studies, the clinician’s expertise, and individual patient assessments as well as their values and preferences (Melnyk et al 2012). EBP and research utilization are often used interchangeably, but the two terms have important differences (Estabrooks 1998). Research utilization has a narrower focus than EBP and stands as a process in making research applicable to practice. This process usually involves
critique and synthesis of findings from several studies, application of these findings to make a change in nursing practice, and measurement of the outcomes from the change in practice (Titler et al. 1994). Therefore, research utilization is a dimension of EBP; and though it is a major part of EBP, it is not the only component and the term should not be understood as synonymous to EBP.

Though efforts in research utilization have been ongoing for some 25 years before the evidence-based movement arrived (Estabrooks 1998), its impact is nowhere near as influential as the latter. The call for healthcare practitioners to base their practice on evidence began with the publication of Archie Cochrane’s book, *Effectiveness and Efficiency: Random Reflections on Health Services* in 1972. Cochrane demonstrated remarkable vision when he demanded that healthcare treatment be efficacious, efficient, and equitable, forming the fundamentals of a national performance framework for the National Health Service (NHS) (Greenhalgh 2004). Though he was not able to see his vision become reality, the Cochrane Collaboration was founded in 1993 (Chalmers 1993), compelling medical staff to base their clinical decisions on the best contemporary evidence, a move they termed evidence-based medicine (EBM). The proximity of nurses’ practice with medical staff soon had nurses move onto EBN.

Several nursing scholars have since questioned its applicability to nursing practice (Estabrooks 1998; Mitchell 1999; Scott and McSherry 2008; Earle-Foley 2011). Their criticisms revolved around the epistemology of nursing knowledge that seemed incompatible with the very definition of EBM that inspired EBN. While acknowledging the usefulness of EBN, Estabrooks (1998) asserts that a clear and meaningful definition of the term is needed before nurses hurriedly adopt this concept as a means of pursing nursing’s professional project – a motive she clearly cautions against. This discourse proved substantial as, more than two decades later, her criticisms still stand, with nursing scholars struggling to define what EBP means for nursing and how it fits into the nursing epistemology (Holmes et al. 2006; Scott and McSherry 2008; Earle-Foley 2011).

The argument of what constitutes as evidence in nursing in relation to nursing epistemology has been ongoing (Carper 1978; Rycroft-Malone et al. 2004; Porter 2010; Garrett and Cutting 2015). In a highly cited article, Carper (1978) first identified patterns of knowing in nursing that consisted of empirics, aesthetics, personal knowledge, and ethics. Empirics refers to the science of nursing; aesthetics as the irrevocable yet often iterated “art of nursing”; personal knowledge is defined as the knowledge needed for self-actualization of the nurse to facilitate
authentic personal relationships; and, finally, ethics is said to be the moral compass of the nurse in knowing what ought to be done in clinical situations (Carper 1978).

While Carper’s (1978) seminal article on nursing epistemology acts as an impetus for considering what constitutes as evidence in nursing, it has since been reconsidered (see Porter 2010; Garrett and Cutting 2015). Several scholars have argued for the need of the other domains of knowledge within nursing other than empirics/research to be made explicit as it is clear that evidence is socially constructed (Dopson et al 2002; Rycroft-Malone et al 2004; Porter 2010). The notion of nursing knowledge encompassing tacit as well as explicit knowledge cannot be ignored, placing emphasis on a wider focus of research evidence that embraces the other domains of nursing epistemology beyond empirics (Munhall 1982; Rycroft-Malone et al 2004; Porter 2010). These positions on nursing epistemology claims EBM and EBP to be at odds with nursing as it narrowly focuses on research and values objectivity (Borgerson 2009), contrasting with the body of research which explicates much of nursing’s tacit knowledge (Carr 1994; Welsh and Lyons 2001; Herbig et al 2001; Sayar et al 2018).

Definitions of EBP and EBM clearly state support for using both research findings and clinical expertise in supporting healthcare practitioners’ clinical decisions (Sacket et al 1996; Sackett 1997), yet the focus of EBP and EBM has remained on that of research. Moreover, the Cochrane Collaboration defined research findings as those primarily from randomized controlled trials, placing this research method as “the gold standard” (Borgerson 2009). However, this position ignores the importance of other forms of knowledge often used in nursing practice and suggested to be essential for quality healthcare (McCormack 2001; Avis and Freshwater 2006; Kinsella 2009, Ou et al 2017).

While the concern for robust evidence in EBM and EBP rightly exists, it is also true that other types of evidence can be of high quality with the right approach, as suggested by several scholars (Brod et al 2009; Wener and Woodgate 2013; Kornhaber et al 2015). Nevertheless, even as nursing continues to use qualitative methods of inquiries, it was not until 2008 that the Cochrane Collaboration finally included a chapter on qualitative studies in its handbook (Noyes et al 2008). However, randomized controlled trials (RCT) remain its exemplary method and it has been suggested that nursing needs to consider what this means for EBN (Ingersoll 2000; Scott and McSherry 2008; Earle-Foley 2011). Importantly, the main argument here is not about the primacy of quantitative or qualitative research in making decisions regarding patient care, it is rather about the consistency of the values of the evidence-based movement with nursing
epistemology. Clearly, the long-suggested need to reconceptualise EBN to better fit nursing’s unique epistemology and values (Estabrooks 1998) still stands.

Going forwards, I will focus on research utilization as one of the domains of evidence in achieving evidence-based, person-centred care (Rycroft-Malone et al 2004). In focusing on research utilization, I acknowledge the importance of applying research to practice in improving healthcare outcomes, at the same time recognizing the significant contribution of other types of knowledge that has formed parts of nursing epistemology (Carper 1978; Estabrooks 1998; Porter 2010). Further, my study focus on research utilization is an attempt to narrow the theory-practice gap that is apparent in nursing. This thesis includes literature that use the term EBP or EBN but only after a careful consideration of the study has been undertaken to ensure that the evidence referred to in the study is indeed research.

Research, in this sense, means published forms of inquiry in peer-reviewed journals and embraces both qualitative and quantitative research. This is to encourage broader reading of the literature to ensure vital information on nurses’ research utilization is not missed as EBP or EBN is often used as a moniker for research utilization (Estabrooks 1998). While nursing scholars deliberate on the appropriate evidence deemed valid in nursing, my study will focus on research utilization to encourage nurses to move away from traditional and/or anecdotal practices that are potentially harmful.

1.3. The current state of research utilization

Research utilization has a long history in nursing, establishing itself as a significant area of research long before the evidence-based movement (Estabrooks 1998). Accordingly, a bibliometric map of the field showed an overwhelming majority of research utilization articles originated from nursing scholars, demonstrating nursing’s investment in this area of study (Estabrooks et al 2004). It follows that a continuing focus on this research area responds to calls from nursing scholars in developing discipline-specific knowledge in establishing nursing as a profession (Mitchell 1994; Butts et al 2012).

Research utilization is broadly defined as the use of research findings in any aspect of the nursing role (Estabrooks 1998). In identifying and measuring nurses’ use of research, Estabrooks (1998) conceptualized three types of research utilization that has been asserted to be defensible. Instrumental utilization is the direct use of research and is the type of research utilization most often measured in studies as researchers rely on observable behavior change as an outcome (Estabrooks 1999; Thompson et al 2007). Moreover, instrumental utilization is
the concrete application of research findings directly by nurses either via a product of research findings (e.g. clinical protocol or clinical practice guidelines) (Estabrooks 1999) or specific interventions adopted individually by the nurse after reading and evaluating research articles. Some scholars have argued that research utilization is the translation of research to practice without accounting for a holistic picture of patient care (Mackey and Bassendowski 2017). However, this is a simplistic understanding of only one type of research utilization – instrumental use – disregarding the full understanding of research utilization as it has been defined as a process that involves evaluation of outcomes as a consequence of research use (Titler et al 1994; Stetler 2001) rather than mechanical application.

Next, conceptual utilization is the indirect use of research findings to change practice, usually by influencing the cognition of nurses instead of mechanical application of research findings into practice (Estabrooks 1999). This closely follows the conceptualization of knowledge by Loomis (1985) and Shaperman and Backer (1995), affirming the location of research utilization under the domain of knowledge. Beyer and Trice (1982) added symbolic utilization to instrumental and conceptual utilization of knowledge and this has been successfully applied in the nursing field as well (e.g. Stetler 1994a, 1994b). Symbolic utilization is the persuasive use of research to justify a practice or legitimize a position (Estabrooks 1999).

Evidently, research utilization entails a wider meaning than conducting research, being inclusive of different ways nurses can use research in practice. While nursing scholars debate on whether all nurses need to be conducting research in order to use research in practice (see Pager et al 2012; Siedlecki and Albert 2016), I find the stance of negotiating inclusivity most reasonable within the plethora of opinions (Segrott et al 2006). Within the inclusivity approach, it is recognized that nurses may or may not be involved with research at different points in their careers, yet all nurses should be enabled to be involved in research in whatever capacity should they wish and be able to in any stage of their career (Segrott et al 2006). Nevertheless, it is clear that nurses who conduct research use research as well, in at least one of the three previously defined types of research utilization (Estabrooks et al 2003; Meijers et al 2006). Consequently, this shapes the sample of my study that includes nurses both conducting and utilizing research, either as part of their paid role or continuing education, as will be further discussed in Chapter Three: Methodology.

Meanwhile, a systematic review investigating the extent of nurses’ research utilization in practice painted an optimistic picture of nurses’ research utilization (Squires et al 2011). The
review included 55 quantitative studies, of which the majority was of moderate quality, and 38 showed that nurses had moderate-high use of research in their practice, a finding that was most prominent between the years 1995-1999. However, the review found this consistent result of moderate-high use as troubling, raising questions regarding validity and reliability of instruments used (Squires et al 2011). This not only pointed out the limitations of a quantitative approach to studying research utilization, yet additionally emphasized the suggestion by Lacey (1994) that nurses tend to agree with statements regarding research utilization and this socially desired answering remains unchanged in recent years, as found by Ubbink et al (2013). The use of questionnaires in quantitative studies to investigate nurses’ research utilization also rests on the assumption that nurses know they are using research (Squires et al 2011), an assumption that has little basis. Rodgers (2000) demonstrated the advantage of qualitative methodology in studying research utilization by following up with participants in a pilot study on issues with the reliability of a questionnaire to measure nurses’ research utilization. Certainly, the follow-up interviews revealed inadequacies with the questionnaire such as the suggestion of several participants for the item “not able to” to be added to the Likert scale responses. Many participants felt that they were not able to apply certain research findings due to lack of autonomy, however, did not feel comfortable in simply stating they did not use it (Rodgers 2000).

Several studies consistently found that most studies focused on instrumental research utilization, with less emphasis on conceptual and persuasive utilization (Estabrooks 1999; Thompson et al 2007; Squires et al 2011). Nevertheless, Estabrooks (1999) found that nurses most often used research conceptually, as opposed to instrumental and persuasive utilization. Furthermore, Squires and colleagues (2011) questioned the appropriateness of including “research awareness” as research utilization, arguing that being aware of research without it making a difference in the actions or cognition of nurses does not constitute research utilization. However, given that conceptual utilization is under-researched (Squires et al 2011), this argument remains debatable and suggests that our understanding of research utilization would benefit from varying approaches to inquiry as it is a complex area of study.

From systematic reviews of nurses’ research utilization (Thompson et al 2007; Squires et al 2011; Ubbink et al 2013), it appears that studies have mostly arisen from North America, the UK, Australia, and some parts of Europe and Asia. Though these reviews focused on different aspects of research utilization, it was apparent that a definitive picture of the extent of research use among clinical nurses the world over could not be concluded due to a number of limitations.
(e.g. methodological quality, conceptualization problems, instrumental limitations, etc). This further highlights the importance of continuing research utilization studies to build a body of knowledge substantive enough to support its implementation in future practice.

Investigation into nurses’ research utilization has not all been inconclusive as a great number of barriers and, to a lesser extent, facilitators have been identified (Funk et al 1995b; Rodgers 1994; Nagy et al 2001; McKenna et al 2004; Martis et al 2008; Lai et al 2010; Kajermo et al 2010; Ubbink et al 2013; Leng et al 2016). Interestingly, most barriers and facilitators identified were convergent, excepting a language barrier and limited access to databases in some countries (Martis et al 2008; Ubbink et al 2013). Barriers identified for nurses were a lack of time to read and implement new research evidence; lack of facilities or resources; lack of experience and training in research utilization; poor support from management and administrators in implementing new research evidence; limited access to research (via database or library); unawareness of research; irrelevance of research findings to own practice; lack of authority to change practice; and inability to understand research (Kajermo et al 2010; Ubbink et al 2013). Whereas facilitators to research utilization were inculcating research utilization skills in pre and postgraduate curricula; staff and management support to learn and apply research evidence in practice; close collaborations between academic and clinical staff; multidisciplinary committees and involvement of local opinion leaders; structural promotion and facilitation of research activities by the management and experts; and clear and accessible sources of research (Thompson et al 2007; Ubbink et al 2013).

From the aforementioned barriers and facilitators, it is apparent that most of these factors are linked to organizational factors, thus emphasizing the substantial influence of organizational context on research utilization. This notion is supported by several studies showing the close relationship between organizational context and research utilization (Aarons 2005; Squires et al 2013; Estabrooks et al 2015). Context is generally defined as the environment in which research utilization is to be implemented (Kitson et al 1998), more specifically defined by the interplay of the components of culture, leadership, and evaluation (McCormack et al 2002).

Interestingly, leadership forms part of the construct of context, although not clearly defined, and seems to be focused on the quality of relationships between formal leaders and their subordinates. Further work on the PARiHS model affirms the notion of leaders as those in formal leadership positions for this model, with additional emphasis on transformational leadership that leads to clear roles and supportive organizational structures (Rycroft-Malone 2004). Furthermore, facilitation appears key in the PARiHS model (Kitson et al 1998; Rycroft-Malone 2004), successfully influencing implementation even in poor contexts where culture and formal leadership may need development (Kitson et al 1998). Facilitation in the PARiHS model is defined as individuals who support others in changing their views and behaviours using change management strategies to achieve research use (Kitson et al 1998), akin to change agents.

As those in leadership positions play a vital role in shaping the environment in which nurses practice (Evans 1994; Gifford et al 2007; Cummings et al 2010), it follows that inquiry into leadership in nurses’ research utilization needs to include a sufficient consideration of its context. Leaders and administrators have important roles in mobilizing resources, fostering a culture for research-based practice and inculcating a high value for research activities. They are also vital in providing education on research utilization and the process involved, additionally collaborating with academicians for said education efforts. In recognizing the crucial role that leaders play in utilizing research in nursing practice, it is important to recognize the context in which leaders exist and its indissoluble nature.

Taking into consideration of leadership as an act of change, it is therefore unsurprising that leadership has shown to have a significant impact on nurses’ research utilization (Stetler et al 1998; Gifford et al 2007; Cummings et al 2010). Furthermore, those in leadership positions are responsible for the professional practice environment where nurses provide care and are strategically positioned as middle management to enable nurses to use research (Gifford et al 2007).

1.4. Leadership and nursing

Nurses face significant challenges in the current fast-paced landscape of healthcare, making leadership most pertinent at this time in the past three decades that nursing scholars have explored leadership. Certainly, nursing leadership has been shown to play an essential role in improving patient outcomes (Wong et al 2013), enhancing nurses’ work performance (Germain and Cummings 2010), retaining nurses in practice (Ribelin 2003; Kleinman 2004), promoting
the nursing profession (Mahoney 2001), influencing policy (Antrobus and Kitson 1999; Gebbie et al 2000), and impacting healthcare fiscal outcomes (Pappas 2008).

To further advance this discussion, it would be helpful to define leaders and leadership. According to Bass (1960), leadership is demonstrated when an individual attempts to change another’s behaviour. This definition is closely related to definitions of other leadership studies that preceded his time, who described leaders as agents of change (Gurnee 1936; LaPiere and Farnsworth 1949). Considering leadership as an act of change, leaders are aptly defined as influencers who direct others toward making a behavioural difference (Bass 1960; Yukl et al 2002). It is important to recognize that leaders are not always managers, nevertheless leadership skills are often required of managerial positions as these positions often entail decision-making that could bring about organizational change. In distinguishing leaders from managers, Bryman (1996) asserted that the key difference between them are that leaders have an orientation towards organizational change whereas managers are more task-oriented, thus again relating leadership with change.

This definition of leaders as change agents is also congruent with the standards previously expected of registered nurses as outlined in the standards of proficiency for registered nurses in 2010, quoted below:

“All nurses must act as change agents and provide leadership through quality improvement and service development to enhance people’s wellbeing and experiences of healthcare.”

(NMC 2010)

Although this leadership expectation of registered nurses has since been refined to a demonstration of understanding the mechanisms of organizational change (NMC 2018a), it remains that acting as change agents denotes an expected part of nursing leadership. In the effort to move nursing from a practice steeped in tradition to one based on sound research findings, this definition of leaders and leadership is not only appropriate, yet also delineates the critical role leaders play in research utilization. By recognizing the leader as a change agent and not as an individual with a certain position in an organization, this implies that leaders are found in various levels of an organization. This is consistent with various studies that emphasize leaders at all levels of organizations are key in research utilization efforts (Kitson et al 1998; McCormack et al 2002), especially in ensuring sustainability (Davies et al 2006). Although it must be acknowledged that the power to influence change in an organization increases with a person’s hierarchical position and that leadership responsibilities are inherent
of administrative and educational positions. Nonetheless, expanding my focus to include both formal and informal leaders would facilitate constructing the leadership process in my study, as opposed to studying only formal leaders.

It is suggested that strong leadership which facilitates research utilization is characterized by transformational leadership that empowers others (McCormack et al 2002; Gifford et al 2007; Matthew-Maich et al 2010). This is consistent with a shift in the leadership paradigm apparent in the leadership literature. It is now asserted that leaders are less conceived as powerful, authoritative individuals that dominated the leadership literature until the early 90s (Dambe and Moorad 2008; Avolio et al 2009; Reichenpfader et al 2015). As a consequence of globalization and a rapidly changing world, leaders are now under different expectations as in previous decades further demonstrating the close relationship between leadership and context (Wikström and Delle 2009; Kellerman 2013). The emphasis of leadership on relational practices as opposed to power-based, transactional styles resonates in nursing (Haycock-Stuart and Kean 2012; Cummings et al 2018). Some scholars have advocated for servant leadership (Jackson 2008), distributed leadership (Fitzgerald et al 2013; Currie and Spyridonidis 2018) and, overwhelmingly, transformational leadership (McCormack et al 2002; Salsali and Mehrdad 2009; Halm 2010; Hatfield et al 2016) for research utilization. Nevertheless, the mechanism in which leadership affects research utilization is still unknown.

Leadership in nursing has often been studied through the practices/behaviour paradigm (Cummings et al 2008), bifurcating nursing leadership theories into two major components – relational styles and task-focused styles. Relational leadership encompasses leadership styles that prioritise people and relationships, such as transformational leadership which encourages the potential of others for innovation, creativity, and intellectual stimulation (Bass and Avolio 1994), resonant leadership that centres on individualized consideration (Boyatzis and McKee 2005), and authentic leadership which focuses on leader transparency and congruency between espoused beliefs and actions (Avolio et al 2004). Meanwhile, task-focused styles prioritise the accomplishment of set tasks, for instance transactional leadership that provides rewards for completing tasks (Bass and Avolio 1994), dissonant leadership which uses authority and pace-setting behaviours to produce results (Goleman et al 2002), and instrumental leadership that uses a blend of motivational vision and strategic task-focused monitoring behaviours to achieve organizational goals (Antonakis and House 2002).
It is often asserted in the nursing literature that relational leadership practices produce better outcomes for nurses (Cummings et al 2018). A recent systematic review by Cummings et al (2018) investigated leadership styles and outcomes for the nursing workforce, focusing on the domains of staff job satisfaction, staff relationships with work, staff health and well-being, relations among staff, the organizational environment, and finally, productivity and effectiveness. The review found that relational leadership styles positively and significantly affected all six outcome domains although some support for task-focused leadership styles were found. There were assertions that task-focused leadership increases job satisfaction (McCutcheon et al 2009; Abdelhafiz et al 2016), decreases burnout, emotional exhaustion and depersonalization (Ebrahimzade et al 2015), and increases job autonomy (Boumans and Landeweerd 1993). However, the support for relational leadership styles and its association with various work outcomes for nurses was overwhelming, concluding the review with recommendations that nurse leaders invest in meaningful relationships with staff who may need support with their emotional needs in delivering complex and impactful patient care (Cummings et al 2018).

Still, the enthusiasm for relational leadership theories, particularly transformational leadership, is not without criticism. Several scholars point out that transformational leaders may abuse their powers of emotional attachment to manipulate others for their own self-interest that may put others at a disadvantage (Conger and Kanungo 1988b; Stone et al 2004; Sendjaya 2005; Hay 2006). Since then, proponents of transformational leadership argued that leaders can only be “truly transformational” (Bass and Steidlmeyer 1999, pp. 181) when premised on a moral foundation (Bass and Steidlmeyer 1999; Stone et al 2004; Simola et al 2010). This gave rise to the distinction between authentic and pseudo transformational leadership, differentiated by their moral orientations (Price 2003), although it has been argued that moral and ethics are subjective constructs and yet to be included as a dimension to the measurement of transformational leadership (Hoch et al 2018). Leadership scholars have since advanced ethically oriented leadership theories such as authentic, ethical, and servant leadership (Northouse 2010). This move towards ethical leadership theories is consistent in the nursing leadership literature, especially authentic and servant leadership.

Luthans and Avolio (2003, pp. 243) defines authentic leadership as “a process that draws from both positive psychological capacities and a highly developed organizational context, which results in both greater self-awareness and self-regulated positive behaviours on the part of leaders and associates, fostering positive self-development.” Four main constructs underlie
authentic leadership: 1) self-awareness, 2) unbiased processing, 3) authentic behaviour, and 4) relational authenticity. The theory’s focus on relational components of leadership, along with its’ ethical foundation to build psychological capital to enhance the work engagement of others clearly meets the need of contemporary nursing in fostering a positive work environment (Wong and Cummings 2009a). Additionally, the emphasis of a flatter hierarchy is apparent in authentic leadership, most notably seen in its conceptualization of others as “associates” (Luthans and Avolio 2003) as compared to transformational leadership’s often perceived “followers” (see Bass 1999). The difference in conceptualizing leader-follower relationships in both theories further underscore the paradigm shift in leadership studies that contemporarily emphasizes the development of others as leaders (Dambe and Moorad 2008). Similarly, other studies in nursing have found leader-follower relationships to be dynamic rather than clearly defined (Kean et al 2011; Crossman and Crossman 2011).

The support for authentic leadership and empowerment of others resonates in nursing. Studies have found a significant relationship between authentic leadership and positive outcomes for nurses, for example improved job satisfaction and performance (Wong and Laschinger 2013), healthier work environments (Shirey 2006), increased voice behaviour (Wong and Cummings 2009b; Wong et al 2010), and perceived collaboration of the multi-disciplinary team (Regan et al 2016). Interestingly, the recent interest in authentic leadership in nursing often relates this leadership theory with empowerment, specifically the mediating role of structural empowerment (Wong and Laschinger 2013; Lashinger et al 2013; Regan et al 2016).

While studies on leadership styles has provided nurse leaders with sufficient direction, it has been criticized that theories based on styles and behaviours lack important contextual information. This results in leadership theories having limited application in healthcare (Ola 2017), for instance, the controversial use of transformational leadership in operating theatres (OT). It was previously found that transactional leadership produced safer and efficient outcomes in the OT setting (Parker et al 2012), however, it was recently disputed that transformational leadership resulted in better operating team behaviours (Hu et al 2016). Importantly, it was later pointed out that rigid adherence to safe surgery checklists as recommended by the World Health Organization (WHO) evidently calls for a transactional leader during surgical procedures (Ola 2016). Clearly, the lack of contextual adaptability and unhelpful focus on competence and behaviour affects the ability of leadership theories to inform leadership development programmes (James 2011; Ardichvili et al 2016).
Studies abound of the pertinence of leadership and context in nurses’ research utilization (Stetler et al 1998; Udod and Care 2004; Rycroft-Malone 2004; Shirey 2006; Meijers et al 2006; Gifford et al 2007; Cummings et al 2007). Findings from studies that investigated the barriers and facilitators of research utilization in nursing practice (Funk et al 1995b; Nagy et al 2001; Lai et al 2010) supports this notion as it can clearly be seen that both factors were closely related to organizational issues, underscoring the role leaders play in implementing research-based practice. However, the process in which leadership facilitates nurses’ research utilization is largely unknown and there has been calls from nursing scholars in the field to uncover such processes (Gifford et al 2007). Further evidence from the literature on research utilization and leadership will be explored in detail in the subsequent chapter, Chapter Two: Literature review.
1.5. **Study context**

I conducted my study in one health board in Central Scotland with data collection spanning between August 2017 to September 2018. Population size for the locality was approximately 850,000, with four hospitals providing acute services and supported by 24,000 staff. Of this number, nurses and midwives make up almost half of the workforce at a total of 48%\(^1\). As previously mentioned in section 1.1., Scottish nursing has demonstrated visionary leadership in the inception of the first nursing degree programme in the UK in 1960 at the University of Edinburgh. Accordingly, the Scottish Executive Health Department (SEHD) published a strategy in 2002 that aimed to develop research literate, research aware, and research active nursing and midwifery professionals (SEHD 2002). Consequently, there exists a number of funding opportunities for nurses via the Research Training Fellowship scheme to support and mentor nurses to develop new research roles within clinical practice. Further research training schemes are available for nurses at higher education institutes across Scotland and at the Nursing, Midwifery and Allied Health Professions (NMAHP) Research Unit based in University of Stirling. The benefits of a nursing workforce trained and proficient in research was underlined by the UK Clinical Research Collaboration (UKCRC), one of which is to form the evidence base that informs their practice (UKCRC 2007). As of April 2018, the Scottish health board in which I conducted my study employs circa 200 research nurses, 8 doctorally qualified nurses, and funds approximately 20 nurses studying at doctoral level (personal correspondence with Chief Nurse of Research 2018).

However, significant challenges exist for clinical-academic nurses, most importantly with a lack of a stable career pathway (SEHD 2002; UKCRC 2007; Finch 2009). The struggle of establishing clinical-academic nursing resonates in different parts of the world as the nursing career pathway have traditionally sectioned off between clinical practice and academia, presenting a substantial obstacle for clinical-academic nurses and research utilization (Finch 2009; van Oostveen et al 2017). Leadership has consistently been called for nurses’ research utilization (Barta 1995; Halm 2010; Hafsteinsdóttir et al 2017), though the dimensions of this leadership is yet unknown and remains a current area of interest.

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\(^1\) Source: NHS Board Workforce Plan 2017-2019, locality withheld.
1.6. **Structure of thesis**

In this chapter, Chapter One: Background, I present the context of my topic of interest, giving an overview of the current knowledge on nurses’ research utilization and the key role of leadership. I also provide a concise introduction to the context of where I conducted my study and outline the contents of this thesis.

Next, in Chapter Two: Literature review, I take a critical look at the literature specific to research utilization and leadership. I present my appraisal of the literature in the form of an integrative review with the following themes: role of leadership in research utilization and leadership and organizational context, additionally unpicking issues in leading research utilization and the issue of power.

In Chapter Three: Methodology, I present my research methodology pertaining to grounded theory and using situational analysis as an analytical tool.

In Chapter Four: The research process, I detail the research process for my study, including accounts of data collection, data management, ethical considerations, and limitations of this study. Also in this chapter, I detail my unique analytic journey as the integration of situational analysis in constructivist grounded theory is a novel approach only done three times before in other studies. I describe my analytic process in detail, particularly the use of situational analysis with snippets of examples following the development of one main category and I end with a description of how this has refined my research questions.

In Chapter Five: Research findings, I delineate my research findings in relation to the existing literature as an integrated findings and discussion chapter. I further examine the theoretical model here with excerpts from participants’ quotes to evidence the link to theory and co-construction of knowledge.

In Chapter Six: Theoretical discussion, I focus on discussing the theoretical underpinnings of my study, forming the link between my findings and theories of empowerment and social identity theory.

Finally, in Chapter Seven: Conclusions, I end the thesis by providing a summary of the study and my reflections, together with implications and recommendations for future research.
CHAPTER TWO

Literature review

2.1. Introduction

The issue of reviewing the literature in various stages of the research process is often discussed by grounded theorists (McGhee et al. 2007; Thornberg 2012; Giles et al. 2013; Ramalho et al. 2015). Certainly, grounded theorists hold differing perspectives on reviewing the literature, particularly at the start of a study. These differences stem from researchers’ varying theoretical perspectives and the resulting views on preconceptions and maximizing the quality of a study. For classic grounded theorists, the literature review is delayed until after data collection commences or even after a substantive theory is formed (Glaser and Strauss 1967; Giles et al. 2013). This is argued to prevent the data from being forced into preconceived categories and concepts, although the consistency of this assertion is questionable in the foundational text The Discovery of Grounded Theory, by Glaser and Strauss (1967).

More recently, it has been recognized that a preliminary literature review is necessary, especially for novice researchers conducting research as part of a degree or professional qualification (Dunne 2011). Within this claim, it is suggested that researchers return to the literature abductively during the iterative process of data collection and analysis (Giles et al. 2013; Charmaz 2014) to build on the emerging theory. Thornberg (2012) calls this return to literature according to the developing analysis akin to theoretical sampling and increases the researcher’s theoretical sensitivity. Importantly, the majority of contemporary grounded theorists support this view (Dunne 2011; Giles et al. 2013; Ramalho et al. 2015) and emphasize the use of reflexivity and transparency throughout research to minimize imposing preconceived ideas onto the data (McGhee et al. 2007; Charmaz 2014). Likewise, I make use of the literature reflexively at various stages of this study, from the design to analysis stages and further on in discussing findings.

This chapter reports on my initial review of the literature during the design stage of my study to highlight significant issues in focusing on research utilization and leadership. I describe returning to the literature for theory building purposes during the iterative process of data collection and analysis in Chapter Four: The research process. Finally, I link the body of literature relevant to my findings later on in Chapter Five: Research findings and Chapter Six: Theoretical discussion, both structured as integrated literature and findings chapters.
2.2. Search strategy

To ensure a sufficient breadth and depth of knowledge to drive this study, I devised a search strategy of the literature before designing this study. As the importance of leadership in nurses’ research utilization has been established in Chapter One: Background, the aim of this literature review was to consider what is known for leadership in research utilization as well as scrutinize how this area of interest has been studied in nursing to address methodological concerns. I used several search engines and databases to review the literature throughout this study, however, for the aim of this initial review, I used the Cumulative Index of Nursing and Allied Healthcare Plus (CINAHL Plus) databases as well as the University of Edinburgh’s online library service, DiscoverEd. I decided on CINAHL Plus as it has a specific focus on nursing and allied healthcare, minimizing my chances of receiving irrelevant articles. Searching DiscoverEd was essential in exploring the university’s physical and electronic resources.

To gain a broad picture of research utilization and leadership, I decided not to apply any restrictions on publication date. As evidence-based practice/nursing can sometimes be used interchangeably with research utilization, I decided to include these in my review, however, I carefully considered the nature of evidence discussed to ensure it was research. Only literature written in English were reviewed. Inclusion and exclusion criteria applied to the literature search is presented below in Table 1.

<table>
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<tr>
<th>Inclusion criteria</th>
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<tr>
<td>Articles with a specific focus on both leadership and research utilization.</td>
<td>Opinion piece/letters/editorials.</td>
</tr>
<tr>
<td>Peer reviewed journal articles with full text.</td>
<td>Anonymous work.</td>
</tr>
<tr>
<td>Systematic/integrated/narrative reviews.</td>
<td></td>
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<td>Published in English.</td>
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**Table 1**     Inclusion and exclusion criteria for initial literature search.

I used the search terms evidence-based nursing, research-based nursing, research utilization in nursing, evidence-based practice nursing, and nurse/nursing leadership. I used the Boolean operator OR to first extend the breadth of my literature search, followed by the Boolean operator AND to focus onto relevant literature as shown in Appendix A. The following **Figure 1** illustrates my selection of literature for this review using a PRISMA diagram.
Figure 1   PRISMA diagram of literature selection

I decided to include only articles with a specific focus on leadership processes in research utilization or evidence-based practice where the evidence was based on research. Additionally, some articles centering on processes of change for research utilization in healthcare were included as I define leadership for this study as an agent of change, previously discussed in section 1.4. Moreover, leadership has often been conceptualized as part of organizational
context (Kitson et al 1998; Estabrooks et al 2015), hence articles with a focus on context inclusive of leadership in research utilization were included. Recognizing the important role of managers and other formal leaders in research utilization, articles on managerial leadership implementation of research utilization were also included. A further number of articles were added through hand-searching references and a subsequent update at the end of this study in 2019. This brought the total number of articles included in this review to 48. A table of the study characteristics can be found in Appendix B.

The majority of the studies explicated the role of both formal and informal leaders in applying research or research-based practice in social services and healthcare settings. Leadership was scrutinized in terms of behaviours, practices or routines, actions or strategies, and styles, i.e. transactional vs. transformational, servant leadership (Aarons 2006; Jackson 2008; Wilkes and Jackson 2013). Importantly, leadership is often discussed either in relation to or part of organizational context (Kitson et al 1998; McCormack et al 2002; Stetler 2003), particularly with culture (Cummings et al 2010; Squires et al 2013). Several issues for leading change in research utilization were identified, for instance the knowledge and confidence of managers (Bianchi et al 2018) and the quality of the relationship between leaders and users of research (Udod and Care 2004; Crow 2006; Alleyne and Jumaa 2007; Aarons et al 2014). Accordingly, this leads to an exploration of the issue of power in leadership for research utilization. The following sections explore these concerns that rose from the included studies in more detail.

2.3 Role of leadership in research utilization
In effecting change for research utilization, theories for leadership has often been discussed yet little has actually been tested in or arose empirically from practice settings. From a review of the included studies in my literature search, theoretical models or theories that has been used are such as the Clinical Nursing Leadership Learning and Action Process (CLINLAP) model (Jumaa 2005) and the Rosswurm-Larrabee model (Burns et al 2009). Both models entail step-by-step suggestions for application of research to practice, with the CLINLAP model focussing on leadership strategies (Alleyne and Jumaa 2007) and the Rosswurm-Larrabee model centering on instrumental application of research to practice (Rosswurm and Larrabee 1999). Meanwhile, a plethora of theoretical frameworks have been proposed to explicate the role of leadership in research utilization, indicating this to be a great area of interest. These include Schein’s (1992, 2010) framework for organizational culture (Kavanagh et al 2007; Aarons et al 2014); a combination of Lewin’s theory of change (Lewin 1951) and the American Association of CriticalCare Nurses’ (AACN) framework for navigating change (Buonocore

Schein’s (2010) framework for organizational culture has often been used to discuss the role of leadership in forming organizational culture for change. Using Schein’s (2010) embedding mechanisms, Aarons et al (2014) examples how leaders can build a climate for the implementation of research within organizational contexts as well as outwards for public health and the importance of aligning the two contexts for sustainability. Organizational climate, yet another factor often associated with research utilization, is often used interchangeably with organizational culture though they are distinctly separate (Scott-Findlay and Estabrooks 2006). Although both concepts concern understanding the psychological experiences in organizations, climate is the subjective perception of employees of their experiences within the organization and culture is the underlying mechanism that explains these experiences (Ostroff et al 2013).

Schein (2010) asserted the use of primary and secondary embedding mechanisms in communicating the values and priorities of leaders at various organizational levels. There are six embedding mechanisms of leaders (Schein 2010), as follows:

1. What leaders’ attention is directed at on a regular basis, for example to measure and control.
2. The reaction of leaders to critical incidents and organizational crises.
3. The way leaders allocate resources.
4. Deliberate role modelling and teaching.
5. The way leaders allocate status and rewards.
6. Ways in which leaders recruit, promote, select, and exclude.

Using the assumptions outlined above, Aarons et al (2014) makes clear the value for relationships and communication in leadership to form the climate of the organization in being receptive to research utilization. This is similar to findings from Stetler’s (2014) study that aimed to determine the roles of different levels of leadership in institutionalizing research utilization. From that study, behaviours of role modelling and intervening were conceptualized in a framework they called Leadership Behaviors Supportive of EBP Institutionalization (L-EBP) (Stetler et al 2014). Both studies had common ground in delineating the leader’s role in engaging others as a role model in research utilization, acting as an impetus for a workplace culture that values research utilization (Aarons et al 2014; Stetler et al 2014).
Clearly, relationships are key to research utilization as frequently seen in the identified literature. For instance, open relationships between leaders and others form one of the main tenets of the CLINLAP model, a research-based theoretical model for leadership used by Alleyne and Jumaa (2007) to improve leadership of clinical nurses to impact quality of patient care. Relationships are key to research utilization and said to increase an individual’s social capital by building trust across levels of the organization (Alleyna and Jumaa 2007). The importance of social capital is further demonstrated in a study that examined the value of opinions and characteristics of informal leaders in facilitating research utilization (Anderson and Whall 2013). Informal leaders in that study were considered opinion leaders and an emerging theoretical model was constructed based on an exploration of related theories. Although still in the phases of development, the emerging model explicated how nurses with strong opinions to act and receive consistent results on action could garner a following, especially when others are unknowledgeable of her perceived area of expertise (Anderson and Whall 2013). Hence, it can be inferred that opinion leadership in research utilization would not be valuable in contexts where others are knowledgeable of research and supported through organizational structures (Anderson and Whall 2013).

The relationship between leadership and organizational structures for research utilization is often made in a number of studies (Caramanica and Roy 2006; Burns et al 2009; Aarons et al 2014). It is apparent that leadership plays a crucial role in forming links with important stakeholders in research, thus influencing organizational structure in embedding support for implementation (Aarons et al 2014). Additionally, the role of leadership in enabling the direct involvement of staff in identifying and resolving clinical problems through research was seen as essential to building a culture for research utilization in the clinical area (Burns et al 2009). The formation of a council to support research utilization provided access to research expertise, as does links to academic institutions, both said to be key in fostering a culture for research use (Burns et al 2009).

Although the sample in my study encompasses both formal and informal leaders, it has to be acknowledged that formal leaders play a crucial role, especially in providing access to organizational infrastructure (Lukas et al 2010). This is perhaps most evident in the fact that most of the studies in this review either explicitly or implicitly focussed on the role formal of leaders (Udod and Care 2004; Gifford et al 2007; Duffy et al 2011) and some used the terms leaders and managers interchangeably (Alleyne and Jumaa 2007). Nevertheless, studies
examining the role of formal leaders additionally emphasized the value of shared leadership (Udod and Care 2004).

The proponence for shared leadership stems from assertions that nurses need to be actively making decisions about the care they provide in order to use research in practice (Udod and Care 2004), instigating notions of power between nurses and formal leaders. Similarly, findings from an English study on implementation of research-based guidelines highlighted the role of distributed leadership for success (Fitzgerald et al 2013). Distributed leadership in that study was contended as collaborative relationships between managers, hybrid clinical-managers, and healthcare professionals in the implementation of new guidelines. This relational theory of leadership was characterized as a diffusion of power amongst both formal and informal leaders towards the shared goal of research utilization for service improvement (Fitzgerald et al 2013). Foundational to the success of distributed leadership was sound relationships between managers and clinicians, highlighting the facilitative role of hybrid clinician-managers (Fitzgerald et al 2013). This underscores the findings from several other studies on the role of leadership in forming relationships facilitative of research utilization (Udod and Care 2004; Crow 2006; Alleyna and Jumaa 2007; Aarons et al 2014).

The significance of levelling power between relationships for research utilization is additionally emphasized by others who advocate for servant leadership in realizing research utilization for nurses (Jackson 2008; Wilkes and Jackson 2013). Servant leadership engages others in a holistic manner to prioritize their development through altruistic and ethical orientations (Eva et al 2019). It is posited that servant leadership at any level of the organization, cultivates a culture of inclusivity, creativity, and collaboration that are essential for a clinical research culture (Jackson 2008). This is further affirmed by a subsequent empirical study that found positive collegial relationships and an enabling culture to be vital for a sustainable research culture (Wilkes and Jackson 2013).

The issue of power balance is apparent in research utilization, further justifying my focus on both formal and informal leaders in my study. Focussing on leadership as an agent of change and changing processes further broadens the scope of my study to capture how leadership facilitates research utilization, as opposed to a narrow view of leadership practices and behaviours of a privileged few. Nonetheless, transformational leadership has often been contended as key to research utilization (Hauck et al 2013; Weng et al 2015), yet some studies give a less conclusive picture of transformational leadership being advantageous over
transactional leadership (Aarons 2006). In a study that investigated the leadership styles of managers and staff attitudes towards evidence-based practice, Aarons (2006) found that both transformational and transactional leadership were positively associated with positive views of adopting evidence-based practices. Moreover, transformational leadership was found to be associated with views of indifference between current and evidence-based practice (Aarons 2006). Importantly, the analysis of the study data showed considerable variance for the construct of leadership, pointing to the necessity of considering other significant factors, particularly organizational context (Aarons 2006).

This initial review of the literature clearly shows the role of leadership in research utilization in forming the organizational climate, building relationships to enable the development of others, providing access to support for research through links with important stakeholders, and shifting the distribution of power to foster an innovative implementation culture. These studies suggest the vital influence of leadership on the organizational context, particularly culture and infrastructure. The next section discusses what is known on leadership for research utilization in relation to these key aspects.

2.4. Research utilization: leadership and the organizational context

Nursing scholars have consistently identified leadership as one of the main components in the conceptualization of organizational context (Kitson et al 1998; McCormack et al 2002; Stetler 2003). It is clear that leadership and organizational context is closely related and a study investigating leadership processes should take organizational context into account so as to enhance its’ transferability (Schloemer and Schröder-Bäck 2018). Significantly, the majority of studies converge in conceiving leadership at all levels of the organization as crucial to research utilization. This perhaps relates to the apparent reciprocal relationship between shared governance and research utilization, both of which advances nurses’ leadership skills (Funk et al 1995a; Zuzelo et al 2006; Gloeckner and Robinson 2010).

Some studies exploring the role of organizational context in research utilization found culture to be one of the most significant determinants (Cummings et al 2010; Squires et al 2013). A recent scoping review importantly pointed out that even the most enthusiastic and knowledgeable nurse’s research use would be impacted by organizational culture (Williams et al 2015). Correspondingly, it has been suggested that leadership shapes an organization’s culture (Pettigrew 1979; Smircich and Morgan 1982; Kotter and Heskett 1992; Bryman 1996),
as Schein (2010) suggests that concern for culture creation and manipulation is the distinct feature between leaders and managers.

Culture, as defined by Pettigrew (1979), is a system of a publicly and collectively accepted meanings which gives function and a sense of orientation to a certain group at a given time. Pettigrew (1979) further conceptualized organizational culture as the mixed product of symbol, language, ideology, belief, ritual, and myth. Similarly, Schein (2010) conceptualized that organizational culture can be recognized at three fundamental levels. In ascending order, these three levels are: 1) artefacts, 2) values, and 3) basic underlying assumptions. Artefacts are observable elements one sees upon entering an organization, for example ward rounds or the whiteboard in wards displaying patients’ names. Values are the explicitly articulated norms, principles, and ideologies considered to have intrinsic worth within an organization. Finally, basic underlying assumptions are the shared perceptions of human nature and beliefs about reality that members of an organization agree upon.

It has been suggested that leaders influence organizational culture by representing values of the organization via symbolism and this can be conveyed by his or her behaviour, language, and vision (Pettigrew 1979; Scott-Findlay and Golden-Biddle 2005; Schein 2010; Aarons et al 2014). Similarly, the role of leadership in forming an organizational culture that values research-based practice is delineated by Scott-Findlay and Golden-Biddle (2005). Using Schein’s (1992) conceptual framework, they elaborated how an organization’s implicit value for physical activity and physical knowledge impacts on nurses’ work structure and consequently influences research utilization (Scott-Findlay and Golden-Biddle 2005). Firstly, the organizational approach to work that values the physical activity of nurses in patient care (i.e. “the busyness value”) as opposed to taking time to reflect and search for research evidence on which to base care, influences the value nurses put into utilizing research in their practice, thus hampering research use. The value of appearing to be busy in the nursing work culture can perhaps be put into perspective by using Eraut’s (1985) framework for knowledge creation and utilization.

Eraut (1985) posited that knowledge is created and utilized in primarily three contexts: the academic context (where knowledge is valued over action), the policy context (which requires social and political skills), and the action context (which demands a pragmatic orientation and the aim is action). Clearly, the busyness value inherent in nursing is aligned with the action context, highlighting the challenge presented to leaders of research utilization – incorporating
the academic context into one that values action. Another example of how an organizational approach to work can limit research utilization is the current trend of cutting back on resources related to professional development and ongoing nursing education (Scott-Findlay and Golden-Biddle 2005; Hegney et al 2010; Bungeroth et al 2018). Not only does this deepen the chasm for nurses to understand and use research (Nagy et al 2001), it communicates that scholarship is not considered as one of the nurse’s professional responsibility (Riley et al 2002).

Furthermore, according to Scott-Findlay and Golden-Biddle (2005), the types of knowledge that are used and valued in nursing care are shaped by the nature of the nurses’ work (i.e. the nature of human activity). In accordance with a cultural value for action and interaction, it is expected that nurses highly value human sources of information over text or electronic based that consists much of research (Thompson et al 2001; Scott et al 2008). Likewise, nurses tend to distrust sources of knowledge that are incongruent with their clinical experience (Scott et al 2008; Samuriwo 2010). This apparent value for practice knowledge underlines previous arguments on nurses’ ways of knowing beyond empirical research, emphasizing the need to diversify research paradigms to embrace the nursing epistemology. Although an integrative review has shown nurses’ positive perceptions of research and evidence-based practice (Saunders and Vehviläinen-Julkunen 2016), this has to be regarded with caution as the majority of these studies are quantitative in nature and nurses are known to lean towards social desirability (van de Mortel 2008). Even so, these studies conclude that significant organizational barriers exist to nurses’ research utilization despite nurses’ positive regard (Saunders and Vehviläinen-Julkunen 2016; Brown et al 2009), leading us back to organizational culture.

Furthermore, it is suggested that the organizational structure of nurses’ work as a result of underlying assumptions that value action over reflection influences their use of research (Scott-Findlay and Golden-Biddle 2005; Thompson et al 2008). Although this claim is yet to be explored in primary research, it is affirmed in the various studies that found nurses perceiving a lack of time for research utilization due to demands for direct patient care (Williams et al 2015), while other studies show that involving clinical nurses in research activities require significant organizational support, particularly with regards to access to infrastructure and executive leadership support (Scala et al 2016). Moreover, Thompson and colleagues (2008) succinctly captured the impact of organizational value for action as opposed to reflection on nurses’ mental lack of time, instead of real clock time, which translates into nurses perceiving a lack of time for research utilization.
It is clear that organizational culture greatly influences nurses’ research utilization. Nonetheless, debates exist on Schein’s (1992, 2010) conceptual framework and assumption that leadership creates culture (Hatch 1993). This argument centres on a symbolic-interpretive view that culture and leadership share a dynamic relationship, hence culture can act as both an antecedent and intervening factor (Hatch 1993). However, it later became known that culture is more responsive to leadership than the latter is to the former (Sarros et al 2002), highlighting the primacy of leadership in research utilization. It follows that nurse scholars have consistently called upon clinical leaders to initiate a cultural change in their respective contexts in valuing time to reflect and utilize research in practice in efforts to move away from the “busyness value” inherent in nursing practice (Scott-Findlay and Golden-Biddle 2005; Newhouse 2007; Thompson et al 2008; Williams et al 2015).

The literature abounds with strategies to instigate change to foster a research culture among nurses. Amongst them are – conveying value for research with leaders’ language and behaviour (Stetler et al 1998; Thompson 2003); displaying concise research findings in the clinical environment (Scott-Findlay and Golden-Biddle 2005; Larkin et al 2007); the inclusion of EBP in nurses’ performance reviews and promotion structures (Udod and Care 2004; Turkel et al 2005; Gifford et al 2007); the use of specialist nurses as research champions (Milner et al 2005; Chummun and Tiran 2008); and providing protected time for nurses to be involved in research-related activities within their clinical role (Scott-Findlay and Golden-Biddle 2005; Hatfield et al 2016). Evidently, all these strategies encompass Schein’s (2010) conceptual framework of the levels of culture – artefacts, values, and basic underlying assumptions. However, no studies can be located that investigates the dimensions of culture related to leadership in facilitating nurses’ research utilization.

Other contextual factors that are increasingly gaining attention in research utilization are: infrastructure (Newhouse 2007; Flodgren et al 2012), organizational climate (Squires et al 2013), and the provision of education and professional development opportunities (Rodgers 2000; Craik and Rappolt 2006; O’Nan 2011). Organizational infrastructure has been identified as influential for research utilization to some extent, yet a systematic review by Flodgren et al (2012) found only one low quality study investigating the effectiveness of organizational infrastructure in promoting nurses’ research utilization, thus limiting our understanding of this factor. Importantly, leadership is essential in enabling an infrastructure that supports research utilization in healthcare (Newhouse 2007), highlighting the importance of exploring its process. Similarly, it has been suggested that leadership is crucial in the provision of
educational and professional development opportunities that centre on research for nurses and its’ impact in increasing capacity for research utilization (Segrott et al 2006; Edwards et al 2009; O’Nan 2011).

Several nursing scholars have highlighted the role of organizational culture in shaping nurses’ use of research in their practice and emphasized the role of leadership in manipulating that culture to facilitate research utilization (Scott-Findlay and Golden-Biddle 2005; Halm 2010; Wilkes et al 2013). Indeed, the influence of organizational context on research utilization is increasingly being recognized (Scott-Findlay and Golden-Biddle 2005; Meijers et al 2006; Cummings et al 2007; Squires et al 2013) and leadership continues being an important component in the conceptualization of context (Kitson et al 1998; Rycroft-Malone 2004). The significance of studying leadership to influence research utilization for nurses is vital, as it is apparent that leadership is the driving force of change in any organizational context. Understanding the process of leadership to facilitate research utilization is pivotal in contributing to existing strategies of increasing nurses’ research utilization.
2.5 Summary

This initial literature review explicated how leadership facilitates research utilization through the many known factors of relationships, organizational structure and sharing of power. A majority of the focus of these studies were evidence-based practice/nursing and it has been shown that research has particular issues for nurses in utilizing it in practice, for example a lack of research capacity (Segrott et al 2006) and supportive infrastructures for nursing research (McCance et al 2007). A focus on research utilization also broadens the ways in which nurses can apply research to practice, as opposed to the centrality of instrumental research utilization in evidence-based practice. However, a paucity of studies focussing on leadership processes for research utilization, particularly in the UK and, additionally, the Scottish context, necessitated a broad overview of both the evidence-based and research utilization literature. From this initial review, I developed my research focus for this study, as further discussed below.

2.6 The research focus

The barriers of research utilization (Funk et al 1995b; Mckenna et al 2004; Lai et al 2010; Kajermo et al 2010) and individual characteristics in determining research utilization in nursing (Squires et al 2011) have been studied extensively. Consequently, the focus in the field has currently shifted from a narrow focus on individuals to a broader, more holistic view that includes organizational level factors and context (Meijers et al 2006; Cummings et al 2007; Squires et al 2013). From this review, it is clear that leadership is an important part of organizational context and plays a crucial role in nurses’ research utilization (Champion and Leach 1989; Scott-Findlay and Golden-Biddle 2005; Gifford et al 2007; Wilkinson et al 2011). Lesser known is how these factors interact to lead to research utilization for nurses and this formed the basis of my aim and research questions at the start of this study, as follows:

2.6.1 Aim

To gain a theoretical understanding of the role of leadership in nurses’ research utilization.

2.6.2 Research questions

1. How is leadership related to nurses’ research utilization?

2. How do contextual factors influence leadership in nurses’ research utilization?
3.1. Introduction
In this chapter, I give a detailed account of the research process for this study, including a justification of the decision to use a qualitative approach and, more specifically, the complementary use of constructivist grounded theory with situational analysis. Additionally, I will delineate my stance in conducting this research, evidencing reflexivity in my study methods, discuss the challenges I encountered and how I resolved them, ending with how I managed ethical issues for this study.

3.2 Research aim and research questions
From a review of the literature at the beginning of this study, the following aims and research questions were formulated to provide a focus for this study:

3.2.1 Aim
To gain a theoretical understanding of the role of leadership in nurses’ research utilization.

3.2.2 Research questions
1. How is leadership related to nurses’ research utilization?
2. How do contextual factors influence leadership in nurses’ research utilization?

3.3. Qualitative inquiry
Central to this study was the aim of gaining a theoretical understanding of the role of leadership in research utilization and this was consistent with a qualitative approach that enables the researcher to gain an in-depth understanding of a topic of interest (Berg 1995; Klenke 2016). Additionally, it has been asserted that context matters in leadership (Bryman et al 1996; Schein 2010) and likewise has been conceived as being part of context in research utilization (Kitson et al 1998; Stetler 2003), emphasizing the importance of accounting for context in studying leadership.

This further lends support to the use of a qualitative approach that can give a better picture of the context in which the research is conducted and how this context influences action (Bryman 2004; Maxwell 2013). Moreover, it has been suggested that a qualitative approach is more suitable for areas of interest that are lesser known (Maxwell 2013; Bryman 2015), and as the
previous literature review has shown, the field of research utilization has only just started to look at the role of leadership, making this particular topic unfamiliar to current literature and befitting a qualitative study. Coming from a Malaysian perspective, trying to make sense of a Scottish healthcare system with all its’ different values and structure, I found it pertinent to make my stance known and this worked well with a qualitative study where reflexivity is key (Watt 2007; Alvesson and Skoldberg 2009; Charmaz 2014).

It is not uncommon for research questions to change in qualitative research (Morse et al 2002, Maxwell 2013), moreover in a grounded theory study where theoretical sampling is key to develop concepts and categories that follow analytical leads as data collection and analysis are done iteratively (Charmaz 2014; Corbin 2016). Indeed, alteration of research questions are warranted in qualitative research as the study unfolds, prompting the researcher to be reactive and creative in order to demonstrate methodological coherence, which is a key factor in ensuring rigour in a study (Morse et al 2002). Using this approach, my research questions remained throughout the study, guiding my data collection and analysis but were further refined and expanded in the research process, consistent with the direction of collected and analysed data, as will be further discussed in Chapter Four: The research process.

In this study, I used a qualitative approach that emphasized an emergent design in order to build theory instead of testing them (Maxwell 2013; Charmaz 2014). Thus, a study with an emergent design has to be flexible yet well thought-out in order to guide the researcher in avoiding common pitfalls in research and establish rigour (Maxwell 2013). There is no step-by-step recipe for qualitative research (Maxwell 2013; Klenke, 2016) and the purpose of using a certain qualitative methodology in a study is to provide analytical tools to assist the researcher in systematic inquiry (Charmaz 2014), as I do in bringing situational analysis into this constructivist grounded theory study. In addition to starting with a study design that is flexible, it is also important to note that qualitative research does not progress in a linear fashion and, indeed, each component of the study design informs one another to a certain degree (Maxwell 2013; Klenke 2016). To further illustrate the flexible and inductive nature of my study, I have devised a study design map for my study (Figure 2) as recommended by Maxwell (2013).
**Figure 2**  Design map of my study

**Goals**
- Understand leadership process in research use
- Conceptualize important contextual factors for leadership

**Conceptual framework**
- Charmaz’s constructivist GT

**Research questions**
- How is leadership related to nurses’ research utilization?
- How do contextual factors influence leadership in nurses’ research utilization?

**Methods**
- Interviews
- Theoretical sampling
- GT coding
- Purposive sampling
- Situational analysis

**Validity**
- Transparency (i.e. diary, memos)
- Concurrent data collection
- Participant feedback
- Rich data
- Constant comparison
3.4. **Philosophical assumptions of the study**

*“If men [sic] define situations as real, they are real in their consequences”*  
(Thomas and Thomas, 1928, pp. 571)

The above Thomas and Thomas (1928) theorem highlights the importance of individual definition of reality in shaping one’s perceptions and actions, underscoring the necessity of making this explicit. Ontology, a branch of metaphysics, deals with the nature of reality while epistemology concerns the science of knowledge, how we know what we know and, indeed, what we *can* know (Allison and Pomeroy 2000). This study is guided by a constructivist worldview that assumes reality as relativist and thus epistemology as subjectivist (Lincoln et al 2018). Ontological assumptions form the foundations of epistemology that informs one’s research that influences the selected methodology, leading to the researcher’s preferred methods (Crotty 1998).

However, it is important to note that while these relationships are typical, they are not in any way mandatory. As long as it is appropriate to the research purpose, any paradigm can be embedded in any methodology which can then make use of any appropriate research method (Crotty 1998). Johnson and Onwuegbuzie (2004) echoed this claim in stating that the chosen methodology does not always follow the held epistemology as logic of justification is an important aspect of epistemology but does not and should not dictate specifically how data must be collected and analysed. Certainly, it is accepted for the researcher to mix methods and methodologies in a research design as long as it is justified and necessary.

Similarly, symbolic interactionism, typical of grounded theory studies, was not used as a guiding paradigm in this study. The premises of symbolic interactionism are discussed further in section 3.4.2 and while its assumptions fit well with constructivism, it was evident that its’ practical implications would have little benefit for the aim of my study. For example, symbolic interactionism urges the researcher to focus on actions and behaviours to derive meaning (Benzies and Allen 2001). This would necessitate the use of observation in my study; however, observation was ruled out as a study method for reasons outlined later in section 3.5.5.

Nevertheless, symbolic interactionism informs my study in the typical way that it informs grounded theory principles (Crotty 1998; Hallberg 2006; Aldiabat and Le Navenec 2011), however, is not the prescribed paradigm of my study. Constructivism remains the guiding paradigm for my conduct of this study and the following sections outline my ontological and epistemological stances.
### 3.4.1. Ontological stance

Constructivism, a known part of interpretivism, aims to gain knowledge by interpreting subjects’ perceptions (Lincoln et al 2018). Being ontologically relativist acknowledges that realities exist in the form of multiple mental constructions, making reality dependent on the persons who hold them (Guba 1990). It follows, therefore, that knowledge is subjective and co-created between the inquirer and inquired, fusing them into a single identity (Guba 1990). Using grounded theory within a constructivist paradigm then implies that perceptions are co-constructed between the researcher and the participant, rendering knowledge that is useful to the study (Charmaz 2014). Thus, constructivists aim to understand the complexity of multiple realities instead of narrowing understanding into simplistic themes (Creswell and Creswell 2018).

There are several implications for practice in operating within a relativist ontology. Firstly, my questioning of participants will be open-ended to facilitate participants’ construction of the meaning of a situation. Additionally, it is important that I take into account the details of specific contexts mentioned by participants to understand how multiple realities are negotiated socially and historically (Creswell and Creswell 2018). This ties in well with the need to include contextual factors in theorizing for leadership, as indicated by the previous literature review in Chapter Two. The notion of socially constructed realities necessitates scrutiny of social processes between individuals (Creswell and Creswell 2018), complementing grounded theory’s aim of describing basic social processes (Charmaz 2014). The relativist ontology that underpins constructivism fits well with situational analysis as Clarke (2005) expands on this notion by considering actors/actants within and outwith the studied phenomenon, including external and internal factors that may impact the situation (Clarke 2005; Charmaz 2014).

Alternatively, I reject ontologies of an external, single reality for this study, for example objectivism that underpins post-positivist epistemologies. An objectivist ontology assumes an external reality thus emphasizes discovery of data rather than active co-construction (Charmaz 2014). Moreover, it implies value in dualism, acknowledging that complete independence of the researcher and the researched is impossible but taking it as an ideal (Guba and Lincoln 1994). Employing external guardians of objectivity would only undermine my study findings as it would be subjected to interpretation of the critical community (e.g. editors, professional peers, etc) and not reflect the perceptions of the study participants. Therefore, taking an objective stance would only deepen the theory-practice gap as important contextual factors...
could be missed or ignored, hence limiting understanding of the vital leadership process needed in encouraging nurses’ research utilization.

Consistent with a constructivist paradigm, I maintain that reality is relative and knowledge as subjective – all having been constructed by humans based on their backgrounds, experience and capability. Thus, no construction is unquestionable and readers cannot be obliged to accept my perspectives on grounds of indisputable evidence or uncontested logic (Guba and Lincoln 1994). Following this, I can only rely on the persuasiveness and utility of my study’s findings in uncovering the process of leadership in nurses’ research utilization using grounded theory. I further describe my epistemological stance of constructivism in the following section.

3.4.2. Epistemological stance

Symbolic interactionism and pragmatism forms the roots of grounded theory (Chamberlain-Salaun et al 2013), enabling grounded theorists a framework in understanding society to further their understanding of basic social processes (Baker et al 1992). Pragmatism, a humanistic movement in philosophy that emphasizes the role of humans in creating an objective and meaningful reality, acts as a precursor to symbolic interactionism (Reynolds 2003). Pragmatism unified knowledge and action at a time when scholars demanded that theory be applicable to practice to extend its worth to society (Dewey 1929).

Key scholars attributed to developing the intellectual foundations of symbolic interactionism are Charles Horton Cooley, William Isaac Thomas and George Herbert Mead, whose work was built upon by John Dewey, Herbert Blumer, and Strauss, one of the founding fathers of grounded theory (Chamberlain-Salaun et al 2013). However, the inception of symbolic interactionism is credited to Mead, although he did not call it symbolic interactionism, a term coined by Blumer in 1937 (Blumer 1969). Mead proposed the theory of intersubjectivity, suggesting that people take up roles according to their individual responses to social gestures, which is taken up to adjust common attitudes (Dodds et al 1997). This is further expanded in symbolic interactionism, which premises that interpretation and action each informs the other, forming a reciprocal relationship. Essentially, symbolic interactionism acknowledges that people act in response to how they interpret situations and the symbols they use to convey these interpretations (Blumer 1986).

This implies symbols in multiple forms, concrete objects, abstract ideas, concepts, etc., that people use and are able to modify in their use in action and interaction as a result of their interpretations (Charmaz 2014). The assumption of symbolic interactionism holds that “human
group life or society exists in action and must be seen in terms of action” (Blumer 1969, pp.6), a notion that stayed with Strauss and is the founding reason for why grounded theory coding recommends coding in gerunds wherever possible (Charmaz 2014). Crucially, symbolic interactionism views reality as being constructed eventually by shared experiences and meaning (Locke 2001), tying in well with the epistemological grounding of constructivism for this study.

Constructivism acknowledges the relativity of the constructed worlds of both the participants and the researcher (Charmaz 2014), thus generating knowledge that is subjective in nature. In particular, a constructivist approach recognizes the involvement of the researcher in the study and how this might shape the data (Lauridsen and Higginbottom 2014). This recognition fosters reflexivity rather than assumes the researcher as a neutral observer and value-free expert (Charmaz 2014). Reflexivity is valuable in qualitative research compared to assumed objectivity as it facilitates both the understanding of the phenomenon under study and the research process itself (Watt 2007).

Because of its emphasis on processes to study an external world, grounded theory does contain some positivistic elements (Charmaz 2015). However, a constructivist paradigm is essential in this study as it helps the researcher to gain rich data from participants as well as take the context into perspective rather than ignoring the context as a researcher with a positivist outlook would. While postpositivism encourages studies to be done in organic environments, the critical realist ontology inherent in this paradigm (Guba and Lincoln 1994) would significantly affect the richness of yielded data as findings would be put through scrutiny and possibly dismissed. Guba and Lincoln (1994) called this limitation of positivism or postpositivism as “context stripping” (pp. 106) and asserts that research findings would vary greatly if the study’s context have been taken into account. The contextual stripping of this objectivist outlook would, they argue, limit the applicability of the research findings as the results can only be replicated under similar circumstances. It can be argued that an interpretative stance also limits applicability, however, the difference here is that subjectivity is acknowledged and the context is sufficiently put forward for readers to compare to their own. Similarly, an objectivist grounded theory aims for generalizations across contexts, as compared to the constructivist aim for an interpretive understanding of historically situated data with conditional transferability (Charmaz 2014). Moreover, as theories of leadership for nurses’ research utilization accumulates, one
overarching basic social process will emerge to enhance our understanding of this phenomenon (Parry 1998) and one of the advantages this theory will have is its grounding in rich data.

Furthermore, sufficient description of context is crucial in qualitative research looking into leadership as it has been recognised that organizational context has a reciprocal relationship with leadership development (Yukl 2006). In a systematic review of nursing managerial roles in research utilization, Gifford et al (2007) found that most qualitative studies were limited in describing the study context, thus hampering the study’s quality. A constructivist paradigm would successfully circumvent this problem as constructivism holds a relativist ontology that gives rise to subjective knowledge (Guba and Lincoln 1994), thus taking into account of context is important in understanding this subjectivity.

Using constructivism as a guiding paradigm for my study fosters the discovery process and encourages conceptual thinking necessary in uncovering theory (Charmaz 2014). This further provides the appropriate outlook and tools to take on the recommendations of scholars in the field of nursing research utilization to develop a discipline-specific theory (Scott-Findlay and Estabrooks 2006). Alternatively, a positivism or postpositivism study paradigm would be preoccupied in proving or disproving existing theories which would, inevitably, give rise to new knowledge, yet not in the theoretical manner needed in this field.

A critical theory or feminist paradigm is appealing in its common theme for social or political change and has been used in some grounded theory studies (Plummer and Young 2010; Allen 2011; Kempster and Parry 2011). Based on these paradigms, reality is viewed through the lenses of social, political, cultural, economic, ethnic, or gender values that are crystallized over time (Guba and Lincoln 1994), making the case for grounded theorists to be reflexive and transparent in conducting research. However, the aim of inquiry for feminists and critical theorists is that of transformation and emancipation (Guba and Lincoln 1994) and this does not suit the aim of my study.

Further, critical realism is appealing in its suitability for a grounded theory approach, particularly its resonance of uncovering causal powers using levels of analysis with that of grounded theory’s levels of abstraction (Kempster and Parry 2011). Critical realism also aligns with the notion of knowledge as socially constructed, however, is at odds with my relativist ontology in that critical realists assume a single reality that only varies in interpretation (Sayer 1992). Additionally, the perceived levels of reality in critical realism would necessitate data
collection through various methods, particularly observation, and I further explain how this would not be possible for me in section 3.5.5.

I conducted my study within the framework of Charmaz’s (2014) constructivist grounded theory and Clarke’s (2014) postmodern situational analysis was used as an analytical tool at a methods level to form part of my data analysis. It is intriguing to note that a couple of studies have attempted to use situational analysis within a constructivist paradigm and have struggled with it, particularly with positional mapping (Mills et al. 2007; den Outer et al. 2013). The reason for this was cited as difficulty in reconciling the differences between constructivist and postmodern notions of agency, i.e. the driver for the positional maps (Mills et al. 2007; den Outer et al. 2013). Both authors contend that to bring discourse analysis into their studies would divert it from a constructivist view, however, recent developments in qualitative research would suggest that epistemological differences are not as clear cut as previously thought to be (Lincoln et al. 2018).

Remarkably, in the 15 years since they last wrote on competing paradigms, Lincoln and colleagues (2018) have now adopted a more flexible view, stating that there is great potential for “interweaving of viewpoints” and “bricolage” where borrowing of viewpoints would seem useful or enhancing richness of a study. Lincoln et al (2018) gave an example of their study in 1989 that although was firmly rooted from a constructivist viewpoint, reflects critical theorists and participatory action in calling qualitative researchers to action in conducting authentic research. In relation to this, they refer to Geertz (1973, 1988) who predicted a “blurring of genres” – a phenomenon that they deem not only necessary but critical in getting qualitative research to inform policies and social ills (Lincoln et al. 2018). This does not, however, justify “methodological slurring” or validate the notion that grounded theory needs no theoretical underpinning (Glaser 2004), rather highlighting that useful knowledge can only have meaning from community consensus within the study’s stakeholders (Lincoln et al. 2018).

It is vital to note here that there is not to be a pick and mix approach to positioning knowledge within a philosophical stance, yet some epistemologies share some common ground that can be used productively when scrutinized and advanced to its fullest. It is apparent that from a constructivist view, the resulting findings of a study depends on the researcher’s perspectives. Charmaz (2014) supports that Clarke’s (2014) situational analysis fully develops this idea by specifying and making the researcher aware of the idea of self, others, and actors (both
articulated and silent) within the study and encourages analyses of power which is essential in a study on leadership.

Situational analysis was introduced by Adele Clarke in 2005 in an effort to resolve some epistemological and methodological issues she saw in classic grounded theory as problematic. A student of Strauss, Clarke developed situational analysis further along his strand of pragmatism within grounded theory (Clarke 2005), as opposed to Glaser’s seemingly positivist, classic grounded theory. In conceiving situational analysis, Clarke (2005) argues that grounded theory’s roots in symbolic interactionism places it in a predisposed position to being postmodernist. She continues to assert that this is especially so given symbolic interactionism’s influence by Mead’s theory of intersubjectivity, placing grounded theory in a fully compatible position to produce research within Haraway’s (1991) inherently feminist situated knowledge framework. Haraway’s partial and situated knowledge posits that there is no single truth to be discovered, rendering all knowledge to be partial and linked to the contexts in which it was constructed (Haraway 1991). While Clarke (2005) attempts to redefine grounded theory within a more fully postmodernist paradigm, I operate within this common space between grounded theory and situational analysis that acknowledges perspectives in a shared reality and warrants the use of situational analysis as an analytical tool through a constructivist lens.

3.5. Grounded theory

Having established that a constructivist, qualitative approach provided the best analytical tools to answer my research questions, I decided on a grounded theory methodology, as this was most appropriate to the study’s perspective of conceiving leadership as a social process. To fully appreciate the value of grounded theory in generating theoretical understanding that stays close to the experiences of the study participants, one has to be acquainted with the classic grounded theory first revolutionized by Glaser and Strauss in 1967. Through their seminal text, *The Discovery of Grounded Theory*, they laid the foundations of grounded theory methodology, including constant comparison, theoretical sampling, theoretical sufficiency and concurrent data collection and analysis (Glaser and Strauss 1967), all of which remain core processes of all grounded theory methods regardless of underpinning epistemology (Maz 2013).

Grounded theory is distinguished from other qualitative methodologies in its purpose of generating theory, providing researchers with an understanding of a social situation by specifying its core and subsidiary processes that are operating within it (Strauss and Corbin 1994). Glaser puts it simply that grounded theory allows researchers to “discover what is going
on” (Glaser 1978, pp. 4). The purpose of theory generation rather than theory validation was revolutionary for research at the time grounded theory was introduced, consistent with Glaser and Strauss’ dissatisfaction with the prevalent hypothetico-deductive practice of testing sociological theories at that point in time which partly gave rise to their inception of the grounded theory methodology (Glaser and Strauss 1967; Kenny and Fourie 2014). Grounded theory’s roots in symbolic interactionism guides grounded theorists in understanding the processes of society, revealing avenues of inquiry to develop further understanding of social situations (Baker et al 1992; Birks and Mills 2015).

The value of grounded theory in generating theoretical understanding is apparent in the high interest it generated amongst qualitative researchers, giving rise to its many evolutions and underlying paradigms. As such, the following section discusses the evolution of grounded theory, followed by a justification of its methodological fit for this study. Though it was determined that constructivist grounded theory remains the best method of inquiry for this study, other methods have not gone unexplored as the following sections deliberate on other qualitative methodologies in relation to the research questions. This section includes a theoretical outline of the process of conducting a grounded theory study, as well as a short criticism of grounded theory and its benefits to my research questions.

3.5.1. Evolution of grounded theory
When first introducing grounded theory, the authors Glaser and Strauss (1967) emphasised that grounded theory is not a rigid set of rules for researchers but rather a method to stimulate others to “codify and publish their own methods for generating theory” (Glaser and Strauss 1967, pp. 8). The evolving methods of grounded theory has certainly lived up to this notion, as various methods now exist, raising the question of what is a grounded theory? Notwithstanding the various theoretical perspectives underlying the various methods that give rise to diverse approaches to analyses, it is evident that all evolved variations of grounded theory share the same core processes for theorizing, differing only in epistemology, as Morse (2016) asserts the core principle of grounded theory:

“Grounded theory is a way of thinking about data – processes of conceptualization – of theorizing from data, so that the end result is a theory that the scientist produces from data collected by interviewing and observing everyday life.”

(Morse 2016, pp. 18)
This founding principle is consistent with my aim of gaining an understanding of the leadership processes in research utilization, which requires a firm grasp of the contextual factors involved. The unique process of conceptualization in grounded theory not only helps me in this aspect of my study but assists me in familiarizing myself with a foreign setting, balancing the emic-etic perspective so valued in qualitative research (Klenke 2016).

Building on the challenge of developing grounded theory, the method has now expanded into a plethora of approaches, with scholars referring to the original method as “classic grounded theory” (Thornberg 2012). Other types of grounded theory branched from the resulting diversion of the two original scholars, i.e. “Glaserian grounded theory” and “Straussian grounded theory” (Stern 1995, 2016), as Figure 3 below illustrates.
Figure 3  Genealogy of Grounded Theory: Major Milestones (Morse 2016)¹

Though each approach shown above vary considerably, they all have common ground in their core processes, as Charmaz (2014, pp.15) asserts that a grounded theory study would:

1. Conduct data collection and analysis simultaneously in an iterative process.
2. Analyse actions and processes rather than themes and structure.
3. Use comparative methods.
4. Draw on data (e.g. narratives and descriptions) in service of developing new conceptual categories.
5. Develop inductive abstract analytic categories through systematic data analysis.
7. Engage in theoretical sampling.
8. Search for variation in the studied categories or process.
9. Pursue developing a category rather than covering a specific empirical topic.

For Charmaz (2014), points 1 – 5 above are essential in a grounded theory study, yet a variety of opinions exist as to which of the above needs to be demonstrated in a study for it to sit under the grounded theory umbrella. Criticism exists regarding the heterogeneity of studies within grounded theory and whether some studies can be called a grounded theory study at all (McCrae and Pursell 2016) and I address this in further detail in section 3.5.3. Importantly, my study used a constructivist grounded theory approach that supplemented analysis with situational analysis as an analytical tool and I will further evidence in this chapter and subsequent ones that all the above items featured in my study to the advantage of answering the research questions.
3.5.2 The process of grounded theory

As described in the previous section, a study needs to demonstrate certain criteria to be considered a grounded theory study. Central to the grounded theory process is theoretical sampling, the simultaneous collection and data analysis and memoing that sets it apart from other qualitative methodologies.

3.5.2.1 Data analysis

It has been suggested that the parting of ways between Glaser and Strauss stemmed from issues with data analysis, giving birth to what is often termed the Glaserian and Straussian branches of grounded theory from which other methods of grounded theory derives (Walker and Myrick 2006). On the surface, it would seem that both strands are similar in its process of generating a grounded theory – coding, constant comparison, memoing, developing categories and refining through theoretical sampling – yet differ significantly in how the researcher engages with the data during analysis due to the differing epistemological underpinnings.

Coding is a key difference to the methods advocated by Glaser (1978) and Strauss (Strauss and Corbin 1990). While both founding fathers suggest grounded theorists begin with open coding, Glaser (1978) asserts that this should proceed line-by-line with as many codes as possible alongside theoretical and conceptual memos, yet Strauss believes that this stage of open coding is an analytic process aimed at identifying concepts and dimensionalizing their properties from the data (Strauss and Corbin 1990). Glaser (1992) criticised this approach as jumping ahead in the analytic process, forcing the data to fit into theory.

A further key difference in open coding between the two methods is the issue of achieving theoretical sensitivity, that is the ability to think of the data conceptually and theoretically from a distance while maintaining sensitivity to the research process as well as the researcher’s involvement in that process (Walker and Myrick 2006). While both Glaser (1978, 1992) and Strauss (Strauss and Corbin 1990, 1998) seem to agree on the importance of theoretical sensitivity, they differ on how to achieve this, with Glaser advocating for total immersion of the researcher in the data (Glaser 1992) and Strauss proposing the use of a number of analytical tools (Strauss and Corbin 1998). Glaser (1992) again warns that this may force the data in preconceived ways, however, Strauss and
Corbin (1998) reminds researchers not to impose anything on the data whilst encouraging the use of their analytical tools.

The position of Charmaz’s constructivist grounded theory on open coding is similar to that of Glaser (1978), which supports line-by-line coding and immersion in the data. However, constructivist grounded theory differs from Glaser’s seemingly objectivist grounded theory in arguing that the resulting theory is constructed rather than emerging from the data (Charmaz 2014). Further on in the coding process, Strauss and Corbin (1990, 1998) introduces axial coding as a way of relating categories to subcategories by specifying the properties and dimensions of a category. This technique has since been revised (Corbin and Strauss 2015), however, it involved a set of complicated coding procedures to generate themes (Strauss and Corbin 1998; Charmaz 2014) whilst other grounded theorists, such as Clarke (2005) views axial coding as elaborating a category and uses diagramming to subsume relevant categories (Charmaz 2014). Similarly, Charmaz (2014), depends on emergent strategies to build subcategories into properties of larger categories rather than using specific analytic procedures.

3.5.2.2 Theoretical sampling

Theoretical sampling is sampling according to developing analysis to build theory and is thus theoretically oriented as opposed to description (Breckenridge and Jones 2009). Although grounded theory has evolved into several methods, as discussed in the previous section 3.5.1, the definition of theoretical sampling has remained largely undisputed amongst grounded theorists, in that sampling follows leads developed during analysis and progressively focuses data collection in development of theory (Glaser and Strauss 1967). This is consistent later on with Corbin and Strauss (1990) in asserting that sampling in grounded theory first begins purposively and progresses with the aim of outlining the dimensions, properties, and variations of developing concepts for the resulting theory. Similarly, Charmaz (2014) defines theoretical sampling as sampling to develop the properties and boundaries of a developing category, making it explicit that a preliminary category must already exist to begin theoretical sampling. Theoretical sampling and the constant comparison process work integratively to build the density of categories, taking the researcher to increasingly conceptual levels evidenced in their memo writing and coding (Glaser 1978). Theoretical sampling ceases when theoretical sufficiency is
reached, that is no new data benefits theoretical development for the purpose of the study (Dey 1999; O’Reilly and Parker 2012; Maz 2013; Charmaz 2014). A description of how theoretical sampling was done and theoretical sufficiency was reached in this study is given in detail in Chapter Four: The research process, section 4.2.3 and section 4.2.4 respectively.

3.5.2.3 Memoing

Memos are a written record of the researcher’s developing thoughts and, indeed, can be used throughout a study from the planning stage so that there is a record of decisions surrounding design of a study (Schreiber 2001) through to analysis and developing theoretical codes with accompanying theoretical memos (Glaser 1998). Accordingly, memos become increasingly focused and its boundaries clearer as the study progresses, particularly in the analytic stage of constructing theoretical codes (Montgomery and Bailey 2007). It has been argued that memoing is not unique to grounded theory and is inherent of all qualitative methodologies (Birks et al 2008), however, the theoretical nature of memoing in grounded theory sets it apart from other qualitative methodologies as memoing in grounded theory aims to develop the researcher’s thoughts on building conceptual density of codes and categories with the aim of developing theory (Glaser 1998).

Free writing has mostly been encouraged for writing memos, giving the researcher freedom to explore ideas and effectively create a space for them to speak to themselves about the data and developing codes and subsequent categories (Glaser 1998; Schreiber 2001; Charmaz 2014). However, Strauss and Corbin (1990) has developed typologies of memos (e.g. code notes, theoretical notes, operational notes, diagrams, logical diagrams, and integrative diagrams) although this has been criticized by Glaser (1992) as limiting the abstraction of data to a descriptive level.

Nevertheless, the majority of grounded theorists advocate for memo writing to be spontaneous and the form of writing to benefit the advancement of the researcher’s analytic thoughts, be it a methodological journal, diagramming, or short notes on fleeting ideas (Schreiber 2001; Charmaz 2014). This is consistent with Clarke’s (2005) notion of memo writing, in that it should be done in whatever form most useful to the researcher yet should be done often, further encouraging researchers to keep a “memo bank”
containing ideas and revisions of ideas for possible future use. Clarke (2005) suggests recording verbal memos while diagramming in situational analysis, a strategy I used during my study, along with keeping a research diary or methodological journal as Charmaz (2014) suggests, additionally creating memos when coding using the NVIVO software. Further accounts of the practicalities of my study relating to the grounded theory process is described in Chapter Four: The research process, section 4.2. An example of written memos relating to the development of the core category is also provided in Appendix H.

3.5.3 Criticism of grounded theory

As much as the founders of grounded theory encouraged researchers to be creative with the method while remaining within its’ basic tenets (Glaser and Strauss 1967), the development of various types of grounded theory can prove to be a disadvantage to the neophyte researcher. Still finding their way in research methodologies, novices can find the various methods of grounded theory, some contrasting even more than the last, to be confusing and thus unappealing for future research.

Crossman (2012, personal communication with Charmaz) brings forward a relevant issue within grounded theory in that all the different methods seem detached and isolated from each other, proposing that the novice label themselves and pledge sides in order to gain access to the method. This would produce a rather fragmented future for grounded theory, threatening to move further away from its’ basic tenets. However, taking a “pick and mix” approach in grounded theory is unfavourable, as most researchers who use this strategy to avoid the discourse in grounded theory do so in a manner that disregards the incompatibility of the underlying paradigms (Cutcliffe 2005). It is then, rather timely that the book *Developing Grounded Theory: The Second Generation* was published, bringing different perspectives of the method together to highlight their common ground and describing their varying paradigms.

Certainly, having a text that so concisely describes the different methods with exemplars all in one place helps the novice in preparing for the practicalities of carrying out one’s own grounded theory study.

However, as unattractive as the various versions of grounded theory might seem to the novice, it is pertinent for researchers to be reminded that the founders of the method called for others to adopt and adapt the grounded theory methodology. This clearly implies that there is no
“recipe” when it comes to using the methodology and gives researchers the room they need to be creative according to their respective contexts. I certainly found this allowance encouraged my creative thinking during the conduct of this study, especially as I am using a combination of two methods within grounded theory that has only been done a handful of times thus far (Mills et al. 2007; Khaw 2012; den Outer et al. 2013). The lack of guidance in combining methods within grounded theory afforded me the opportunity to be independent and creative while carefully following the basic tenets of both situational analysis and constructivist grounded theory as indicated by the authors (Clarke 2005; Charmaz 2014) and other literature (Clarke and Montini 1993; Mills et al. 2007; Khaw 2012; den Outer et al. 2013; Lincoln et al. 2018). It was challenging to get the balance between demonstrating creative thinking and avoiding methodological slurring yet I believe I have achieved this and illustrate this in the following chapters.

3.5.4 Benefit of grounded theory method to research questions

The call for theory generation resonates between nursing and leadership scholars, moreover in the study of leadership and its’ related context for research utilization (Parry 1998; Meijers et al. 2006; Scott-Findlay and Estabrooks 2006; Estabrooks et al. 2006). The use of organizational science theory in exploring organizational culture in nursing limits the development of discipline-specific theory to understand the process of leadership in nurses’ research utilization – a vital endeavour for the development of testable and practical interventions to address the lack of research utilization in practice (Scott-Findlay and Estabrooks 2006; Estabrooks et al. 2006).

Moreover, grounded theory allows the researcher to gather rich data by encompassing the complexities of the organization, thus taking into account contextual factors (Morse 2007) that may be ignored or assumed away by other methodologies of inquiry. Similarly, Kan and Parry (2004) illustrates the usefulness of grounded theory in studying nursing leadership in changing practice. In their longitudinal study of nursing leadership in overcoming resistance to change, they found that unreconciled paradoxes in nursing hampered changing practice (Kan and Parry 2004). From an apparently post-positivistic stance, Kan and Parry (2004) clarified how organizational politics hindered the transformational leadership potential of nursing leaders and the importance of identifying paradoxes for multiple realities to converge, leading to organizational change. Without the identification and resolution of paradoxes, individual realities will continue to diverge, hampering organizational change and stifling nursing
leadership potential (Kan and Parry 2004). While being helpful in facilitating understanding of how organizational politics impacts nursing leadership, the study further demonstrates the usefulness of grounded theory in studying the leadership process and highlighting contextual factors. However, this study extends from the leadership literature, thus not being discipline-specific as called for by nursing scholars (Scott-Findlay and Estabrooks 2006), nor does it entail research utilization.

Grounded theory’s ability to identify basic social processes will inevitably give rise to a number of forms of leadership processes as studies accumulate (Parry 1998). However, this should not be seen as a disadvantage but rather as an advantage of using grounded theory in leadership studies as it allows an overarching social process to emerge, which will explain variations in all lower level concepts (Parry 1998) and perhaps may even emphasize the importance of organizational context.

Identifying the leadership process through qualitative methods have been recommended in the nursing literature (Gifford et al 2007; Wilkinson et al 2011) as well as to generate theory (Scott-Findlay and Estabrooks 2006), though none has explicitly mentioned using grounded theory. Nonetheless, the use of grounded theory in investigating leadership for research utilization is evidenced by its capacity to study leadership as a process, rather than a variable, permitting the researcher to investigate multi-levels of leadership in an organization and thus moving away from a narrow, central outlook on leadership that has dominated leadership studies (Parry 1998; Bryman 2004). Similarly, the importance of moving away from studying leadership as a central concept is emphasized in the nursing leadership literature, as this contributes to leadership for research use being under-reported (Gifford et al 2007). In deciding grounded theory as the research methodology for this study, I compared its’ advantages and challenges to other qualitative methodologies and it could not be denied that grounded theory remained the best choice in meeting the needs of the knowledge gap as indicated by the literature.

3.5.5 Consideration of other qualitative methodologies

In considering other qualitative methodologies, I found ethnography to closely match my analytical needs in answering my research questions. In its simplest form, ethnography is the description and interpretation of a social group or system by immersing oneself in the social context of the study (Klenke 2016). This methodology appealed to me as a foreigner to Scotland’s healthcare system as, historically, ethnography was used by researchers to study
contexts in countries outside their own, though this has changed recently and more ethnographic work are being done in the researchers’ locality (Hoey 2014). Nonetheless, the amount of literature on adapting to foreign cultures available to researchers looking to use this methodology appealed to me and I considered ethnographical work in the design of my study. However, after much consideration, there were a few inconsistencies with using ethnography to answer my research questions. Firstly, the immersive experience of participant observation inherent in ethnography (Klenke 2016) would benefit my study very little while requiring much effort in gaining approvals for participation and drawing up a systematic method of observation. While it has been done before (e.g. Machell et al 2009), observing leadership is a subjective activity, one that has to take into account the underlying paradigm guiding a study. Further, I would be limited in ability to participate in the observed context as, at the time, I was an international nurse with no nursing registration in the UK. It was inevitable that I would have less participation and be more of an observer and this concerned me as the degree to which the researcher involves herself in participation of the context under study affects the quality of an ethnographic study (Kawulich 2005). However, I did see the advantage of gaining familiarity of the studied context. It was for this reason that I arranged for observational posts and registered as an NHS volunteer in order for me to gain familiarity of the study sites and identify potential participants (discussed further in section 3.9.2). Additionally, generous invitations by my participants to meet a practicing nurse active in Scottish politics, which included a tour of the Scottish parliament, provided me with some experiential knowledge valued by ethnographers (Savage 2000; Atkinson and Morriss 2017).

I later turned to phenomenology as a potential methodology, being drawn to its usefulness in illuminating people’s lived experience of a phenomenon. I found phenomenology particularly appealing to me for its unit of analysis, the phenomenon, as opposed to the individual (Klenke 2016) and this was appropriate for my study as it conceptualizes leadership as a process, avoiding a central outlook on leadership that has often been criticized (Bryman 2004; Gifford et al 2007). Yet, upon further reading, I was unconvinced about the analytic approach of phenomenological reduction, otherwise known as bracketing.

Bracketing is viewed as a methodological device in phenomenological inquiry that compels the researcher to put aside his or her own beliefs and initial knowledge about the phenomenon at hand prior to and throughout the study (Carpenter 2007). At first glance, it would seem that
bracketing is similar to the assertions of “classic grounded theory” for the researcher to delay the literature review so as to avoid forcing their data into pre-existing categories (Glaser and Strauss 1967), in that both methodologies discount the socio-historical contexts researchers come from and exist within. According to Osborne (1994), the inherent differences and similarities in the metatheories on which phenomenology and grounded theory are based accounts for the nuanced differences and similarities between them. With regards to the role of the researcher’s views, it is common ground for the two methodologies to suspend these perspectives, at least in the classic grounded theory method (Osborne 1994).

It was apparent that bracketing is characteristic of a phenomenological study and I remained unconvinced of this strategy in putting aside preconceptions. It is perhaps agreed that apprehending preconceptions is needed in remaining unbiased in collecting and analysing data, however, it is arguable how one might know of one’s preconceptions, as most are unaware of their own. On this note, I agree with Charmaz (2014) on the vital role of reflexivity in challenging our preconceptions and revealing our assumptions and it is this awareness that I decided was needed in conducting this study in a systematic manner.
3.6 Constructivist grounded theory

Through careful consideration of the different types of grounded theory, I decided that Charmaz’s (2014) constructivist grounded theory held the most benefits for my study and closely aligned with my study’s aims. The main contention around this method is that data is generated through the researcher-participant interaction, hence it is essential that researchers examine their privileges and preconceptions that shape the analysis and, ultimately, determine what facts they are able to identify (Charmaz 2014). This was of utmost importance to me, coming from a foreign background to Scottish healthcare, as it was vital in identifying what limitations I had, how was I to overcome them, if possible, and overall sharpening my skills as a researcher.

Taking a balanced perspective from between the two founding diversions on a spectrum, Charmaz’s constructivist grounded theory was first introduced in 2000 (Charmaz 2000) and later developed alongside other scholars (Bryant 2002; Mills et al 2006a; Mills et al 2006b). In contrast to the classic method, Charmaz (2014) advocated reflexivity of the researcher when reviewing the literature and, indeed, throughout the study. For instance, Charmaz (2014) advocates the use of the literature as sensitising concepts, which provide a sense of direction in a study (Bowen 2006), especially for neophyte researchers at the beginning of a study. Along the same vein, Thornberg (2012) encourages the use of the literature as a source of inspiration and ideas during analysis to enhance the abductive process, in a strategy he called informed grounded theory. He emphasized the benefits of a constructivist view in grounded theory as opposed to the apparently objectivist view of the classic grounded theory method which would assume the researcher free from preconceptions while in fact, he/she is not. This pretence not only puts the researcher at a disadvantage in the academic world where keeping up-to-date with the literature of one’s field is required, yet additionally ignores the uniqueness of researchers as individuals who bring with them different socio-cultural histories and ideas (Thornberg 2012; Charmaz 2014).

In particular, a constructivist approach recognizes the involvement of the researcher in the study and how this might shape the data. This recognition fosters reflexivity rather than assumes the researcher as a neutral observer and value-free expert (Charmaz 2014). Reflexivity is valuable in qualitative research compared to assumed objectivity as it facilitates both the understanding of the phenomenon under study and the research process itself (Watt 2007). Moreover, an objectivist grounded theory would aim to attain generalization from theory.
(Charmaz 2014), yet this would not provide the empirical depth needed for practical application of leadership theories (Conger 1998).

Considering other perspectives within grounded theory, the systematic and closely guided approach by Strauss and Corbin (1998) rightly appeals to the novice researcher as it is less ambiguous. In guiding grounded theorists, Strauss and Corbin (1998) developed a number of analytical tools to assist in data analysis, one of which is the conditional/consequential matrix. They believe that this matrix is an analytic device that can help the researcher to identify repeated interactions in the data and trace its linkages through the specific conditions that influence it (Strauss and Corbin 1998). There has been much debate about the epistemological stance Strauss and Corbin (1998) take in their development of grounded theory (Annells 1996; Annells 1997; Charmaz 2000; Charmaz 2014) and it has been said that this reflects the authors’ efforts in moving with the fast-paced moments of qualitative research (Annells 1997).

However, in their efforts of developing various analytical tools, I agree with Charmaz (2014) that Strauss and Corbin (1998) were post-positivistic in their approach as they seek to legitimize their findings using these tools rather than returning to participants as advocated by constructivist grounded theory. Charmaz (2000) asserts that the use of such an analytic device assumes an external reality that can be uncovered and it has previously been described that an objectivist ontology will not serve my study well. This is not to say that one method is superior to the other, rather to highlight my alignment with constructivism that meets the aim of my study.

Furthermore, I decided upon constructivist grounded theory for its advocacy in the use of abductive reasoning. According to Thornberg (2012), abductive reasoning is the selection or invention of a reasonable hypothesis that best explains an inconsistent finding in the data and the researcher then tests this hypothesis and subsequent ones until he/she arrives at the most plausible interpretation of the data (Charmaz 2014). The logic of abductive reasoning clearly evidences that it not only supplements theoretical sampling but also complements the use of a literature review. I evidence my use of abductive reasoning throughout my data collection and analysis processes, discussed in detail in Chapter Four: The research process.

The use of Clarke’s (2005) situational analysis aligns well with a constructivist paradigm (Clarke 2016). I decided to use situational analysis as an analytical tool in my study to assist me in analysing the important contextual elements affecting leadership and discussing them in
a systematic manner. Situational analysis was also helpful in encouraging me to think about the actors and agencies involved as well as pushing me into thinking about analyses of power, which proved to be fruitful in the proceeding data analysis. The use of situational analysis within a constructivist paradigm was evidently a useful supplement to answering my research questions and details of this process is further discussed in Chapter Four: The research process.

3.7 Situational analysis

I used situational analysis in this study as a complementary analytic tool to constructivist grounded theory methods to enhance my understanding of the context under inquiry. In this section, I elaborate on the foundations of situational analysis, the different types of maps involved in it, the advantages and criticism of situational analysis, and I explore the compatibility of using situational analysis in conjunction with constructivist grounded theory.

Situational analysis draws from the teachings of Strauss, with Clarke having studied with the co-founder at the University of California San Francisco (UCSF) (Morse 2016). Elements of Strauss’ teachings apparent in situational analysis includes its’ pragmatist roots (Clarke and Charmaz 2014) that Clarke tried to take a step further by analysing discourses within the constructed social processes, a strategy she says “pushes grounded theory around the postmodern turn” (Clarke 2005). A further influence of Strauss is the social worlds/arenas/discourse analysis approach in which situational analysis is rooted, shifting the grounded theory methodological focus on basic social processes to social ecology/situation to sufficiently ground situational analysis research in its broader context of inquiry (Clarke 2005).

Notably, when envisioning situational analysis, Clarke’s (2003) intention was to revamp grounded theory in order to address some issues that were critical to her postmodern views, hence situational analysis has been considered by some as an adjuvant approach to analysis as opposed to a stand-alone method (Aldrich and Rudman 2016). In particular, as Clarke and Charmaz (2014, pp. ix) describes, situational analysis contributes to the expansion of grounded theory by introducing the following features:

- Making use of visual representation with one or all of the three types of analytic maps and working with them;
- Enhancing reflexivity of the researcher;
- Bringing attention to varying perspectives in the data and nuanced differences;
- Moving beyond the knowing subjects of interviews to include analyses of discourses;
• “Helping silences speak” by analysing absent positions in maps;
• Elucidating important nonhuman elements in the situation of inquiry; and
• Pursuing analyses of power, especially through analysing implicated actors.

Clarke (2003, 2005) defines situational analysis as taking the situation of inquiry itself as the unit of analysis, which contrasts with other grounded theory methods that focuses on main social processes involved in the situation of inquiry (Clarke 2012). Therefore, I found the use of situational analysis supplemented constructivist grounded theory in that I was able to elucidate important social processes as well as gain a broad view of the involved context.

Situational analysis has been especially lauded by grounded theorists for enhancing reflexivity of the researcher through raising questions of power and taking account of the nonhuman subject in a study (Mills et al 2007; Mathar 2008; Khaw 2012; den Outer et al 2013). Likewise, situational analysis takes grounded theory further by not just analysing the basic social process constructed but moving the unit of analysis into the situation itself (Clarke and Charmaz 2014), advancing my study particularly by giving me a better grasp of the role of context in leadership and research utilization in nursing. In this study, my understanding of the context involved in research utilization was enriched by using all of the following three maps Clarke (2005) introduces to be used to extend grounded theory:

1. **Situational maps** where all actors or actants, be they individual, collective, elements or discourses, are mapped in a messy layout to symbolize the complexity of the situation and relationships between them are then analysed. This messy layout can then be arranged in an ordered map with different elemental headings to define the situation as a whole.

2. **Social world/arenas maps** where collective actors are mapped to represent the world of discourses and its complexities (Strauss 1978) so as to make clear the “sites of action” (Clarke, 2005, pp.86).

3. **Positional maps** where major positions taken and not taken in the study are laid out to highlight particular axes of concern, difference, and controversial issues around the area of inquiry.

It is apparent that the above maps work well as an adjunct to other qualitative methods, grounded theory or otherwise, as Clarke (2005) recommend they be used for exploration with coded data. Accordingly, situational analysis has been lauded for pushing analytical boundaries
of the researcher by opening up the data and encouraging analysis in different ways (den Outer et al 2012; Aldrich and Rudman 2016). Ingold (2000) differentiated the purposes of map-making, cartography, and mapping by suggesting that the first two aimed for spatial representation whereas mapping was a product of storytelling. It has been suggested that situational analysis attempts to do both spatial representation and conveying a story (Kitchin and Dodge 2007), with the three maps addressing levels of analysis at the micro, meso, and macro level (den Outer et al 2013).

For the construct of situational maps, this begins in an abstract and messy manner, embodying the actors and actants involved in the context of the study, whether explicit or implicit, from both the perspective of research participants and the researcher (Clarke 2005). These “messy” maps can and should, indeed, exist in several versions, each labelled and dated, reflecting the inevitably more focused coding with the inclusion/exclusion of categories (Clarke 2005). Each category or preliminary code on the messy maps can then be used for relational analyses, focusing on different elements in turn and relating codes in consideration of their relationships to other codes (Clarke 2005). Messy maps can then lead to ordered maps, if the researcher chooses, categorizing each code or element in messy maps under headings to order and clarify situational maps (Clarke 2005). Within these processes, as in any grounded theory study, memoing is imperative to record and push analytical ideas as maps are developed along the research process. Clarke (2005) recommends writing and audio-recording memos while engaged in mapping for a more immersive analytical experience that can be captured promptly.

While situational maps take the situation under study as the locus of analysis, social worlds/arenas maps aim to illuminate the social spaces between actors in the phenomenon of interest. Consistent with the intention of situational analysis, social worlds/arenas maps challenge the convention of taking individuals as the unit of analysis in qualitative research, focusing instead on meaning-making of social groups, emphasizing its roots in symbolic interactionism (Clarke 2005). Social worlds/arenas mapping begin by determining which social worlds belong in arenas together and why, pushing the researcher to think in terms of collective action within the social interactions of the phenomenon under study (Clarke 2005). Importantly, social worlds/arenas maps do not represent discourses explicitly as social worlds themselves are universes of discourse (Strauss 1978) in their respective arenas, constituting and maintaining themselves through discourses (Clarke 2005). Rather, the focus of social worlds/arenas are on collective social action, addressing Clarke’s (2005) problematization of
qualitative research as lacking meso-level analysis as called on for social worlds/arenas mapping. Nevertheless, discourse may still be captured by the researcher in the form of memos during construction of the social worlds/arenas map (Clarke 2005).

Akin to situational mapping, social worlds/arenas mapping starts as an abstract process, with the researcher’s primary focus on determining key social worlds to be included in the map (Clarke 2005). Boundaries between social worlds/arenas need not be rigid, and indeed can be overlapped with one another (Clarke 2005), further signalling the complexity of the area of research. Additionally, relative size and power, including placement of each social worlds in relation to one another are important decisions made by the researcher and form the inherent discourses within social worlds/arenas maps (Clake 2005). Others have suggested the usefulness of social worlds/arenas maps in observing how different worlds maintain their distinction from others and how this is socially legitimised (den Outer et al 2013), providing the potential for sociological analysis.

A further part of situational analysis, positional maps attempt to address the issue of representation in Clarke’s version of grounded theory, taking major positions often contested within the data visualised on a graphical axis. Instead of conceiving differences as “negative cases”, situational analysis makes use of the different positions regarding major issues to demonstrate the standpoints of participants in the study in visual form (Clarke 2005). Positional maps remove the need for the researcher to take a particular position in discourses, either implicitly or explicitly, as would be implied by using terms such as “negative” or “deviant” cases. It simply acknowledges that there are different perspectives regarding an issue in the study and creates an avenue for discussion. It is also important to note that positional maps do not represent individuals or groups related to these contested positions on the axis, rather represents a heterogeneity of positions that might exist within an issue of great contest within the study (Clarke 2005). By representing all possible positions taken and not taken in discourses, Clarke attempts to overcome the issue she calls as oversimplification that grounded theory can convey by taking binary positions (den Outer et al 2013).

Although Clarke (2005) gives detailed descriptions of making the above situational analysis maps and with examples, she also asserts that these are not prescriptive nor rigid, but rather the most important outcome of the maps is in opening up the data to push the researcher’s analytical thoughts. Further, Clarke (2005) suggests the maps should be used as a reflexive tool,
in that the researcher includes their assumptions, observations, and other personally relevant information regarding the study, into the map as a way of being conscious and taking account of preconceptions.

Clarke (2012) asserts that the making of the above maps, as well as by following through with analytic work and memos as I have done in this study, places situational analysis as empirically constructed. A common and long-standing criticism of grounded theory and, certainly, most qualitative research, is the process of analysis and how the researcher needs to make the conceptualization process of themes or categories more visible (Miles and Huberman 1994). I found situational mapping useful in responding to this criticism, as elements in situational mapping can be included or excluded according to the developing analysis, providing different versions and iterations for each (Clarke 2005; Mathar 2008). This enhances the transparency of analysis for both the reader and the researcher as well, helping both novices and seasoned researchers alike to overcome the notion of analytic paralysis (Clarke 2005; Khaw 2012).

Moreover, situational analysis facilitates the construction of a grounded theory as it compels the researcher to think about the data from different angles (Clarke 2012; Khaw 2012). Coming from a postmodern perspective, Clarke (2005) urges the researcher to consider both what participants said and have not said. She asserts this analytic strategy as “help(ing) silences speak” (Clarke 2016, pp. 167) which is new to grounded theory and one of the unique features of situational analysis. Considering “sites of silence”, as she calls it (Clarke 2003, pp. 561), enriches the data and benefits future research by highlighting areas for potential inquiry.

To elucidate how this approach influenced the findings of my study, for example, at the beginning of data collection, some participants spoke of changing how nurses were taught research and how it should be closer to how research is done in clinical practice. Yet, other participants spoke of having excellent experience during their research modules in their nurse undergraduate programme and how student nurses are sent for clinical attachments with research nurses. Furthermore, a number of participants spoke of how nurse graduates are not encouraged to think critically as they remain in practice, losing their enthusiasm and motivation for questioning practice. Considering what has not been said, as Clarke (2005) suggested, I then began to question the relationship between clinical practice and academia, leading participants to say that the relationship can be distant and needs improvement. This led to the construction of a preliminary category that looked at the relationship between clinical practice
and academia, which tied in well with the other categories of building relationships across clinical and academic contexts. This further led me to construct sub-categories involving nurse education and considering how they relate to practice using situational maps, relational analysis, and the social world/arenas map. Additionally, this demonstrates the existence of multiple realities and taking into account of these multiple realities to render useful data (Charmaz 2014), illustrating my use of constructivism as the guiding paradigm of my study.

Considering sites of silence was also instrumental in my consideration of the role of society in the developing analysis. My decision for this was threefold – a review of the literature, my own experience as a nurse graduate, and the implication of participants’ words. With respect to the literature, Estabrooks (1998) long cautioned against favouring the evidence-based movement for wanting nursing to be seen as a respected profession, rather moving the focus of a research-based agenda to one where the public’s interest must be put forth. In doing so, she reminds us that nursing is a discipline guided by society’s expectations in which nurses are to put the public’s health first in taking on the research-based or evidence-based practice agenda (Estabrooks 1998). Likewise, a participant made the relevant comment that practice should not be changed for change’s sake and should only be done on the grounds of patient benefit. This led me to reflect on why I chose to conduct this study in the first place, which admittedly did stem from a perceived professional responsibility but also encouraged me to then consider what the society’s view is of nursing and how it could influence research-based practice. This led me to professional identity where, certainly, societal views play a role (ten Hoeve et al 2014), similarly in social identity theory (Ellemers and Haslam 2012).

Situational analysis builds from coded data and pushes the researcher’s analytic thinking with help from visual representation (Clarke 2005). Grounded theory coding, as described by Charmaz (2014), allows the researcher to ground data into the resulting theory by coding for actions (where possible) and building progressively abstract categories from them. This method of analysis was efficient in keeping me grounded to the data while constructing my theory and the use of Clarke’s (2014) situational analysis to construct categories and define relationships, as will be further discussed in Chapter Four: The research process.
3.8 The pairing of situational analysis with constructivist grounded theory

Quite in the same way that Adele Clarke and Kathy Charmaz are good friends (Clarke 2016), I found that the methodological brainchild of the two go well together in a study. This is demonstrated in the issues both question in reinventing grounded theory though it was clear they resolved it individually. For Clarke (2005), it was the issue of reflexivity in conducting the research and oversimplification of results that she problematized in pushing grounded theory towards a postmodern perspective. Clarke’s (2005) critiques on the lack of reflexivity centres very much around the methods and assumptions of classic grounded theory, on which much has been written about (Dey 1999; Charmaz 2000, 2014; Thornberg 2012). With this being significant at the time, the matter of reflexivity was also addressed rigorously by Charmaz (2014) who encourages reflexivity of the researcher throughout the study by welcoming preconceptions so as to be aware of how this might influence the research and its’ results. The subject of reflexivity between Charmaz (2014) and Clarke (2005) share common ground in that different perspectives are acknowledged but none are weighted or privileged.

They also coincide on the matter of reviewing literature before and during a study, echoing Thornberg’s (2012) informed grounded theory which strongly advocates for literature reviews throughout the research process and, importantly, operates within a constructivist paradigm. Clarke (2005) makes a valid point when questioning the voice or representation of participants in a study where it can be narrowed or even completely silenced by researchers. During the course of this study, I found that situational analysis’ roots in feminism (Clarke 2005) which underscores giving a voice to the under-represented, complements constructivism’s co-construction of knowledge that necessitates a thorough understanding of the participants’ as well as the researcher’s perspectives. I argue that using situational analysis within a constructivist view broadens the use of reflexivity in a qualitative study, as found by other researchers using similar approaches (Mills et al 2007; Khaw 2012; den Outer et al 2013).

Another aspect of grounded theory that concerned Clarke (2005) was the identification of a core category, a strategy she sees as oversimplification of the complexities at hand. Her views on lack of reflexivity forms part of the problems with oversimplification, in that researchers do not make the complexities of research explicit, but also that reporting of one major category as the core category of a study does not truly embrace the complexity of the situation under inquiry. In elaborating this, she insists that there needs to be an allowance for multiple social processes.
to be identified from the research problem being explored, be it that they may contradict one another (Clarke 2005).

Though it may seem that Charmaz (2014) advocates for the identification of one core category and assume the others less important, this is a mistaken assumption as, much like situational analysis, she views grounded theory as fluid and ever-evolving. This is evident in her discussion of the appropriate number of interviews needed in a grounded theory study, where she emphasized that the core category identified for a study need not be a terminal end to identifying other important categories in the coded data, before or after publication (Charmaz 2014). Accordingly, the core category of a study depends on the level of constant comparison analysis (Hallberg 2006) making it clear further probing of the data is possible, establishing flexibility for other issues that may be seen as important from another perspective. This is especially vital to meet the criteria of modifiability in evaluating the quality of a grounded theory study, in that the theory is able to adapt in light of additional or new data (Glaser and Strauss 1967; Glaser 1978; Hallberg 2006). I discuss further criteria for evaluating quality of grounded theory studies in Chapter Seven, section 7.3.

I believe the above orientation towards identifying core categories is balanced yet valuable in rendering the data useful for purposes of the research without denying the significance of multiple outlooks. Accordingly, my identification of a core category in my study does not imply a terminal end to uncovering the leadership process in research utilization, rather emphasizing the category with the most illumination to my study’s research questions at a particular point in time.

Much has been said about reflexivity for both situational analysis and constructivist grounded theory (Clarke 2005; Mills et al 2007; Mathar 2008; Khaw 2012; den Outer et al 2013, Charmaz 2014) making it clear that this was foundational to the methodologies. Correspondingly, the next section gives a particular focus on reflexivity in this study and its contribution to the trustworthiness of my study findings.

3.9 Reflexivity
One of the main concerns in qualitative research is how it should be evaluated (Morse et al 2002) and, indeed, the debate is considerable and ongoing (Welch 2018). One of the strategies proposed to ensure rigour and quality of qualitative studies is by use of reflexivity (Krefting 1991; Watt 2007; Charmaz 2008). Qualitative research has often discussed reflexivity but a
diverse conceptualization exists. For example, Cruz & Gillingham (2007) define three distinct variations of reflexivity: 1) responses and decisions according to contexts; 2) questioning power imbalances and the construction of knowledge, and, finally 3) the role of emotions in the field. Alternatively, other scholars prefer to describe reflexivity more widely as introspection, a careful self-analysis of how one’s background and experiences may affect the research and what one can study (Reinharz, 1997; Pillow, 2003; Moser, 2008). Doucet (2008) expands on this notion by conceiving reflexivity as the construction of knowledge in consideration of the researcher’s relationships with others as well as self. It is with this definition that I align myself with in writing about reflexivity as it has the most relevance with the basis of constructivism that forms the foundation of Charmaz’s (2014) version of grounded theory.

Certainly, grounded theorists, regardless of epistemology or ontology held, agree that researchers come into the research world with individual preconceptions or underlying assumptions (Glaser and Strauss 1967; Mills et al 2006b; Charmaz 2014). The difference between the various methods of grounded theory is how they deal with these preconceptions. Operating within a constructivist paradigm comes with the methodological implication that the researcher makes their stance known and practice reflexivity throughout the study. This is especially as the foundation of a constructivist approach is that data is generated through the researcher-participant interaction (Charmaz 2014), placing the researcher as central to knowledge construction. The following sections highlight my perspectives in this research and how it intersects with the study aims and its’ participants, detailing the necessarily different roles I played in interacting with the participants within the research process.

### 3.9.1 The development of my interest in research utilization and leadership

According to Maxwell (2013), it is important to consider the researcher’s personal, practical, and intellectual goals in a study and for the researcher to make this transparent to facilitate assessment of trustworthiness in a qualitative study (Krefting 1991). Reflecting upon this, I started a research diary in order to facilitate my thinking as recommended by several qualitative researchers (Krefting 1991; Watt 2007; Mruck and Mey 2007; Charmaz 2014) and through this diary, I was able to trace the developments of my interest in this field of research utilization and leadership.
Initially, I found that my decision to study leadership in nurses’ research utilization was a result of my desire to empower nurses in Malaysia to excel in their profession through taking ownership of their practice. My search of the literature could not locate any studies specifying the exact number or proportion of graduate nurses in Malaysia and this reflects the developmental stage of nurses’ tertiary education in Malaysia, and other scholars (Chiu 2005) found similar gaps in the literature. A formal letter written to the licensing authority, Nursing Board Malaysia, requesting statistical information on nurse graduates went unanswered. From my experience of growing up and working in Malaysia, I understand that electronic communication via e-mail is still developing, with many preferring face-to-face or social media interactions. I also know that personal networks in government agencies is facilitative in gaining information, a point I will keep in mind for developing my career and research interests for future cross-cultural work between the UK and Malaysia.

As one of the pioneer graduate nurses in Malaysia, I saw it as my role to further develop the profession, hence my interest in nursing leadership. Even as an undergraduate student, I saw many opportunities for change/improvement in the Malaysian nursing workforce and reading about leadership and its very definition so closely linked to change further delved my interest deeper. My initial interest in this doctorate study was to develop a mixed method study on the nursing work environment and its related patient outcomes using the Nursing Worklife Model (NWLM) as a theoretical framework.

Nevertheless, as I further considered the NWLM, I found that the concept of a “nursing model of care” as opposed to a medical model of care was not possible in Malaysia as long as nurses are unable to utilize research in their practice. The literature on Malaysian nurses’ evidence-based practice further confirmed my suspicions as it was found that nurses in this region had low value for research, had low research literacy, and poor resources to access research (Martis et al 2008; Lai et al 2010; Leng et al 2016). Considering this evidence, I decided it would benefit my study to conduct this research in an environment where research utilization is facilitated rather than hindered, as evident in the Malaysian nursing workforce.

Consequently, I decided that nursing leaders and administrators in Malaysia needed to take on the challenge to educate nurses in Malaysia on research utilization as similarly suggested by scholars who have studied EBP in Malaysia (Martis et al 2008; Lai et al 2010; Leng et al 2016). Reading more widely on the topic of nursing leadership in research utilization, I found that
international scholars (Kitson et al. 1998; Stetler 2003; Gifford et al. 2007; Cummings et al. 2010; Wilkinson et al. 2011) have discussed this. Yet, further obstacles beyond education exist for research utilization and it has been suggested that leadership is crucial to overcome this (Melnyk et al. 2012). However, the dimensions of leadership needed for research utilization remains largely unknown (Gifford et al. 2007).

My search of the leadership literature led me to Parry (1998) who argued the premise of studying leadership using grounded theory. I further read the literature around grounded theory and agreed with Parry that grounded theory seems a highly appropriate method for studying leadership as a process. Through my literature search and reading, I found that there has been no published studies to date that uses this method to study leadership in nurses’ research utilization. Subsequently, I felt it was an opportunity for me to generate new knowledge in line with the award of a doctorate.

However, consistent with being reflexive throughout the conduct of this study, my views and motivation for moving this field of study forward has changed considerably. As I mentioned previously, the initial motivation for this study was based on my desire to excel the nursing profession in Malaysia and I began this study with the assumption that research-based practice was very much facilitated in a country where nursing is a graduate profession. While maintaining that research is valued and nurses are aware of research here in Scotland, there is truth to the words of Estabrooks (1999) that research utilization encompasses so much more than understanding research methods and methodologies. Indeed, conducting this study and analysing the data has given me a newfound appreciation for the role of context in forming the prerequisites needed for research utilization (Estabrooks 1999). Additionally, my previous passion for developing the nursing profession, which first drove this study, has now altered to one that fuels the desire for ensuring professional accountability of the practicing nurse in that he/she is using the best current practice in the interest of the patient. My motivations at the beginning of this study in developing the Malaysian nursing workforce remains unchanged as I expand my perspective of nursing as a global workforce, forming the impetus for future cross-cultural research and collaborations.

Relating my experiences to Maxwell’s (2013) assertion of personal, practical, and intellectual goals in research, I believe that my personal goal in this research moved from wanting to learn from highly motivated individuals to put research into practice, to wanting to understand more
about putting research into practice in different contexts. At a time when I thought completing this study would prepare me well to take on leadership in research-based practice in Malaysia, I now want to learn more about knowledge translation for I now appreciate the complexity of this intriguing field. In regards to my intellectual goal, I am eager to develop theoretical knowledge in the field of research utilization, to advance this field, and inspire nurse leaders the world over to champion research utilization in their respective contexts.

3.9.2 My positionality and intersectionality in the research process

Conducting interviews puts the researcher in a social situation, in that his/her motives form who they are and how they are perceived, the dynamism of this influenced by the changing conditions of the situation (Daly 2007). Therefore, it is essential that researchers present themselves in a way that they want to be seen, being aware of how they are perceived and understanding how this influences the data they collect (Alvesson and Skoldberg 2009).

The establishment of a reciprocal, non-hierarchical relationship with participants in my study is important for several reasons. The objectivist, classic grounded theory method typically distanced the researcher from the researched and has since come under much criticism (Thornberg 2012; Charmaz 2000, 2014; Clarke 2016). It is suggested that this distancing results in a power imbalance that favours the researcher (Mills et al 2006a), in contrast to the constructivist approach of reciprocity (Charmaz 2014; Mills et al 2006a). It is further asserted that this reciprocity is needed to minimise bias in interviews and aid the co-construction of knowledge (Mruck and Mey 2007; Charmaz 2014).

Regardless of my epistemological outlook, at the beginning of this study, I was acutely aware of how I will be perceived as an outsider to the organization, at least initially, hence interview accounts may be overly optimistic in efforts to project a positive image of the organization. However, I was also aware that being perceived as an insider to the organization is not without its disadvantages as scholars assert that both positions of being familiar and being a stranger to the research context influences data collection (Mruck and Mey 2007). Evidently, positionality and intersectionality matters in qualitative research and is pertinent for the researcher to make explicit to enhance the trustworthiness or reliability of a study, a criteria important in ensuring the quality of qualitative studies (Miles et al 2014).

It has been contended that people allow others to access conceptual layers of themselves based on how secure or, alternatively, how vulnerable, they feel (Guillemin and Heggen 2009). With
regards to research, establishing and maintaining rapport with participants is vital in obtaining rich data (Guillemin and Heggen 2009; Charmaz 2014), yet a balance must be struck so as not to emotionally exploit the participants. In-depth interviewing represents a social interaction, similar to that of a conversation between friends (Johnson 2001; Charmaz 2014). However, unlike a friendship, the goal of the researcher-participant relationship is to collect data and this raises some specific ethical issues. Although some researchers have advocated a friendship or therapeutic approach to the researcher-participant relationship (Tillmann-Healy 2003; Eide and Kahn 2008), I decided on the reciprocal dialogue approach (Yassour-Borochowitz 2004) for my study. This approach involves a balance of power as both parties are treated as equals and commences from the beginning of data collection when seeking consent to participate through to conclusion where insights from the study are shared with participants (Yassour-Borochowitz 2004). Similarly, several scholars have long held the view of maintaining distance in striking a balance in the researcher-participant relationship to avoid possible emotional consequences of participants that should remain priority over yielding benefits to the study (Gordon 1987; Eide and Kahn 2008; Duncombe and Jessop 2012; Olsen et al 2016).

With this in mind, I scrutinized the different selves and roles I brought into this study, exemplifying from Reinharz (1997), as below:

- **Research-based selves**: being a novice researcher; being an international student; being a PhD student with an interest in research utilization; being a Malaysian registered nurse with experience in various clinical settings in Malaysia.
- **Brought selves**: being female; being a mother to young boys; being outwardly Muslim; being foreign to where the research is conducted; being a nurse academic.
- **Situationally created selves**: being an outsider; being a nurse with interest in research and research utilization; being a listener; being a researcher.

In my study, I found that my position as a novice researcher comes with its’ own strengths and limitations. As a novice, I have less hardened assumptions regarding the field but may have difficulty in seeing important data and meanings of participants’ experiences (Johnson and Rowlands 2012). Having less hardened assumptions fits well with a grounded theory approach (Charmaz 2014) and the struggle of novice researchers in seeing the nuances in rich data further highlights the significance of Thornberg’s (2012) informed grounded theory.
I found that my position as an outsider to the research context hampered the initiation of data collection as I did not know anyone within the health board, complicating recruitment. I also did not know the culture and structure of the organization to comprehend the best place to begin recruitment, hence reading about the organization and accepting help from my supervisors in forming networks facilitated these early stages. I found that colleagues who worked clinically while conducting their doctoral study were better able to recruit participants, especially if the target population was healthcare staff as they would have an existing network to recruit from. I found that it was true that insider researchers benefit from having established relationships with research participants (Unluer 2012; Blythe et al 2013), yet I was also aware that insider status comes with its own limitations (Hewitt-Taylor 2002; Sultana 2007; Burns et al 2012).

Nevertheless, it is also recognized that insider/outsider status is dynamic and changeable according to circumstances (Merriam et al 2001; Dwyer and Buckle 2009; Wilkinson and Kitzinger 2013). As such, I focused on identifying positonalities of the participants where I can be perceived as an insider to build rapport and gain participants’ trust, demonstrating the importance of the researcher’s representation (Mullings 1999; Dwyer and Buckle 2009). For instance, I bonded with participants who were mothers, who had done a PhD, and those who were interested in research utilization.

Alternatively, I found that my outsider positionality enabled me to view the data collection process more neutrally, as similarly found by other scholars (Hewitt-Taylor 2002; Asselin 2003). I was more cautious about having assumptions about my participants or their workplace since I was aware that I knew very little about both, avoiding the pitfall of uncritical assumptions common to researchers who are insiders to their research context (e.g. Pitman 2002). Additionally, I found that I was perceived as non-threatening to participants, as I was able to build rapport and gain trust quickly, perhaps as a result of my focus on common positions between me and the participants. This was evident in the rich data I gained from interviews, including one occasion where the participant burst into tears disclosing how her achievements in research was driven by personal circumstance. Evidently, my ability to access this personal layer of the participant results from the participant feeling secure in her disclosure, as previously described by Guillemin and Heggen (2009).

Correspondingly, I found the concept of “ethical mindfulness” (Guillemin and Heggen 2009) to be most useful throughout my interactions with participants. This approach involved being
ethically mindful of situations within the research to promote participants’ emotional safety (Guillemin and Heggen 2009; Bowtell et al 2013). Moreover, it demands a great degree of reflexivity on the researcher in considering the kind of representation they wish to make of themselves during ethically important moments in the study (Guillemin and Gillam 2004; Guillemin and Heggen 2009; Bowtell et al 2013). In the case of the participant bursting into tears during our interview, I was aware of her feeling secure in her admission, thus I took a position of respect and allowed her time to cry in silence. Once she was able to compose herself, we continued with the interview after she confirmed she was comfortable to do so.

Clearly, representation plays a major role in qualitative data collection. Additionally, I was aware of my position of being outwardly Muslim as, of recent years, anti-Muslim attitudes and policies across the globe has intensely increased (Ogan et al 2014). Going into the field, my fears of being a target of racism and hate speech were not baseless as I have experienced such episodes here in the UK, even during family excursions with my young children. Yet, it has to be said that anxiety is a classic emotion of the interviewer (Laurier and Parr 2000) and, at the beginning of my study, I took comfort in knowing that people with educated backgrounds have less Islamophobic tendencies (Ogan et al 2014), as most of my participants will be educated to at least college level. Regardless, my experience throughout data collection did not involve any episodes of racism, however, it is difficult to know if this was the result of my efforts in building rapport with participants or other sociodemographic factors.

As part of my attempts to negotiate a balance between the emic-etic perspectives, I took on observation posts to gain familiarity of the clinical setting at the beginning of this study. During the posts, I found that my clinical experience in various practice settings helped in building a rapport with the participants. One of my first observation posts was in an emergency department, and having experience working in one, I knew of the value of knowing where things are and getting them quickly. For example, in one instance, after the research nurse finished taking blood samples for a study, he then proceeded to take the IV cannula off the patient for discharge and I offered to get gauze and tape to cover the patient’s bruise after cannula removal. Not long after, a patient fell off her bed and I was quick to bring over the blood pressure monitor and handed it over to a nurse for vital signs. This quick consideration on my part helped foster my relationship with the research nurse, who was a potential participant at the time, along with the rest of the healthcare team.
However, I was also cognizant of being an outsider to the healthcare team and tried my best not to inconvenience anyone by getting in the way of their work or by inadvertently doing something out of bounds as an observer who was trying to be helpful. I limited contact with patients, other than introducing myself when shadowing the research nurses, and always watching for cues from the research nurses if they were too busy to talk or were otherwise unavailable. I respected the workplace as their ‘turf’ and would not go anywhere without company or at least not without their knowing; I was careful to observe the rules of the clinical area and dressed appropriately, remembering to wash my hands coming in and before leaving.

3.10 Summary
Researcher responsiveness and methodological coherence is essential in designing a rigorous qualitative study (Morse et al 2002). I have demonstrated both qualities in being flexible and creative through my use of situational analysis as a supplement to constructivist grounded theory, nevertheless avoiding methodological slurring by adopting the implications of a constructivist paradigm to a grounded theory study (Mills et al 2006a; Charmaz 2014).
CHAPTER FOUR
The research process

4.1 Introduction

This chapter details the process of research for this study, particularly my novel use of situational analysis as a supplementary analytic tool within a constructivist grounded theory methodology. I will also give an outline of the analytic journey in conducting this study, which shows how I integrated situational analysis and constructivist grounded theory in analysing the data. Importantly, this chapter will also detail how the research questions were refined as a result of the abductive process. Lastly, I present the final analytical process of this journey, which is the theoretical model. I evidence how the other two processes from situational analysis – social world/arenas map and positional map – influence the construction of the theoretical model and the subsequent contribution to knowledge of my study.
4.2 The research process

In this section, I describe the practicalities of applying grounded theory principles throughout the conduct of my study. I begin with a description of the research setting and the process of recruitment, how theoretical sampling was used, the data collection method, followed by data management, analysis, ethical concerns and an illustration of how quality was maintained, ending with the limitations of my study.

4.2.1 Research settings

I conducted my study across various settings as participants ranged from staff nurses to medical consultants and members of the health board. However, most interviews occurred within acute services settings, such as a quiet room in a large hospital. In instances where participants were not clinically based, I arranged to meet with participants either at their place of work or at the university. All interviews and meetings with participants were arranged at a time and place of their convenience and choice.

4.2.2 Process of recruitment

I found the process of recruitment particularly challenging, having had limited exposure to the NHS in my capacity as an international student. Key informants who also acted as gatekeepers, most of whom were research nurse managers, facilitated my access to participants. My supervisors, both with links to the clinical area, supported recruitment by introducing me to individuals relevant to the study at the start of data collection and as necessary throughout the developing data analysis.

Consistent with the notion that the best participants for a grounded theory study would be those who have experienced the phenomenon of interest (Morse 2007), I chose to sample nurses and other healthcare professionals who have taken clinical research as their career pathway. This decision was made based on the literature, where it was found that those who use research in their practice tend to be those who have research-related job responsibilities and are involved in doing research (Estabrooks et al 2003; Meijers et al 2006). This would limit the findings of my study as the theoretical model was built on experiences that facilitate nurses’ research utilization and most participants were experienced in research. The resulting theoretical model would benefit with more data from clinical nurses not involved or experienced in research, however, some negative experiences of research did surface in my
data and a couple participants not experienced in research were also interviewed where relevant according to the data, following the principles of theoretical sampling.

In recruiting participants, I was conscious of how my approach would affect potential participants and their ability to be completely open in interviews to establish a reciprocal relationship so valued in constructivism (Mills et al 2006a). I decided that I would approach relevant nurse managers and ask their recommendations on who would be interested in the study but that I would speak to each potential participant myself. This would assist in building networks for recruiting participants while minimizing the chances of coercion (Maxwell 2013) as well as ensure confidentiality of participation or non-participation.

I contacted the nurse manager of a research group in one of the target hospitals who then responded that she would be happy to participate and support my study. Through this initial contact, she introduced me to her line manager who agreed to meet with me to discuss the structure of research nurses for that particular NHS board and the nature of their jobs. Additionally, with the support of a chief nurse, I gained the opportunity to see research nurses at work as part of an observation post, chatted with and recruited three of them for my study.

This initial stage of recruitment expedited purposive sampling at the beginning of my study to recruit more nurses with an interest in research, who all turned out to have taken their career pathway as research nurses, with some going on to be nurse researchers themselves. This is consistent with a study that found some research nurses gaining further educational qualifications to then lead research themselves as nurse researchers (MacArthur et al 2014). It is important to note here that research nurses are distinct from nurse researchers in that the former work to support a multidisciplinary team in clinical trials while the latter form research questions and protocols to lead research of their own (Raja-Jones 2002; MacArthur et al 2014).

Sampling for my study continued to be done purposively according to the data, as is typical with the iterative process of grounded theory (Charmaz 2014), for example clinical nurses were recruited when it was said that they were less interested and had no time for research. This purposive sampling continued alongside data analysis and theoretical sampling was engaged once preliminary categories were developed. **Table 2** provides a summary of
participant characteristics and pseudonyms. Participant roles in the organization may have been redacted to protect confidentiality as detailed in section 4.3 Ethical considerations.

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Role in NHS</th>
<th>Education level</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Senior research nurse</td>
<td>Doctoral</td>
</tr>
<tr>
<td>P2</td>
<td>Senior research nurse</td>
<td>Masters</td>
</tr>
<tr>
<td>P3</td>
<td>Senior research nurse</td>
<td>Postgraduate diploma</td>
</tr>
<tr>
<td>P4</td>
<td>Senior research nurse</td>
<td>Masters</td>
</tr>
<tr>
<td>P5</td>
<td>Senior research nurse</td>
<td>Diploma</td>
</tr>
<tr>
<td>P6</td>
<td>Senior research nurse</td>
<td>Bachelors</td>
</tr>
<tr>
<td>P7</td>
<td>Senior nurse practitioner</td>
<td>Masters</td>
</tr>
<tr>
<td>P8</td>
<td>Chief nurse</td>
<td>Doctoral</td>
</tr>
<tr>
<td>P9</td>
<td>Medical consultant</td>
<td>Doctoral</td>
</tr>
<tr>
<td>P10</td>
<td>Senior research nurse</td>
<td>Masters</td>
</tr>
<tr>
<td>P11</td>
<td>Senior nurse manager</td>
<td>Masters</td>
</tr>
<tr>
<td>P12</td>
<td>Clinical-academic nurse</td>
<td>Doctoral</td>
</tr>
<tr>
<td>P13</td>
<td>Senior charge nurse</td>
<td>Masters</td>
</tr>
<tr>
<td>P14</td>
<td>Quality improvement nurse</td>
<td>Diploma</td>
</tr>
<tr>
<td>P15</td>
<td>Chief nurse</td>
<td>Doctoral</td>
</tr>
<tr>
<td>P16</td>
<td>Staff nurse</td>
<td>Bachelors</td>
</tr>
<tr>
<td>P17</td>
<td>Senior charge nurse</td>
<td>Not disclosed</td>
</tr>
<tr>
<td>P18</td>
<td>Medical consultant</td>
<td>Not disclosed</td>
</tr>
<tr>
<td>P19</td>
<td>Medical consultant</td>
<td>Not disclosed</td>
</tr>
</tbody>
</table>

Table 2 Summary of participant characteristics and pseudonyms

As seen above, participants’ roles and educational levels varied and P17 - 19 did not disclose their level of education. This reflects theoretical sampling in my development of the interview schedule for data collection as there was no indication in the data at that point that necessitated a discussion of their educational level and I found establishing rapport with participants was more effective by asking about the nature of their job rather than educational/work history. Additionally, participant P1 was interviewed twice as indicated by the developing analysis, bringing the total number of interviews to 20. P1 was the first participant I interviewed and as the study progressed, I found it necessary to probe the relationship between the clinical and
academic contexts. P1 was completing her doctoral study on a clinical-academic career scholarship at the time, placing her as the best person to explore the clinical-academic relationship, demonstrating my use of theoretical sampling.

### 4.2.3 Theoretical sampling

Following principles of grounded theory, my study began with purposive sampling, which is the active selection of participants thought to have the best answers to the research question (Marshall 1996). This continued until preliminary categories were formed and theoretical sampling began after 13 interviews were conducted and six preliminary categories were constructed from analysis. This is consistent with Charmaz’s (2014) suggestion of using theoretical sampling to explicitly focus and refine developing categories, elaborating its’ properties and relationships, hence should not be done too soon as this might lead to closure of superficial analytic categories.

One of the six preliminary categories formed at the time was called “medical-nursing power struggle”, defined as the intertwining professional boundaries of medicine and nursing that affects nurses’ use of research in practice. This preliminary category is best demonstrated in the example quote below:

> “you know the battle between medicine and nursing in terms of power and who can determine what happens to the patient. So... if you’re going to be – if you’re wanting to bring nurses on in terms of being umm an evidence-based profession, and in that I mean that they need to then know the theory to apply it. And they ought to generate the theory. They’ve got to be... they’ve got to be *allowed* (emphasis) to do that in a clinical area.”

– P12, clinical-academic nurse.

Following on from the above quote and to theoretically develop the preliminary category “medical-nursing power struggle”, I attempted to recruit clinical nurses to probe the medical-nursing relationship in clinical practice as well as the ward culture and the role of leadership in both. I was successful in recruiting one clinical nurse and explored these key themes with
her, and although the general medical-nursing relationship was characterized as “good”, from her perspective, there was apparently an element of powerlessness:

“I: So, when there are disagreements between the staff and doctors, can you tell me what usually happens? How is it usually handled?

P: We usually (...) give our opinion across but at the end of the day if the doctor wants something done, they're a given, we have to give it. Cause we could (...) you know, if it's prescribed and... you know, we could go... we could almost be in trouble for NOT giving it but I think as long as we always voice our concerns and we document clearly the concerns that we've had and that we've raised them with the appropriate (...) with the doctor or with the nurse in charge or emm... overnight with the nurse in charge down in ICU, you know. Emm (...) then that's all we can do, really.”

– P16, staff nurse.

From the above participant quote, and from other data gathered around this preliminary category, it was clear that the “medical-nursing power struggle” was a complex category interrelated with professional boundaries, both within and between nursing and other healthcare professions, with culture and leadership playing an essential role. Hence, following theoretical sampling, this preliminary category evolved into the navigating professional boundaries sub-category, which explores intra and inter-professional boundaries, seen in section 5.2.3.

4.2.4. Theoretical sufficiency

Closely related to theoretical sampling in grounded theory is the notion of theoretical saturation, or more recently known as theoretical sufficiency (Dey 1999, Mason 2010) or data sufficiency (O’Reilly and Parker 2012). Theoretical sufficiency is the result of theoretical sampling (Bowen 2008), as sampling according to the developing theory while iterating between data collection and analysis saturates categories and leads to sufficiency, necessitating a stop to data collection.

The issue of data saturation is often discussed in qualitative research and indeed, many differ on the criteria held for achieving data saturation and thus warranting a stop to data collection.
Several qualitative researchers assert that data saturation is achieved when no new insights arise from collecting new data (Tuckett 2004; Nixon and Wild 2008; ) yet others with possibly a post-positivistic stance assert that data saturation is established when the study can be replicated using the currently analysed data (Fusch and Ness 2015). These differing views highlight the heterogeneity of qualitative research, informed by varying purposes, philosophical paradigms, and methodologies that dictates the point of data saturation rather than having one established criterion for all (O’Reilly and Parker 2012; Malterud et al 2016; Saunders et al 2018).

The notion of saturation itself originates from grounded theory (Glaser and Strauss 1967), defined as the point where the properties of established categories are all accounted for and relationships between them are made hence theory building can commence (Green and Thorogood 2004; O’Reilly and Parker 2012; Charmaz 2014; Morse 2015a). However, it has been argued that there will always be potential for new insights to emerge, therefore the term “theoretical sufficiency” is proposed to reflect a stopping point when the categories formed is most useful to the purpose of the study (Dey 1999; Mason 2010).

As previously mentioned, theoretical sampling began at 13 interviews and it was at this point that the theory began to emerge with the formation of preliminary categories. I continued data collection to refine and build density of these categories, following the recommendation of Glaser and Straus (1967) to integrate categories and their properties with subsequent analysis. Key to achieving sufficiency is the constant comparison method (Bowen 2008; Aldiabat and Le Navenec 2018), and indeed, it was through comparing relevant data to each category that I found that the nineteenth and twentieth interviews gleaned no further insights to the developing theory, demonstrating theoretical sufficiency (Dey 1999; O’Reilly and Parker 2012; Maz 2013; Charmaz 2014). To evidence theoretical sufficiency, Table 3 below shows an outline of how the category shifting culture was progressively saturated:

<table>
<thead>
<tr>
<th>Preliminary category name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needing a huge cultural change (coded in-vivo)</td>
</tr>
</tbody>
</table>
### Related open codes

- Needing a critical mass, raising the profile of nursing research, viewing research as part of practice, continuing clinical-academia collaborations, leadership shaping ward culture, medical-nursing power struggle, forming the work culture, changing the work culture, being in an authoritative culture, changing nurse education, building relationships, supporting questioning practice

### Illustrative quote

“emm.. I think.. you emm.. I think there’s a huge culture change that needs to happen? Because I think medical staff are very much encouraged to consider research at all levels of their training and beyond in their careers and emm.. it’s very much seen as part of what they do emm.. whereas for nurses, research doesn’t have- hold that, doesn’t have that emm.. thing. Doctors are given time away from practice to do their own research, nurses do not get that. Emm and ehh so if you want to improve how nurses interact with research and em how they emm.. bring it into their practice and things, you need to give them, you know if you want nurses to-to find out new emm.. ways of emm.. you know, ehh.. managing care plans, or you know ehh you know, quality (QI) kind of quality improvement em things then you need to give them time to understand what those things are? You know?”

– P2, senior research nurse.

### Developing main category stage

#### Developing category name

Shifting culture, defined as: Changing culture at the ward level to support changing practice and encouraging nursing research engagement.

#### Sub-categories (with individual definitions)

- Being in an authoritative culture, focusing on patient flow, having clinical pressures, empowering the nursing voice, forming collective groups.

#### Illustrative quote

“So the challenge is for the hospital… means that the whole kind of pressures, culture… in that – on that site is very different to the other
ones. And I think it’s just much harder... for people to have time... to think about that beyond... the word “flow”? I don’t know if the word flow has come up in your conversations already but that... you know, that is the driving force in healthcare. Is maintaining flow. Patients coming in the front door and the patients being discharged. And that... to some degree is what people focus on. [...] But I still think because of the organizational culture in the NHS, is about... firefighting, patient flow, getting patients in, getting people out, there’s very little... umm.... (pause) recognition of the fact that actually doing research might be one of the solutions to this problem.”

– P8, chief nurse.

### Theoretical sufficiency stage

**Main category**

Shifting culture, defined as: participants’ views of nurses’ research utilization as a multi-faceted challenge with organizational culture playing a key role.

**Sub-categories (with individual definitions and sub-themes)**

- Forming the workplace culture, restricting professional autonomy, navigating professional boundaries.

**Illustrative quote**

“So I think where that exists, then nurses can become eh tired, maybe a little bit demoralized, and then they stop asking questions and... sort of pushing to be the best that we can be because they’ve slightly lost... their voice into the rest of the noise. So I don’t necessarily think it’s something that nurses are... completely... in control of... I think there’s a lot more noise in clinical nursing practice just now, that I think can steal away from research. [...] but (patient-led care) but that’s not necessarily happening, there’s still an, I think, an unspoken hierarchy, ward unspoken hierarchy of medical (gestures with hands) to nursing, behaviours and beliefs and practice.”

– P10, lead research nurse

### Table 3

Outline of progressive saturation for the main category **shifting culture**
At the point of theoretical sufficiency, the main categories were fully saturated and theoretical sorting commenced to construct the theoretical model through a combination of methods, as discussed in detail further in section 4.4.9 Theoretical model.

4.2.5 Data collection method

Interviews

While deliberating on data collection methods for this study, I decided to conduct sequential, intensive, semi-structured interviews as this was most appropriate to the study’s aims and befitted a constructivist grounded theory approach. As this study aimed to understand the role of leadership in research utilization, in-depth meanings of leadership processes were to be gathered and analysed, and uncovering processes of such a nature was only conceivable through intensive interviews. Additionally, the open-ended and emergent nature of intensive interviews was akin to grounded theory methodology (Charmaz 2014), thus complementing the process of data collection and analysis. Other sources of data include my field notes and memos during data collection and analysis. As data collection and analysis occurs concurrently in a grounded theory study, it is now essential to underline both these processes in this study and the following Figure 4 does so succinctly.
Figure 4  A summary of data collection and analysis in my study

Key:
Orange denotes data collection sources
Blue denotes components of data analysis
CC: Constant comparison
RA: Relational analysis
TS: Theoretical sampling begins
Over the years, interviews have become the most common data collection method in qualitative studies (Cooper and Schindler 2008), likewise in leadership studies with a qualitative approach (Klenke 2016). Previous qualitative leadership studies have also found interviews as a data collection method that resulted in in-depth understanding of leadership while also revealing contextual factors pertinent to leadership (Klenke 2016). Interviewing in grounded theory aims to expose the participants’ concerns in the researcher’s area of interest, thus the theory generated from my study is grounded in the participants’ experiences (Holstein and Gubrium 2003). By engaging in face-to-face conversations with participants in the privacy of a quiet room, I found that participants were more willing to explore their personal experiences of leadership, research and research utilization, and organizational issues that they would perhaps have found more difficult to do so in focus group interviews.

Grounded theorists prefer that interviews are unstructured and informal to stimulate the participant to open up and tell their story (Charmaz et al 2002; Charmaz 2014). However, as a novice researcher, I conducted semi-structured interviews to assist me as well as for practical reasons of approval from relevant authorities, also noted by Charmaz (2014). To initially provide direction for interviews, a broad interview guide (see Appendix C) was constructed and reviewed by my supervisors and relevant governance bodies, and this guided the first few interviews until data analysis could sufficiently guide data collection.

Consistent with semi-structured interviewing, I used an interview guide at the outset of each interview but questions were asked in any order that made most sense according to individual participants. A few topics were highlighted as essential to discuss but these had no particular sentence structure to them, thus interviews were very much directed by the participants. Bearing in mind that the quality of an interview significantly impacts the quality of data one gathers for a study (Charmaz 2014), principles of interviewing (Johnson and Rowlands 2012; Charmaz 2014) were paid close attention to during the data collection process.

In an effort to build rapport, tea was served at each interview and conversations started with participants describing what they do and their professional background. Their experiences and interests in research was then probed, followed by questions on research utilization and influence from others, their driving force or motivation in research, and questions on the role of the organization. With the purpose of maintaining rigour, each interview guide was considered individually for each participant, thus different questions/topics for each are written
down and is part of a paper trail for this study. As data analysis developed, questions became more focused and directed by emerging categories and concepts.

Using my experiences as a nurse and educator, I found that I brought many communication skills that benefitted the interview. I was able to listen actively, probing where necessary and was comfortable to sit in silence to allow the participant to reflect. Additionally, my role as an outsider to the organization was perceived as non-threatening and I found many participants were able to be open and honest with me, especially regarding organizational issues. In efforts to establish rapport and mutual trust, I took an open stance to answer participants’ questions both during and after the interview as recommended by Mills et al (2006a). This essential trusting relationship between myself and participants were further facilitated by conducting interviews and/or informal meetings at multiple points of the study, which is typical of grounded theory, assisting the researcher to get closer to the phenomenon of interest (Charmaz et al 2002). Moreover, interviewing several times in sequential fashion permits the researcher to conduct independent checks over time, expands theoretical understanding, and strengthens the emerging processual analysis (Charmaz et al 2002).

### 4.2.6 Data management

All interviews were self-transcribed verbatim. Self-transcription allowed me to immerse myself in the data (Gibbs et al 2002) and is, indeed, recognized as the starting point of analysis. The CAQDAS package NVivo 11 was used to manage and store documents related to this study as it’s iterative nature was most appropriate to the grounded theory method (Bringer et al 2006). After coding using NVIVO 11, I decided to construct a messy map of participants’ significant statements on paper flipcharts using coloured markers and not only did this give me focus for analysis but I also found this staved off analytic paralysis that can come from intense computer analysis (Clarke 2005; Khaw 2012). There has been critique about the use of computers in qualitative research (Gibbs et al 2002) in that it reinforces views of positivism (Mauthner and Doucet 1998) and symbolized dehumanization for which were all argued against quantitative research by qualitative advocates (Seale 2010). However, the usefulness of computers in qualitative research cannot be denied and I felt my use of both to expand my analytic thinking stood for a balanced perspective between the differing views.

### 4.2.7 Data analysis

The contemporary method used for data analysis in this study is unique in that it is a blend of two different methods which usually operate within different paradigms, brought together
within a constructivist lens. Yet, there are many overlaps between the two philosophical underpinnings of situational analysis and constructivist grounded theory in which I conducted my study and found useful.

In analysing the data, the accustomed steps in constructivist grounded theory were used in that the data was transcribed, coded line-by-line initially, moved on to focused coding, built preliminary categories, further defined main categories, and developed a theoretical model from which a core category was identified. I would argue that this blended approach to data analysis is important to the advancement of qualitative research and applying findings of qualitative studies to policy as supported by Lincoln et al (2018). For purposes of comprehension and transparency, a detailed illustration of my analysis is available in the next chapter, Chapter Four: The research process.

4.3 Ethical considerations

I undertook two phases of ethical approvals before conducting this study. The first was obtained from the Ethics Committee of the School of Health in Social Science, University of Edinburgh, where I am studying for my PhD. Approval was granted in July 2017 and I submitted again for minor amendments to the participant information sheet regarding self-transcription and anonymized data storage, which was also approved in November 2017 (both documents in Appendix D). Secondly, approval was obtained for this study together with other minor amendments to the participant information sheet, from the Research & Development Office of the NHS health board where I conducted my study (see Appendix D, health board locality redacted). I gained access to potential participants from relevant gatekeepers, most often their line manager, yet I sought consent from participants myself, as I previously described in section 4.2.2.

All versions of the study information sheet and consent forms (with health board locality redacted) that I distributed to potential participants is available in Appendix E. My ethical considerations for this study was drawn from the UK Research Integrity Office’s Code of Practice for Research (UKRIO 2009). Accordingly, ethical recruitment, protection of participants from harm, and respect for anonymity and confidentiality are addressed in the following sections.

4.3.1 Informed consent

I approached potential participants myself, either personally or via e-mail to invite them to participate in my study. I explained the purpose of the study and gave them the study
information sheet for detailed information about the study and the role of their participation. I gave all potential participants time to consider their participation and only contacted them to ask about participation one week after, however, most participants volunteered participation within a day or two. Once participation was agreed upon, we decided on a time and venue to meet according to the participants’ convenience and this was often within their workplace.

At the beginning of each interview, the participant information sheet was again given to each participant, detailing the aim and design of the study, their role and contribution as participant, the expected presentation and publication of findings, as well as contact information for myself, my supervisors, and a contact person should they have concerns regarding my study. I ensured that participants were fully informed that their participation was voluntary, they were free to withdraw at any time or ask that the audio recorder be turned off or refuse to answer any questions I asked. They were also informed of the possibility of a follow-up interview, however, I would take a fresh informed consent from them at that point, if necessary. Participants could also indicate if they wanted to be informed of the study findings, which many of them did. Once agreement for participation was clearly established, a written consent form was signed by both myself and the participants before interviews commenced.
4.3.2 Anonymity and confidentiality

I ensured the confidentiality of participants through a number of ways in the conduct of this study. All consent forms and paper trails during data collection was stored in a secure university locker, for which only I had the key. All interviews were recorded on an encrypted voice recorder before being converted into a compatible format and stored in a university computer. During transcription, any identifying information about the participants or their workplace, including their roles, were redacted to protect confidentiality. Additionally, an online data share software was used as a form of back-up and both computers and online platform are password-protected. Only I and my supervisors had access to the raw data. Participants were informed that anonymised data will be kept for further studies or deposited into a research data bank for a maximum of 5 years for future research use upon completion of this study. Accordingly, all names were changed to pseudonyms and only non-identifiable demographic data will be shared for research dissemination purposes. Personal data will not be stored for longer than 12 months after the conclusion of this study.
4.4 The analytic journey

Figure 5  The process of analysis
**Figure 5** depicts my analytic journey in this study, though the reality of it does not seem quite so linear. The next few sub-sections describe each component of my analysis in detail, along with examples of propositions arising from analysis. These propositions were then tested during data collection and further enriched my data, demonstrating the use of abduction. The order in which the following sections are presented does not dictate in which order it was done in my study, but rather is for the purpose of ease of understanding. For this reason, I first give a short narrative in this section of how I analysed the study data, followed by more detail of each stage of analysis in the upcoming sub-sections.

As seen in **Figure 5**, interviews gave rise to field notes and transcriptions of interviews and the latter were then coded line-by-line. Field notes were later useful in shaping the context through the three situational analysis maps where my thoughts and experiences during data collection were essential. I applied constant comparison throughout the analytic process, however, this was especially vital where depicted in the above figure. I compared data between participants as well as within the same interview, taking note of the differences and similarities.

I first used situational mapping after open coding of eight participants as I had difficulty moving into focused coding because line-by-line coding gave rise to thousands of codes. Drawing a messy map of initial codes and participants’ words that stood out for me as well as their corresponding contexts gave me a fresh perspective and I was able to focus my analysis on data relevant to the research questions. However, before I could move on to focused coding, it was necessary to examine my codes as well as their respective definitions and I then recoded a substantial amount of my data before going further into data collection.

Having resolved this, data collection continued in the iterative manner so demanded by grounded theory (as depicted in **Figure 4**) and focused coding began to take shape. I further developed situational mapping in a more abstract yet messy manner, which I then ordered according to the relevant elemental headings to form an ordered situational map. I found that this increasingly abstract situational map assisted in developing a social world/arenas map and this pushed forward my conceptual ideas in developing the theoretical model, as will be discussed in section 4.4.9. Moving on to focused coding, I found it essential to go back and forth between data collection and analysis to test propositions I had during analysis for clarification and this further enriched my data. I made a messy map of focused codes and used relational analysis on this in my effort to answer the research questions. This exercise gave rise
to preliminary categories that I then condensed to main categories with sub-categories that formed their attributes. Once main categories were formed, it became necessary to consistently scrutinize new data for insights that were useful to my study’s aim, assessing for theoretical sufficiency (Dey 1999; Charmaz 2014). I did this by comparing new data with established main categories to determine if new insights were useful to how the categories were related and/or defined. I ceased data collection when I was satisfied that no new insights could be found that benefitted the research questions.

A theoretical literature review at this stage of the study was key in raising the level of abstraction of the main categories and linking the study findings with contemporary theory to develop the theoretical model. Finally, a positional map was constructed based on the developing theoretical model, additionally aided by my field notes. The positional map, in turn, informed the theoretical model together with the social world/arenas map and the theoretical literature review to probe ideas to arrive at the final version of the theoretical model. Once the theoretical model was formed, it was clear that the category integrating research into the nursing role offered the best illumination of my theoretical findings and hence identified as the core category.

In this section, I have given a narrative of my analytic journey in conducting this study. The following sections will give detailed explications of my analysis of the data, focusing on the development of the eventual core category – integrating research into the nursing role. Through this exemplar, I will further evidence how situational analysis was used to supplement constructivist grounded theory.
4.4.1 Transcribing

Although I initially intended to use a transcribing service to save time, funding for this was an issue and so I decided to self-transcribe. This decision was not in vain, as I discovered that data analysis indeed begins at transcription (Gibbs et al 2002). Self-transcribing also facilitated in my thinking of propositions from the data that I subsequently tested in data collection.

I transcribed verbatim using the software Express Scribe and a foot pedal for assistance. My interpretations, participants’ expressions and non-verbal communication were taken into account as shown in Table 4 below, adapted from Hepburn and Bolden (2017):

<table>
<thead>
<tr>
<th>Transcription note</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[anonymisation]</td>
<td>Anonymised name of people or places</td>
</tr>
<tr>
<td>(event))</td>
<td>Description of events, for example ((laughing)) one person laughing, ((laughter)) more than one person laughing, ((overlapping)) overlapping speech</td>
</tr>
<tr>
<td>[word1/word2?]</td>
<td>Two possible hearings</td>
</tr>
<tr>
<td>NA?</td>
<td>Uncertain speaker</td>
</tr>
<tr>
<td>-</td>
<td>Cut off sounds or interruptions</td>
</tr>
<tr>
<td>( )</td>
<td>Unrecoverable speech</td>
</tr>
<tr>
<td>(...)</td>
<td>A short pause of less than a second</td>
</tr>
<tr>
<td>(pause)</td>
<td>A pause of two seconds</td>
</tr>
<tr>
<td>(long pause)</td>
<td>A long pause of three seconds or more</td>
</tr>
<tr>
<td>CAPITAL LETTERS</td>
<td>Emphasis</td>
</tr>
</tbody>
</table>

Table 4 Transcription scheme used in this study

I found transcription to be immersive and stimulating, especially at the end of transcribing where I reheard the audio recordings against transcripts to check for accuracy although this was admittedly time-consuming. Additionally, being immersed in my data helped in the construction of initial codes that I later used in line-by-line coding.

4.4.2 Memo writing and field notes

Memo writing and field notes facilitated my analytic thinking throughout the iteration between data collection and analysis. While field notes aided in capturing the study settings and context, memos formed an effective dialogue between myself and the data in furthering my understanding of the data (Charmaz 2014), particularly throughout the refinement of the
emerging categories and developing the theoretical model. Both memo writing and field notes were effective in prompting me to question and clarify interpretations from participants’ accounts of their experience with leadership and research utilization within the context of the study. Memos were written in an unstructured manner to capture my fleeting thoughts about the codes and preliminary categories as well as their attributes and relationships between, as recommended by Charmaz (2014). The following sections contain excerpts of memos I wrote during the analytical process and more extensive excerpts of written memos relating to the identification of integrating research into the nursing role as the core category is provided in Appendix H.

4.4.3 Open coding and messy maps
Following transcription, I did open coding line-by-line in order to fragment and sort the data, helping me to think analytically about the data and get closer to the phenomenon of interest. During open coding, I developed propositions from the data that I further tested in interviews of participants, demonstrating abduction. For example, from early interviews, participants spoke of research utilization as a lesser priority in clinical areas, which led me to question the support for research from clinical managers. This led to mixed responses from the participants, uncovering their perceptions of the influence of leadership on the culture of clinical areas, as will be further discussed in Chapter Five: Research findings.

After line-by-line open coding of eight participants, 1524 of codes were generated and although I could sense the significance and direction of the study, I struggled to focus my analysis without inadvertently making conceptual leaps and this is when situational mapping was instrumental in moving my analysis towards focused coding and developing categories. The following is an excerpt of my memo during the analytical process when deciding to begin situational analysis and move into focused coding:
In focusing my analysis, I found that my expectation as in the above memo was correct and messy maps did indeed facilitate the constant comparison method by mapping significant participant quotes. To do this, I listened to each eight participants at the time and paused each time one said something significant to the research questions and wrote it on the messy maps, using different colours for each participant.

While listening to them, significant contextual factors also arose (e.g. working in specialized area) and these were included in the map using a specific colour. In drawing this map, I also dipped into my field notes to include any contextual factors that I thought were important at that time and wrote memos as a form of a paper trail of the developing analysis. At the end of this exercise, I had a flipchart-sized map that did indeed embody the “chaos” of the situation under investigation (see Picture 1, following page), as intended by Clarke (2005). Nonetheless,

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**Memo excerpt on transitioning to focused coding**

9 November 2017

After 8 participants and approximately 1500 codes, I’ve decided to code selectively following the 8th participant. My decision to code selectively is as below:

- I can see emerging themes, it is about a lot more than just leadership and context though, will need to mind map it out to see relevant categories.
- Don’t want to lose data in having too many codes.

I think it is a relevant time to start situational analysis. I will do this over the weekend, along with reading and writing on situational analysis. It will be interesting to see how I use situational analysis and to move from that back to theory. I think it will help me visualize and clear my mind to see relevant categories. I think it is a relevant time to build a couple of significant categories, seeing as the data is showing some relevant themes. I also think I have to go back and look at P1’s transcripts as I was just learning how to code at the time and may have missed some data/coded differently.

I am also thinking of interviewing some people from the quality improvement team. Want to know specifically if research informs their practice and the leadership in that. I am also finding it particularly challenging to code fast, as advised by Charmaz. I think it is because English is my second language, having to read and reread to paraphrase and code succinctly is proving to take a lot of time.
this prevented “conceptual blindness” (Morse 2007, pp. 233) as I initially experienced at the end of initial coding of the first few transcripts using line-by-line coding.

**Picture 1** Messy map of participants’ words and context

Scrutinizing this map facilitated comparison of data with data as opposed to reading texts on different tabs on a computer screen. Additionally, the comparison of data with data and identifying significant findings raised further questions, which guided me in interviewing participants, focused coding, and initiating theoretical sampling once preliminary codes were
formed. Importantly, this analytical exercise using messy maps of initial codes helped me identify which codes were important in recoding and further refining its definitions, forming the initial stages of focused coding.

4.4.4 Focused coding
Once I had more data after thirteen interviews, I examined all codes and compared them to the messy map of participants’ statements and another messy map of codes was developed. The following is an excerpt of a memo I wrote when beginning focused coding, demonstrating my analytical thoughts on the process:

<table>
<thead>
<tr>
<th>Memo excerpt on beginning focused coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 November 2017</td>
</tr>
<tr>
<td>Currently moving codes into selective/focused codes. My plan is to scrutinize each code and move them into the relevant focused code which will then guide subsequent coding. I select codes based on their significance and relevance which is determined by how often it comes up in the data using relational analysis and participants’ thoughts about certain issues as mentioned by interviews up to now. After selective coding, these selective codes will be used for further coding, constant comparison will be used iteratively between relational analysis and drawing up an ordered map in the end, aiming to build preliminary categories at the end of this process.</td>
</tr>
</tbody>
</table>

Consistent with Clarke’s (2005) suggestions, I developed multiple versions of messy maps before finally deciding that all the significant codes were included. Following my thoughts in the above memo, I then applied relational analysis on this messy map of focused codes to develop preliminary categories. Figure 6 on the following page shows an example of how I did one of the relational analysis on focused codes to develop the preliminary category changing nursing engagement with research that then developed into the core category integrating research into the nursing role. An ordered list of the focused codes forming the preliminary category changing nursing engagement with research is presented on page 96.
Figure 6  Messy map and relational analysis of focused codes in developing one preliminary category (ordered in the next page).
Preliminary category 6: Changing nursing engagement with research

Changing nurse education
Incongruence between taught research and research in practice
Needing a huge culture change
Others perceiving research as dry
Viewing research as part of practice
Not having a research tradition in nursing
Being unfamiliar with research terms
Making research tangible and integrated
Being able to see impact of research
Making research integrated into nursing practice
Having research integrated throughout training
Raising the profile of nursing research
Getting nurses to do own research
Generating other evidence
Taking too long to see impact
Being part of a research supported environment
Championing nursing research
Having embedded clinical programs

Supporting questioning practice
Sustaining academic thought in practice
Needing time and space for research
Collaborating with universities
Continuing clinical-academic collaborations
Supporting researchers to work clinically
Being part of a research-supported environment
Having a platform for nursing research
In order to develop preliminary categories and sufficiently direct the study, I decided to relate each code with just one significant code by drawing lines between them. I then listed each related code under the heading of significant codes, which I then raised to preliminary categories, using their related codes to define and question the properties between and within each category. Though I did not make connections between various other codes with codes for fear of losing analytical focus, some codes did appear to be related to more than one code and this helped to probe the relationship between preliminary categories. The following excerpt of a memo I wrote examples my analytical thoughts during this process:

**Memo excerpt on developing preliminary categories**

10 December 2017

Deciding whether or not to raise codes to preliminary categories – I did this by considering how significant each focused code is in facilitating research and research use by looking at the interrelations during relational analysis. Initial situational mapping has led to 12 focused codes so far – changing nurse education, changing practice, emotional aspects, getting nurses to do research, keeping researchers in practice, leading characteristics, making research visible, medical education, organizational issues, positive work environment, +negative manager perception, role of team, and team characteristics. I will go through the data again to see if I have missed any relevant focused codes – this will require another version of situational mapping as it is quite typical to have more than 1 version. Subsequent coding will now be coded to make the focused codes denser, unless new significant data or code is found.

At the end of this, admittedly lengthy, process, I had six preliminary categories, shown below in Figure 7. The preliminary category *changing nursing engagement with research* is highlighted to indicate the flow of the development of the core category *integrating research into the nursing role.*
Preliminary categories were probed and developed to build main categories, as the following memo excerpt shows:

**Memo excerpts on transitioning to main categories**

3 February 2018

At 8 participants in, a messy map was drawn to compare participants’ significant words/ideas with the codes and this then developed a few preliminary categories that were also mapped out in a messy map and proceeded with relational analysis which facilitated in developing preliminary categories. Having identified a few preliminary categories, I now need to think of what questions am I going to pose in order to define their properties and dimensions. These will guide my selection of cases and sources for theoretical sampling. At the moment, I am looking to re-interview P1 for the prelim category “keeping researchers in practice” because she is under the [clinical-academic] scheme and was the first participant who mentioned this. Secondly, I might want to speak to the [quality improvement nurses] in order to populate the prelim category of “changing practice”.

(continued on the next page)
Memo excerpts on transitioning to main categories

13 March 2018

After much thought, I now have the following categories:

1. Clinical-academia relationship
2. Cultural change
3. Changing practice
4. Clinical-academic careers
5. Relational leadership
6. Nursing education

Decided to change the category “nursing education” to “nursing research engagement” as this has implications for both education and practice, which is critical for research utilization. Theoretical sampling served to refine theoretical ideas. P14 and P15 were recruited for their position in the ward that may reveal unit culture and how it influenced research utilization. This was to refine the theoretical category of cultural change. P16 was recruited for her experience and position to further illuminate the theoretical category of relational leadership and if collectivism applies to this.

4.4.5 Main categories

While developing the main categories, using messy maps of the focused codes helped push my analytical thinking and enhanced my understanding of involved parties in the area of inquiry. I moved between situational mapping (messy maps) and developing preliminary categories that I then consolidated to main categories. This process was not straightforward and involved a significant amount of both time and careful analytical thought, as shown in the memo excerpts below. My memos during this time tended to be short, reflective, and called on a need to return to the literature to further probe my data.
Memo excerpts on developing main categories

19 April 2018

Relational leadership – I am looking for a term that encompasses what leaders should do in forming this unit culture and pulling outliers into this culture. I have drafted a diagram but I am not sure “collectivism” is the best term, though I think a better word can be found rather than “relational leadership”. My thoughts at this time, is that leaders play the role of bringing people together (collectivism) and forming the culture in order to apply research findings. I intend to test this out at the next interview with P15 who is a [quality improvement nurse].

Authentic leadership – authenticity and trust à significant to my study? Need to look back at data and further literature, possibly interview staff nurses to ask (KIV [charge nurse] for further staff recruitment).

What about “collective leadership” à what does this mean and how can it be applied? Read literature on this.

7 July 2018

Today I did a simple mind map on what is happening in the data and decided that leadership for research-based practice is very much influenced by culture, whether it is an authoritative or empowering culture and this boils down to consultant and senior nurses influence that forms that unit culture. Looking at this, I’ve decided to go down the road of diplomatic leadership and will be reading more on this.

11 July 2018

Something I’ve noticed in common with doing and applying research – they all talk a lot about “selling” the research/practice and about getting people on board or winning people over. Certainly there seems to be a certain credibility in their background/standing that borrows into this and also the way they approach the change.

(continued on the next page)
When first constructed, there were thirteen preliminary categories, which I then condensed into six categories (shown in Figure 7 of the previous page) and yet further refined into the final three main categories. Relational analysis was key in defining the main categories by showing relationships between and within them, forming the initial steps leading to theoretical sorting. It was through relational analysis that it became apparent that **integrating research into the nursing role** was the core category as it formed the most relationships with the other two main categories, namely **building relationships** and **shifting culture**, making it the central phenomenon (Scott 2004; Hallberg 2006). Memos and diagramming, as seen in the memo excerpts above, were subsequently crucial to the development of the theoretical model at this stage, also similarly suggested by Charmaz (2014). I decided a theoretical review of the literature at this point of the study was essential as opposed to the addition of new data as

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**Memo excerpts on developing main categories**

20 August 2018

Thoughts while coding – a lot of participants refer to personal preferences/characteristics, showing very much an appreciation of individual style as well as the interplay of individual determinants. I will have to evidence this somewhere in my findings (don’t want to put a category or even sub category for this as individual determinants have already been heavily discussed). Also I want to look at linking in selling the practice change with influence of clinical leaders and key opinion leaders (may or may not be the same people). I also need to look back at my interview data on societal perceptions and influence of politics as well as media.

P20 saying not being able to make a difference on their own – reminds me of what P11 said about him being just an individual and if he weren’t there things can’t change. I have put this under forming collective groups but might look back on it and compare with forming critical mass.

22 August 2018

Currently debating on the sub-category – changing practice by choice, should this be a sub-category on its own or can it be integrated into one of the sub-categories? How important is it? I suppose the aim of this sub-category is to emphasize that nurses must choose to change their practice rather than being told to do so. This could mean that it works against an authoritative culture – I will do comparisons between this and look for similarities/differences and see if it could be merged into one category.
theoretical sufficiency was reached (previously described in section 4.2.4), hence data collection ceased at 20 interviews and theoretical sorting began.

At this stage, I began drawing of the social world/arenas map and positional map to develop my analytical thinking in order to assist development of the theoretical model. Several versions of each were made before finally arriving to the end process as presented in section 4.4.7, for the social worlds/arenas map; section 4.4.8, for positional mapping; and finally, section 4.4.9, for the theoretical model. How each process informed the theoretical model is described in each respective section. The resulting theoretical model was thus informed by the two processes of situational analysis, memo writing, and my review of theoretical literature.

4.4.6 Ordered map

From my drawing of several versions of messy maps, I organized an ordered map based on a more abstract version of one of the messy maps. I used the suggested elemental headings from Clarke (2005) with some adjustments to suit the present study. I found this ordered map to be instrumental in helping me think of the context of this study and was a key reference in drawing the subsequent social worlds/arenas map which in turn informed the theoretical model, discussed further in section 4.4.7. The ordered situational map is presented in Figure 8 on the next page.
Individual human elements/actors
Clinical nurses, nurse educators (tutors, lecturers, etc.), research nurses, clinical readers, nurse researchers, nurse managers and directors, medical staff and medical consultants.

Collective human elements/actors
NHS, NMC, GMC, centres for evidence-based nursing, clinical research groups, research councils, quality improvement group, and media.

Nonhuman elements/actants
Computers, databases for evidence, guidelines for practice, audit data, quality improvement data, universities, political climate.

Discursive constructions of individual and/or collective human actors
Nursing and medical power struggle, professionalization of nursing, evidence-based practice movement, professional accountability, clinical-academia relationship, society’s perception of nursing, and nursing professional identity.

Political/economic elements
Graduate level of entry, funding, and political climate.

Temporal elements
Evolving needs of society, development of the nursing profession and nursing education.

Major issues/debates
The investment of governments in nursing education and development, nursing-medical power struggle and accountability, role of technology in nursing research utilization.

Implicated/silent actors/actants
Nursing informatics, perception of senior nursing staff, political climate, influence of media, societal expectations, service user involvement.

Discursive constructions of nonhuman actants
Influence of technology in healthcare advancement.

Sociocultural/symbolic elements
Nursing stereotypes, hierarchical organizational culture.

Key events in situation
Evidence-based medicine movement, graduate status of nursing.

Figure 8  Ordered situational map
4.4.7 Social worlds/arenas mapping

Clarke and Montini (1993) suggests that the aim of an arena analysis is to attempt to view the constructed world metaphorically over the shoulders of all actors involved. In constructing this map, I asked myself the following questions, as recommended by Clarke (2005):

- Who are the key individuals and social groups active in this issue? What are their perspectives and aim?
- Who are implicated by the actions of those in the arena?
- Who are the silent actors?
- Are there any old or new technologies involved or any non-human actants? How do they influence particular social worlds?

These questions fed into my analysis and drawing of the social worlds/arenas map, shown in the memo excerpt below:

<table>
<thead>
<tr>
<th>Memo excerpt on developing social worlds/arenas map</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 September 2018</td>
</tr>
<tr>
<td>Mapping the social world/arenas map raises interesting questions; for instance:</td>
</tr>
<tr>
<td>Would increased nursing research use affect the medical world? How would it affect them? What about accountability, would that change? Would there be implications for the GMC?</td>
</tr>
</tbody>
</table>

As a novice researcher constructing a social worlds/arenas maps for the first time, I found Clarke’s abstract map of social worlds in arenas model (Clarke 2005, pp. 111) particularly valuable. Additionally, essential in drawing this map was input from the previously done situational maps, both messy and ordered. Relational analysis during the development of main categories was useful in determining the placement of the different worlds to demonstrate how they were connected in the nursing research utilization social worlds/arenas map. Meanwhile, the ordered map served as a key reference in identifying the important worlds to be included in the map itself. Figure 9 shows the resulting social worlds/arenas map I constructed based on this stage of the analytic journey. Drafts of the map as it developed is provided in Appendix I.

The constructed social worlds/arenas map informed the final theoretical model by explicating how the different worlds interact in relation to the main categories, demonstrating the direction of empowerment and further discussed in Chapter Five: Research Findings and Chapter Six.
Theoretical Discussion. In particular, the political arena stimulated my thoughts on professional identity as will be further discussed in Chapter Six: Theoretical Discussion. To my knowledge, this is the first social worlds/arenas map representative of nurses’ research utilization based on my data and experience during data collection. While this is a significant contribution to existing knowledge on research utilization and encourages my analytical thinking, it remains as a supplement to answering my research questions. Hence the focus of this thesis will remain on the theoretical model outlined in section 4.4.9.
Figure 9  Social world/arenas map of nurses’ research utilization
4.4.8 Positional mapping

Methodologically, positional mapping is of particular importance in this study as the only three other studies found (Mills et al 2007; den Outer et al 2012; Khaw 2012) which used the same approach of situational analysis in conjunction with constructivist grounded theory did not use the positional map. While the reason for this was not clear with Khaw (2012), both Mills et al (2007) and den Outer et al (2012) cited similar justifications between them.

For Mills et al (2007), the issue they found in drawing positional maps was an epistemological one as they found it challenging in not perceiving humans as agency within a constructivist view. Clarke (2005) emphasizes the importance of avoiding representation in positional maps in order to see “situated positions” better, which she insists is necessitated by disassociating individuals, groups, social worlds, etc., from the articulated positions. According to Mills et al (2007), this worked against their constructivist paradigm of humans as part of the meaning-making process and they therefore used frame analysis instead.

Similarly, den Outer et al (2012) had the same issue with positional maps with regards to representation and human agency. By their account, it would seem that the outcome of positional maps would not benefit the aims of their study as they stated that the maps seemed to limit their analysis rather than opening possibilities. Both scholars (Mills et al 2007; den Outer et al 2012) quoted epistemological conflicts with drawing positional maps but I did not encounter this in my analysis. Rather, I found it facilitative to think of organizational context rather than particular individuals or groups as empowerment structures, as shown in the positional map in Figure 10 on the next page. I drew on my experiences working in Malaysia and the extent of my experience in the Scottish context in drawing this positional map, shown in the memo excerpt below:
Clarke says positional mapping brings out the silences in the data and I thought of the positions missing in the data and if it could happen in the Scottish context but also if this was relevant in Malaysia. I have been drawing comparisons throughout the research, on whether things participants mention happening here also happen in Malaysia and I think part of my learning experience is that I am finding a lot of similarity here as back home. For example, the blame culture and the lack of a clear career pathway for nurses. There are some differences but I think my perception of looking up to the practice here has been dampened a bit and this is actually good – I not only learn from this study, I am also looking at how I can help my participants too.
Figure 10  Positional map of the varied stances within the data regarding empowerment and research utilization
Using positional maps effectively steered the issue to a more productive discussion rather than encourage a blame culture whilst also expanded my view as a researcher to look at the data in search for empowerment in the organizational context of my study setting. As for epistemological conflicts concerning human as agency, I did not find any difficulty in avoiding representation on the maps while still conceiving the roles played by different groups and individuals. Clarke (2005) acknowledges this and allows for discussions following positional maps on the positions of particular groups/individuals though she recommends a nuanced portrayal and a focus on within group differences as well as between. The purpose for this careful detailed account in positional mapping is clear – to avoid black and white binaries and embrace heterogeneity in the situation of inquiry (Clarke 2005).

Participants in my study spoke of their experiences of coming into research and their perceptions of others in relation to research. The aim of my study was to build a theoretical model of leadership facilitators for research utilization, therefore I purposively sampled nurses who were engaged with research at a number of levels and the positional map shown in the previous page certainly embraces the heterogeneity of their views as it is clear that differing degrees of empowerment within organizations impacts the perception of research utilization as part of professional responsibility. More importantly, missing positions in the data are indicated on the map, as recommended by Clarke (2005, pp. 132) to “help the data speak to silences”. Accordingly, I found no positions in the data that indicated participants did not perceive research utilization as part of the nursing role when fully empowered both structurally and psychologically to do so. While this data is missing from my study, I cannot deny that this reality could exist elsewhere, consistent with the notion of relativism and further emphasizing the importance of context.

Additionally, the position of perceiving research utilization as part of the nursing role while not receiving any structural or psychological empowerment was also missing from my data. This alternatively suggests that other situations may exist where nurses are motivated to use research as part of their practice yet are frustrated at not being sufficiently supported by the healthcare organization and its leaders. This certainly speaks to my experience working in the Malaysian nursing workforce where graduate nurses form a minority and are expected to conduct research while working clinically yet are not given any time or resources for this.

Positional mapping in my study has given me interesting insights into the role of context and alternative realities, additionally informing the construction of the theoretical model. In
drawing this positional map, it aided me with consolidating the three main categories into the more abstract construct of empowerment through the constant comparison process. Moreover, positional mapping in my study has given me clear expectations of the transferability of the theoretical model in line with acknowledging the existence of multiple realities.

4.4.9 Theoretical model
Having raised the level of abstraction of the main categories and specifying their relationships through relational analysis, I then struggled to define the core category that was at a sufficiently abstract level enough to explain the basic social process of the findings. From the relational analysis, I could see that the category with the most relevance were building relationships and integrating research into the nursing role. From a review of the literature and taking into account two other processes from situational analysis that informed the theoretical model, I constructed the theoretical model below using the main categories as mentioned in section 4.4.5 to achieve research utilization. Drafts of how the model has developed can be found in Appendix J.

As the theoretical model focuses on impacting nurses’ professional identity to perceive research utilization as part of their professional responsibility, the category with the best illumination of my findings is integrating research into the nursing role – forming the core category in the theoretical model shown in Figure 11 on the next page. A detailed exploration of the theoretical model will be the focus of Chapter Five: Research findings and Chapter Six: Theoretical discussion.
Figure 11  A theoretical model for empowerment in reconstructing nurses’ professional identity to achieve research utilization
4.5 Refining research questions

The research questions proposed at the beginning of this study, as outlined in Chapter Three: Methodology, were:

1. How is leadership related to nurses’ research utilization?
2. How do contextual factors influence leadership in nurses’ research utilization?

As grounded theory requires iterative data collection and analysis, there was an abundance of opportunities to form new propositions to be tested in the field of inquiry. However, this came with the challenge of maintaining a focus on the main aim of gaining a theoretical understanding of the role of leadership in nurses’ research utilization. Throughout data collection and analysis, I constantly reminded myself of this aim by placing a visual reminder of the study aim on my work desk. I managed to focus my analysis towards this aim of understanding the role of leadership at an abstract level yet I struggled to separate leadership from its context as suggested by my proposed research questions.

Following this, I further refined my research questions to reflect my new understanding of the field of inquiry:

1. How do nurses understand the role of leadership in research utilization?
2. What conditions best facilitate leadership for nurses’ research utilization?

Both research questions are answered in the following Chapter Five: Research findings and Chapter Six: Theoretical discussion and explicitly at the end of this thesis in Chapter Seven: Conclusions.
4.6 Contribution to knowledge

The analytical work in this study that brought together two distinct methodologies to enhance understanding of nurses’ research utilization reinforces the usefulness of “bricolage” as asserted by Lincoln at al (2018). Complementing constructivist grounded theory with situational analysis was productive for this study and demonstrates that researchers can be methodologically flexible while being firmly rooted in a particular philosophical stance.

To my knowledge, the combination of situational analysis and constructivist grounded theory has only been used in three other studies before in the context of nursing (Mills et al 2007), family studies (Khaw 2012), and higher education research (den Outer et al 2013). However, unlike my study, the other studies preceding it were not able to use positional mapping in their analysis, making my study the first in using all three maps in situational analysis within a constructivist grounded theory research. Further, the use of positional mapping within a constructivist view such as what I had done, examples the utility of situational analysis from a different paradigm than it is used to. Without being troubled by agency, my analysis has shown that positional mapping can be done within a constructivist outlook while avoiding representation as called for by Clarke (2005).

The decisions surrounding the use of positional mapping clearly demonstrates the different needs of individual qualitative studies and the importance of investigator responsiveness (Morse et al 2002). The reasons for not using positional maps in previous studies were highlighted in section 4.4.8 however, for this study, positional mapping benefited the analysis by delineating standpoints of participants in my study on key issues in research utilization. An understanding of these key issues is indeed vital in understanding the context within which research utilization occurs for nurses and the role of leaders in getting research into practice. The context of this study is further delineated by the social worlds/arenas map in section 4.4.7, forming an additional contribution to the field of research utilization.
4.7 Summary

The issue of transparency in qualitative studies to increase the trustworthiness of a study is often discussed by contemporary scholars (Tuval-Mashiach 2017). The detailed explication of my analytic journey in this chapter to illustrate how I have used situational analysis as a supplement to constructivist grounded theory responds to this issue to evidence the quality of my study.

Additionally, all three processes of situational analysis contributed to the theoretical model to answer the research questions of this study. Situational mapping was key in developing analytical focus in the early phases of analysis, while both social world/arenas mapping and positional mapping was useful in the later stages of developing the theoretical model. Analysing the impact of various actors occupying different worlds in constructing the social world/arenas map was helpful in specifying the direction of empowerment within the data. Meanwhile, constructing the positional map emphasized the value of relativism within a constructivist outlook and moreover aided me in recognizing empowering constructs within the data by considering multiple perspectives. My novel use of situational analysis as a supplement to constructivist grounded theory demonstrates the usefulness and flexibility of grounded theory while maintaining firm stance within an epistemological framework.
CHAPTER FIVE

Research findings

5.1. Introduction

This grounded theory study aimed to gain a theoretical understanding of the role of leadership in nurses’ research utilization, including the impact of related contextual factors. Beginning with purposive sampling and later progressing to theoretical sampling, I conducted 20 semi-structured interviews with 19 healthcare professionals in various roles within one health board in Scotland and analysed the data within a constructivist grounded theory framework, using situational analysis as an analytical tool. Importantly, the findings of this study indicate leadership as crucial to empower nurses’ perceptions of professional identity to achieve sustained research utilization. It is evident that the novel use of situational analysis in conjunction with a constructivist grounded theory methodology gave deeper insights into the context in which leadership influences research utilization, as opposed to using constructivist grounded theory alone.

I will present the findings and discussion of this study in two integrated chapters. This chapter comprises the first of the two where I will explore the three main categories important to address in achieving empowerment for nurses’ research utilization – shifting culture; building relationships; and finally, integrating research into the nursing role. I have found these three main categories to affect nurses’ understanding of their own professional identity and I will evidence how this affects research utilization. Additionally, participants’ notion of leadership as empowering others for research utilization will be described as well as how the main categories relate to empowerment from participants’ quotes and supporting literature. My rendering of participants’ quotes and literature to answer my research questions while maintaining the participants’ value as contributor to this study is consistent with a constructivist outlook of co-construction of knowledge (Mills et al 2006a; Charmaz 2014).

In the next chapter, Chapter Six: Theoretical discussion, I will discuss the theoretical model as a whole, focussing on its’ theoretical underpinnings, and illustrate the value of using situational analysis as a supplement to constructivist grounded theory. Both chapters will relate the study findings to the literature, hence structured as integrated findings and discussion chapters while maintaining the primacy of data. Consequently, the succeeding conclusions chapter will present
a summary of the study findings and implications, highlight contribution to knowledge as well as recommendations for future research.

**Figure 12** on the following page provides a second look at a clear representation of my theoretical findings showing how the three main categories discussed in this chapter feeds into empowerment. I used social identity theory (SIT), from the field of organizational psychology, to conceptualize professional identity while Kanter’s (1977, 1993) socio-structural empowerment theory and Spreitzer’s (1995) psychological empowerment theory was used to conceive empowerment.
Figure 12  A theoretical model for empowering nurses’ professional identity to achieve research utilization (a second look)
As described in Chapter Four: The research process, the three main categories constructed from analysis of the data consists of sub-categories that form the attributes of individual main categories. This chapter aims to outline and discuss them, facilitating conceptual understanding of the study findings. **Table 2** lists the three main categories along with their related sub-categories in the order that I will discuss them. Furthermore, in excerpts of participant quotes, the abbreviation “I” within participant quotes would represent me as the interviewer and “P” representing the participant. At the end of each main category, I will discuss and evidence how the data links to SIT and empowerment in category summaries.

<table>
<thead>
<tr>
<th>Main categories</th>
<th>Sub-categories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shifting culture</strong></td>
<td>• Forming the workplace culture.</td>
</tr>
<tr>
<td></td>
<td>• Restricting professional autonomy.</td>
</tr>
<tr>
<td></td>
<td>• Navigating professional boundaries.</td>
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<tr>
<td><strong>Building relationships</strong></td>
<td>• Building relationships.</td>
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<tr>
<td></td>
<td>• Sharing leadership.</td>
</tr>
<tr>
<td></td>
<td>• Demonstrating commitment.</td>
</tr>
<tr>
<td></td>
<td>• Communicating openly.</td>
</tr>
<tr>
<td><strong>Integrating research into the</strong></td>
<td>• Separating research from nursing.</td>
</tr>
<tr>
<td>nursing role**</td>
<td>• Changing research engagement.</td>
</tr>
<tr>
<td></td>
<td>• Clinical staff investment.</td>
</tr>
<tr>
<td></td>
<td>• Spending time on nursing research.</td>
</tr>
<tr>
<td></td>
<td>• Fulfilling graduate potential.</td>
</tr>
</tbody>
</table>

**Table 5**  Main categories and sub-categories
In this section, I have given an overview of the study findings, including the resulting theoretical model and concise details of the categories arising from analysis. I have also presented the structure of the findings chapters of this study, including a summary of participant pseudonyms and roles. The following sections will describe the three main categories in detail – shifting culture, building relationships, and integrating research into the nursing role. I begin with an introduction of the main category, followed by each sub-category and its related data, ending each section with evidence of theoretical links as in the theoretical model, evidencing how findings of this study are substantiated by the data.
5.2. **Main category: Shifting culture**

This category outlines participants’ views of nurses’ research utilization as a multi-faceted challenge with organizational culture playing a key role. Within organizational culture, participants focused on a culture of hierarchy and the resulting lack of autonomy and inflexible professional boundaries as impinging on nurses’ research utilization as well as the role of clinical leaders in effecting change through empowerment. This category highlights the complexity of culture in healthcare that facilitates or hampers nurses’ research utilization via the mediating factor of professional autonomy and the catalyst role of clinical leaders.

5.2.1. **Forming the workplace culture**

An abundance of evidence points to the role of the leader in forming the culture of their workplace (Wiener 1988; Schein 2010; Warrick 2017). From the data, it is clear that participants identify senior nurses, particularly senior charge nurses and other senior nursing staff who have clinical expertise, and medical consultants as leaders of their clinical area. This sub-category describes the significant role of these identified leaders in forming the receptiveness of clinical nurses to changing practice.

*Informal nurse leaders*

Participants viewed senior nurses as one of the most influential group of informal leaders in the clinical area. Participants defined senior nurses as nurses who have a significant amount of clinical expertise and may not assume formal managing roles of a unit. From the participants’ view, it is clear that senior nurses’ acceptance of change and provision of support determined staff’s receptiveness to change. They point to an authoritative workplace culture, and the role of senior nurses in fostering this culture, as inevitably suppressing research utilization by inhibiting the autonomy of perceived “lower ranked” clinical nurses within particular units. Alternatively, senior nurses who allow other staff to express opinions and trial new ideas were seen to most likely foster research utilization by encouraging practice change in their clinical areas.

“It's still quite hierarchical isn't it and it's very much determined by the leadership style of the senior nurses on the ward and who they work with and if that doesn’t nurture autonomy and promote development but just ask people to do their tasks in a tick boxy way then that'll be what's encouraged in a ward and people will develop into that style”.

– P19, medical consultant.
Current literature supports participants’ assertion of senior nurses forming the workplace culture (Lindwall and von Post 2008; Sammer et al 2010; Murray et al 2018), and culture has been consistently identified as an important determinant of nurses’ research utilization (Harvey and Kitson 1996; Kitson et al 1998; McCormack et al 2002; Scott-Findlay and Golden-Biddle 2005; Prihodova et al 2018). Furthermore, nurses are known to value information from trusted colleagues over other sources of information in their decision-making (Thompson et al 2001; Voldbjerg et al 2016), consistent with nursing’s traditional oral culture and apprenticeship in developing nursing knowledge (Rodgers 2004; Currey et al 2011).

This corresponds with findings from my study, where it was found that senior nurses acted as points of reference for decision-making of less experienced nurses. During an interview, I asked a clinical nurse qualified less than three years of her actions if she were unsure about a clinical decision and she answered that a senior nurse would be her first port of call, preferably the nurse in charge. She claimed clinical guidelines were rarely referred to due to a lack of time and the ease of referring to a colleague. Although both organizational position and clinical expertise was valued, it is clear that seniority in clinical roles was seen as the main decision-maker in clinical practice. This underscores the role senior nurses play as informal leaders of their clinical areas and the subsequent impact on research utilization.

“I'd usually go speak to the (...) possibly the nurse in charge? Usually the more senior or even just a colleague because some of the nurses on the ward have been here for a long time. The senior charge nurse is more (...) she's much more office based now than they were used to be so usually the - the nurse in charge is who you would go to. I suppose, officially, you know, it's the most senior that makes the decisions, so anything you do, the senior charge nurse makes the decision.”

– P16, staff nurse.

Formal nurse leaders

Undeniably, the data also indicated formal nurse leaders as important actors in forming a culture receptive to change. Participants particularly view nurse managers who are able to look past clinical pressures and prioritise best practice as best placed to accept practice change. These nurse managers are seen by participants as being proactive in preventing clinical problems by focusing on best practice despite the presence of other clinical pressures such as patient flow.
In addition to organizational culture, organizational climate has often been said to be key to employee creativity and adoption of innovations (Tesluk et al 1997; Bates and Khasawneh 2005; Hemmelgarn et al 2006). Although a consensus in the literature has yet to be reached, it is clear that participants in my study is partial to the definition of cultural climate as the perceptions of culture experienced by employees of an organization, as conveyed by observed behaviours and physical artefacts (Schein 2010).

The influence of observed behaviours on cultural climate is seen in my findings that show participants’ understanding of staff’s receptiveness to change to be formed by the senior charge nurse. Participants presents the senior charge nurses’ openness to accepting staff views and implementing change as subsequently an important indicator of staff’s ability for research utilization. Moreover, it is apparent that the senior charge nurses’ readiness to distribute power and listen to staff’s concerns play a significant role to setting the cultural climate on research utilization, as will be further discussed in section 5.3.2 sharing leadership.

“I think it comes down to individual leadership of your senior charge nurses, allowing the staff team to express their opinions and go ahead and make small changes in practice. If you work in an atmosphere where change isn’t welcome, where people feel threatened by change, it can be very, very difficult to implement change. So I think leadership of their level is important to enable change and reflection to take place.”

– P15, chief nurse.

The view of formal leaders forming the workplace culture was a shared view amongst participants, although not all participants viewed their workplace as hierarchical:

“so umm (...) I’ve worked in [this discipline] for (...) uhh (...) probably about (...) 30 years. Give or take. So I’ve seen a number of managers come and go. And I don’t know whether it’s because of our specialty or not but they’re ALL very similar in terms of supporting practice. None of them have (...) I mean I – I got a fellowship – when I started out on a research program (...) I got a fellowship. To come out and do research training. Umm (...) with the expectation I could go back to my job at the end of it. Umm (...) I was allowed (...) well, enabled, not even allowed, enabled to do research within my job as a senior sister on the unit – I think it’s because we’re quite a young specialty? Umm has always been, I think, at the forefront of pushing (...) boundaries. Pushing knowledge and trying
to improve practice. Umm and because of that, nurses have been very strong within that (...) push. Umm with the medical colleagues. Because we are a new specialty. So I think we’ve been very fortunate, I’ve never had a nurse manager who has not been supportive.”

– P12, clinical-academic nurse.

Several studies support my findings of formal nurse leaders forming the creative work climate of their workplace, impacting staff receptiveness of innovations (Sellgren et al 2008; Salmela et al 2012). Further evidence points to a strong correlation between organizational climate and nurses’ psychological empowerment (Mok and Au-Yeung 2002). Within the constructs of organizational climate, leadership was shown to have the strongest relationship with empowerment (Mok and Au-Yeung 2002), expounding the role of both formal and informal leaders in providing the psychological capital for nurses’ research utilization.

**Medical consultants**

I further probed the role of medical consultants as I reflected on my own experience of medical consultants holding topmost authority in their respective clinical areas in the context of my home country. In subsequent interviews with medical consultants, it became clear that although nurse managers were perceived to be the gatekeeper for changing practice in clinical areas, medical consultants were also seen as role models in forming the workplace culture.

Participants who are medical consultants saw themselves as role models for other staff in their clinical areas. They claim clinical staff mirrored their behaviours and values, indicating the value of medical consultants as opinion leaders in encouraging nurses to be involved in research and using research findings in practice. From the participants’ views, it was apparent that medical consultants along with other senior nursing staff are important actors in forming the workplace culture.

“We’re role models for the junior medical staff and also, I think, setting the tone along with senior nursing staff for the other staff in the department. People see consultants working hard, the way we speak, the way we treat each other, the way we treat staff and patients (...) that affects the culture or the ethos of the organization. So I think in that sense, we are role models here.”

– P9, medical consultant
Yet further participants bring attention to the relevant point of diversity in medical leadership, forming a significant challenge in maintaining a consistent working culture.

“Uhh sometimes what I reflect on with my consultant colleagues is umm... the atmosphere in the ward...the expectations that you set for your team are very much personality driven and because we’re all quite different and for example on my ward there’s four consultants we’re all quite different I think it's quite hard to have a ward philosophy, a ward ethos... because I think we all come from quite different places...”

- P19, medical consultant

Coupled with the influence of senior nurses, this points to the complexity of organizational culture in healthcare that is fundamental to the realization of nurses’ research utilization. Key to informing this finding in the theoretical model was the social worlds/arenas map that illustrated the influence of several healthcare professionals on clinical nurses and the existence of multiple actors in various worlds (section 4.4.7). This is consistent with the literature which explicates the existence of multiple subcultures in healthcare organizations, further complicating our understanding of this phenomenon (Mannion and Davies 2018). However, it has been argued that multiple subcultures may be important to patient satisfaction as the organization balances between innovation and monitoring efforts (Shortell et al 2004).

It has often been suggested by both nursing and organizational psychology scholars alike of the crucial role formal and informal leaders play in research utilization and the adoption of innovations (Rogers 2003; Cummings et al 2010; Fitzgerald et al 2013; Flodgren et al 2019). Informal leaders can be conceived as opinion leaders as it is generally understood that opinion leaders similarly influence the behaviours and beliefs of others (Valente and Pumplung 2007; Anderson and Whall 2013). Moreover, it is known that opinion leaders who are familiar with a particular innovation is more likely to champion it and be successful (Locock et al 2001; Shirey 2006).

Consequently, as in the case of research utilization, this not only draws the case for change agents to focus efforts on senior nurses and medical consultants of a unit but also points to the urgency of appointing formal leaders with research knowledge and experience or providing those in appointment with research training. This is consistent with several studies that often indicate the importance of equipping formal leaders with research knowledge and experience
to achieve research utilization (Caine and Kenrick 1997; Bianchi et al 2018) if this is, indeed, what the healthcare service engenders for their nursing workforce.

5.2.2. Restricting professional autonomy

From the participants’ perspective, research utilization and practice change are inhibited by a culture of hierarchy, perceived by participants to be an organizational influence cascading from higher management to clinical units. Additionally, several nursing participants explicated their experiences of being introduced or encouraged into research roles by medical staff. Although this served as an important starting point for some participants, it illustrates their experiences of lack of access to organizational resources for research and development of their professional role. This sub-category presents findings from my study on the impact of a hierarchical culture on nursing’s capacity to develop the profession independently.

Hierarchical culture

Healthcare organizations have often been characterized as hierarchical (Green et al 2017) and findings from my study suggests the same. One participant described perceiving organizational guidelines on standards of practice as an artefact pointing to a hierarchical culture as it inhibits nurses’ analytical thinking necessary to question practice and instigate change. However, she claims to have a research-supportive culture in her own clinical unit, formed by a nurse manager who values research, thus underscoring the important role of clinical leaders in forming positive subcultures.
“I think we have quite a lot of top down stuff? It’s becoming a lot more micromanaged, I think asking questions is out of fashion, I think what is in fashion is you fill in a tick chart, you fill in a form, you phone a friend. Senior person. You don’t make independent thoughts of judgments. You escalate up to somebody else. There’s all kinds of rules and regulations that are top down to standardize and to make practice safe. It’s not about thinking out of the box. So I think [anonymisation] is in a very good position about supporting folks to think and to question. But I don’t know that that is allowed so much elsewhere, probably why they don’t have too many clinical-academics elsewhere. I think it’s the culture of the organization in which you are in and that particular area of that organization as well that inhibits nurses to apply and develop research in practice.”

– P12, clinical-academic nurse.

This participant’s perception of being micromanaged reflects the impact of “the rise of managerialism” (Hunter 2006, pp. 5) on clinical autonomy that is designed to maximize production as viewed from a manager’s perspective in the context of a competitive healthcare budget (Allsop 2006). This also affirms the role of governance in shaping the workplace culture (Stumpf 2001) which has often been discussed to significantly influence research utilization (Scott-Findlay and Golden-Biddle 2005; Williams et al 2015). Additionally, several studies scrutinize the impact of hybrid manager-clinician roles (for example Martinussen and Magnussen 2011, Correia 2013, Kuhlmann et al 2013) although it is notable that the majority of these studies exclude nursing in such roles, further evidencing clinical nurses’ lack of structural empowerment.

Nonetheless, findings from such studies suggest that medical staff involved in managerial roles tend to have more positive views of the financially motivated healthcare reforms, thus minimizing resistance and disruption in healthcare (Martinussen and Magnussen 2011). Though distinct from hybrid roles, it has similarly been found that shared governance for clinical nurses produce better outcomes for both nurses and patients (Kutney-Lee et al 2016). These studies support the notion of structural empowerment for clinical nurses to decrease perceptions of hierarchy and loss of autonomy as exampled by the study participant above. Importantly, this raises issues of how a market-oriented model of healthcare views nursing research utilization and the urgency of further research into nurses’ research utilization and its
effects on healthcare cost. This additionally emphasizes the impact of organizational values on research utilization.

The view of needing proactive leaders who collaborate with others and enable staff to question their practice as opposed to authoritative styles is one that is shared among the participants. Participants had a balanced, realistic view of the need for high standards of practice and clear expectations although this needed to be complemented with the ability to empower others, as outlined in the sub-categories building relationships (section 5.3.1), and sharing leadership (section 5.3.2). Participants acknowledge that authority may get a task done but would not build relationships vital to leaders of research utilization, indicating the priority of relationships in this process.

“I: What kind of key characteristics of a senior charge has to have to be able to enable change in their practice?

P: Umm (...) I think (...) they (...) they have – I would say, the more successful leaders are those who umm nourish their staff. So give their staff opportunities to share their ideas, give their staff opportunities to try things out. Emm (...) not be afraid to try things. Emm and (...) those ones who have high standards in terms of what they expect around practice and (...) they ensure that those standards are delivered? So that people are clear about the boundaries, about what they can do, what they can’t do, what isn’t acceptable in terms of values, behaviours, professionalism, etc. Umm (...) I think for me, those senior charge nurses do better than ones that are perhaps much more umm (...) I guess (...) uhh (pause) I’m trying to think of the word umm (...) ones that are much more authoritative?

I don’t think do well in terms of trying to change practice because (...) personally, I don’t think that authoritative approach engages staff. Or patients, for that matter. Umm (...) and not (...) for me, authoritarian approaches don’t work. You know, somebody comes to me with an authoritarian approach, it might get the task done but actually I probably wouldn’t walk away with respect for the person?”

– P15, chief nurse.
Further expanding the argument for professional autonomy, another participant viewed nurses’ scope of practice as determined by the amount of medical support provided in particular clinical areas. From this participant’s view, it was clear that the amount of support and participation from medical staff in the expansion of the nursing role was directly proportionate to the ability of nurses to develop their practice. This is similarly found in another study that highlighted the influence of context on nurses’ scope of practice, with context relying heavily on nurse-doctor interactions (Liberati 2017).

“But different departments have very different scope of practice. And the reasons they cited for that were the amount of medical support that they had? So we get a lot of medical – we get a lot of encouragement and support from the medical teams to do more, learn more, the – they get involved in our teaching. So they’re very encouraging of expanding our role. Whereas in the [anonymisation] at [anonymisation] they don’t have doctors based there at all. So they’re very much protocol-led.”

– P7, senior nurse practitioner.

Further to determining nurses’ scope of practice and hence scope of changing practice, it was evident that support from medical colleagues was key in driving clinical research. Participants working in research management roles describe the need to gain support from medical consultants to be able to conduct clinical research. Though it was understandable that this was dependent upon the research interests of the medical consultants to be involved in the conduct of clinical research, it was remarkable that very little nursing-led research was discussed.

Participants’ views of needing medical support to develop nurses’ scope of practice resonates with the literature as it is known that nurses lack capacity to independently develop their own profession and this has been a long-standing barrier to research utilization for nurses (Funk et al 1995b; Kajermo et al 1998; Parahoo 2000; Sanjari et al 2015; Williams et al 2015; Bressan et al 2016). Studies have affirmed nurses lack authority in healthcare organizations (Manojlovich and Ketefian 2002; Brown et al 2009; Rainer et al 2018), further making a case for the structural empowerment of nurses.

5.2.3. Navigating professional boundaries

Demonstrating the complex web of organizational culture, participants discussed a significant layer of this complexity, which is the power relationship involved in professional boundaries.
This sub-category describes the invisible grapple between and within medicine and nursing in caring for the patient that impact on nurses’ decision-making and autonomy, inevitably affecting research utilization.

**Inter-professional boundaries**

Most nurse participants perceived the source of a hierarchical culture stemming from either a medical or management source, showing the friction that can arise from inter-professional boundaries. Participants experience this as a struggle for power in being able to determine the patient’s plan of care yet, through considering sites of silence as recommended by Clarke (2005), it is remarkable that no one mentioned the need for patient’s input. Nonetheless, participants view this power struggle as inhibiting clinical nurses’ ability to conduct research in the clinical area and applying relevant findings. This view aligns with current literature in explicating the barrier posed by medical dominance in both local governance and research to nurses’ research utilization (Rolfe 2002; Wilkinson et al 2011). Similarly, participants viewed these rigid professional boundaries between nurses and medical staff as limiting the reach of clinical nurses in expanding their role to include research and using the evidence in patient care.

“The battle between medicine and nursing in terms of power and who can determine what happens to the patient. If you’re wanting to bring nurses on in terms of being an evidence-based profession, and in that I mean that they need to then know the theory to apply it. And they ought to generate the theory. They’ve got to be (...) they’ve got to be ALLOWED to do that in a clinical area. So if you’re in a clinical area that doesn’t allow that to happen, then it’ll never happen. And usually, it isn’t allowed to happen because of a medical domination or some sort”

– P12, clinical-academic nurse.

There is a recent proliferation of studies into professional boundaries, illustrating the challenges faced by a changing healthcare workforce that demands role flexibility in the face of patient consumerism (Nancarrow and Bothwick 2005; King et al 2015). The challenge for role expansion and the issue of professional boundaries within this is seen in my data and similarly in other studies that seek to explore the challenges with nurses’ role expansion. Powell and Davies (2012) explicate the issues of power and politics in implementing the acute pain service nurse, a new nurse specialist role, across three hospitals. It was said that one site fared better than the other two and the reason for this was said to be that medical staff had a less dominating role in the successful site (Powell and Davies 2012), echoing the above participant quote.
Interestingly, it was found that nurses in that study resisted role change due to fears of incompetence and lack of support from medical and senior colleagues as opposed to furthering their own professional interests. This further emphasizes the role of senior nurses and medical staff in supporting changing practice such as research utilization and reinforces the need for structural and psychological empowerment for clinical nurses.

The struggle for power in determining patient care plans is further seen in my interview with a participant who holds a senior charge nurse role. This participant describes her initiative in identifying patients ready for discharge out of acute care and often being challenged by medical staff on duty without negotiation or reason. Unlike other studies that identified nurses’ loss of voice due to medical-nursing boundaries (Schwappach and Gehring 2014; Morrow et al 2016), participants in my study emphasize their ability to raise concerns yet remain challenged by medical colleagues. Another clinical nurse interviewed share the common experience of being able to raise concerns and question medical decisions yet concede that final decisions are the prerogative of medical staff.

“I think as long as we always voice our concerns and we document clearly the concerns that we've had and that we've raised them with the appropriate (...) with the doctor or with the nurse in charge or emm (...) overnight with the nurse in charge down in [another unit], you know. Emm (...) then that's all we can do, really.”

– P16, staff nurse.

The struggle for autonomy in nurse decision-making extends to patient care where nursing and medical roles overlap as illustrated by Powell and Davies’ (2012) study on nurses managing acute pain. Another example of an area of overlapping patient care is wound dressing. One participant describes having to defend her team’s current practice of wound dressing when challenged by medical staff by insisting the doctor show them the research evidence supporting the new practice. The doctor was unable to produce them this evidence, hence the nursing team continued dressing the wound as they knew how. This is a case in point of the essential role nurse leaders play in valuing research utilization and advocating for her team yet shows the common friction that occurs between nursing and medical teams in important decisions regarding patient care. A further example of this is shown in the excerpt below on decisions regarding patient admission in a high dependency ward:
“We maybe think oh you know, that doesn’t warrant a [critical ward] bed. Especially when there’s such high pressure on those beds. But because the consultant says, “I want the patient in”. You’re then thinking, okay (...) well, I don’t think they need a bed because of x, y, and z but at the end of the day, it’s their decision. So it’s kinda like okay, I can tell you this but I know you’re gonna overrule me and send the patient in anyway.”

– P13, senior charge nurse.

A scope of the literature supports the existence of long-held challenges in the nurse-doctor relationship (Adamson et al 1995; Salhani and Coulter 2009; Treiber and Jones 2015). These conflicts revolving around inter-professional boundaries are important to address as it has been shown that nurses’ lack of professional autonomy affects their capacity for research utilization (Rodgers 1994; Estabrooks 2003; Brown et al 2009; Williams 2015).

_Intra-professional boundaries_

Raising the issue of inter-professional boundaries affecting research utilization with members of the medical profession uncovered a more complex picture. Medical consultants importantly suggested the resistance of nurses themselves with research utilization. This resistance, according to participants, stems from a combination of clinical pressures, conceiving research separate from nursing thus being an unnecessary burden, and clinical staff not investing in the said research. Medical consultants further suggested that the concern of medical staff would firmly rest on patient safety and as long as this is accounted for, the power of resistance would lie within the scope of practice of those affected by the practice change. For example, if a new practice was seen as a nursing responsibility, the likelihood of resistance will lie with nurses instead of medical staff.

“But I think, also, if that nurse had come in and then there were senior nurses that said, "No we’re not happy with this". Then it wouldn't have got as far. So it may be that you speak to consultants and they're very happy with this intervention, this new thing. It's not going to be impacting on medical workload, it's not going to impact on how they look after patients. But if it's going to get in the way of all the other nurses working, you may find far more nursing resistance.”

– P18, medical consultant.

This participant’s view corresponds with much of research findings pointing to challenges of intra-professional boundaries in applying change to nursing practice. As opposed to the
majority of research pointing to resistance of the medical profession in nurses’ role expansion stemming from issues of power (Nancarrow and Borthwick 2005; Currie et al 2009; Niezen and Mathijssen 2014), resistance within the nursing profession itself is evidently the result of self-categorization. Although there are some legitimate concerns regarding knowledge and training for expanding the role of nurses, it remains that some nurses hold traditional views of being subordinate to medical staff and are less inclined to “upset the established order of the medical team” (Salhani and Coulter 2009, pp. 1226). This emphasizes the importance of a concerted effort encompassing all three elements of my study findings – culture, leadership, and research – in affecting nurses’ professional identity through empowerment to achieve sustained research utilization.

This sub-category explored the important issue of nursing’s ability to practice independently, which is essential to research utilization. Nurses interviewed described experiences of being limited in exercising independent judgment, impeded by medical colleagues, while medical consultants pointed to resistance within the nursing profession itself. The issues raised in this sub-category clearly shows the delicate matter of changing practice as a result of research utilization that both nurses and medical staff experience due to practising in close proximity.

Although professional boundaries and research utilization has been suggested as a fertile area of research (Thompson et al 2008), it currently remains neglected. Findings from my study contributes to the understanding of this important area of scholarly work in relating professional boundaries in research utilization to notions of self-categorization that forms nurses’ professional identity and the role of empowerment in altering this perception.

5.2.4. Category summary
The sub-categories formed under this main category of shifting culture presents data from my study that illuminates the complex web of culture that participants view to impact nurses’ research utilization. The data clustered here describe the role of formal and informal leaders in forming their workplace cultures that are often subcultures within a larger context of organizational culture. This is illustrated in the social worlds/arenas map in section 4.4.7, which shows the different actors and worlds that they inhabit and interact. Social worlds/arenas mapping enabled me to critically analyse the relationships between various actors and worlds within the research utilization arena, highlighting the issue of professional boundaries. Subsequently, it was clear that participants were of the view that a hierarchical culture limits nurses’ ability to develop their profession independently.
Participants saw the actions and behaviours of clinical leaders as formative to the culture of their respective clinical areas. It was evident from the data that the focus of clinical leaders on completing tasks affects nurses’ understanding of their professional identity to the extent that research is not conceived as part of nursing practice.

“Because we’ve got ten and a half thousand nurses. So it’s a big, big workforce. And those nurses that I talk about are overwhelmed in their area with their priorities and pressures (...) and unfortunately research is often the thing that’s probably last on their minds.”

– P11, nurse manager.

“there’s a lot of other agendas to think about but (research-based practice) it’s not core business, it’s not seen as core business certainly when wards are gonna clear and patients are (...) just keep coming through”

– P10, lead research nurse.

The data that shows organizational culture feeding into nurses’ professional identity to conceive research separate from their practice aligns with the limited studies explicating how organizational culture affects professional identity (Doolin 2002; Gerardi 2005). It is apparent that organizational culture affects professional identity by determining participation in organizational activities to form identification (Doolin 2002). It is further known that clinical training and practice environments emphasize occupational norms for healthcare practitioners, including nurses (Gerardi 2005). It is thus unsurprising that clinical nurses should understand research utilization as separate from their role provided their limited autonomy to change practice as conveyed by organizational culture. Alternatively, structural empowerment to provide clinical nurses with the necessary support, information, resources, and opportunity for conducting and applying research findings to their practice would significantly shift organizational culture and affect professional identity.

Evidence from my study shows that participants perceive structural empowerment, especially in the form of leadership support, can facilitate clinical nurses to look beyond cultural norms. Being able to dismantle a culture of hierarchy is evidently important to participants for clinical nurses to be able to raise questions and propose new ideas, both critical to research utilization (Rodger 1994; Wong et al 2010). As shown in the participant quote below, this affects nurses’ self-perception of power and ownership, evidencing a shift in self-categorization. This change
in self-categorization, from being intimidated by hierarchy to perceiving status equality to be able to contribute to patient care, points to a restructuring of identity.

“So actually give them SUPPORT to develop a position where they’re not intimidated by hierarchy that they’ll feel equal. To have an idea or to have a voice and not feel timid or intimidated by somebody more senior. But you still have to enable staff, no matter what their level is, their level of experience or their seniority is. To have a voice. And if you’re senior, they will be intimidated by your seniority so you have to do things to enable them not to feel that intimidation. So that they can have a voice. And that gives them the opportunity that they (...) gives them a sense of ownership and power.”

– P12, clinical-academic nurse.

Evidence exists of a positive relationship between nurses’ professional practice environment and their psychological empowerment (Wang and Liu 2015). Conceiving a professional practice environment similar to hospitals of Magnet status where nurses have more influence in organizational decision-making, quality medical-nursing relationships, excellent nurse manager leadership ability and support, Wang and Liu (2015) found positive correlations between all these elements with all elements of psychological empowerment. This provides additional support to the link between the main category shifting culture with psychological empowerment resulting from structural empowerment. Remarkably, Wang and Liu (2015) also found nurses’ professional practice environment and psychological environment to correlate with work engagement and it is known that increased work engagement enhances innovation (Rich 2010), further supporting my theoretical model. Lastly, **Figure 13** below shows how structural empowerment would facilitate a change in organizational culture to further impact on psychological empowerment and professional identity.
Figure 13  Structural empowerment altering culture to affect professional identity
5.3  Main category: Building relationships

Current conceptions of leadership is clear that leadership is not the property of privileged individuals alone (e.g. Kellerman 2012). This contemporary conception of leadership as a complex process includes, amongst others, an explication of the relationship between leaders and followers (Haslam et al 2011). Although the theoretical model encompasses leadership through empowering constructs, the focus of this section is on leadership as it was clear from the data that leaders building relationships based on trust and mutual respect is essential to research utilization. This section focusses on the various aspects of relationships, as viewed by my study participants, to develop mutual trust and respect between leaders of research utilization and clinical staff. As participants viewed these issues as essential for research utilization, the focused code building relationships was raised to a main category. I will first discuss building relationships as a sub-category in itself, followed by other sub-categories, before discussing the main category as a whole at the end of this section.

5.3.1  Building relationships

Several participants emphasized the value of relationships in bringing research into practice as they recognize the role of others in implementing the practice change and so speak of influence as key. Participants understood the significance of working in partnership with others as opposed to authoritarian styles, though the need to be firm in certain occasions is acknowledged. Recognizing mutual goals and working towards it together requires trust and respect that forms the foundation of an effective working relationship and part of that involves treating others with dignity even in the face of adversity.
**Working in partnership**

Participants’ value for working in partnership echoes that in the subsequent sub-category *sharing leadership* (section 5.3.2), demonstrating the magnitude of distributing power and showing mutual respect.

“I think relationships are key? If you work in a position where you’re reliant on influencing others to implement your ideas or implement your recommendations, it’s very much about relationships. If you’re taking an approach that’s very didactic, chances are, you’ll struggle to have that implemented but if you work through negotiation and work in partnership with managers then (...) And you’re on the same goal in terms of what you’re trying to achieve, then you’re much more likely to be successful."

– P15, chief nurse.

Moreover, the value for working in partnership rather than imposing directions is consistent with contemporary discourse in leadership as organizations adjust to changing expectations of modern leaders (Pearce and Conger 2003; Northouse 2016). This new social and political context in which current leaders function underlines the importance of *building relationships*. This parallels with the emphasis of the values of democracy in structural empowerment, ideally with individuals at all levels of the organization in equal possession of power (Prasad and Eylon 2001).

Building relationships is further shown to be critical as several participants described forming collective groups to empower nurses and countering the effects of an authoritative organizational culture. Forming collective groups was further valued to maintain motivation and form plans for action as a group. Participants understood the gathering of nurses in unison regarding a particular issue as a strength in vocalizing their views to achieve organizational change.
Forming groups for action further highlights the role of social identity and self-categorization in my study and its’ effects on psychological empowerment. Aside from facilitating instrumental needs for change, participants used the formation of groups as a means of empowering one another in order to challenge current organizational culture. They saw an advantage in being united in affecting policy change. In forming groups, it was apparent that manager involvement in these groups was important in implementing change, demonstrating the importance of managerial leadership support and echoing findings in other studies (Gifford et al 2007; Cheng et al 2018).

“There’s the mental health nursing forum in Scotland, which is senior nurses from across Scotland from different backgrounds, whether it’s education, clinical practice, who get together to look at (...) what are the key issues within mental health nursing and how can they go about trying to influence change? There’s also the mental health nurse leads group (...) so there was a strength by coming together as a group. To try and enable change”.

– P15, chief nurse.

Participants’ value for relationships is further backed by the conclusion of a recent systematic review of 129 studies that relational leadership styles consistently leads to better nursing workforce outcomes (Cummings et al 2018). Relational leadership styles are those that emphasize on relationships in achieving positive change or outcomes, such as transformational, resonant and authentic leadership (Cummings et al 2018). The significance and impact of relationships within nursing leadership has long been discussed (Wong and Cummings 2009a; Cummings et al 2010; Cummings et al 2018), however, its impact on research utilization is lesser known. The findings from my study show that relationship building in research
utilization is especially important as research has been consistently viewed as removed from the clinical setting (further explored in section 5.4), an expected consequence of difficulty in accessing and translating research into practice (Clarke 1986; Rolfe 1998; Malik et al 2015; Hagan 2018).

Professional territorialism

A significant aspect of building relationships is the notion of respecting others’ clinical “turf”. There was a sense of ward proprietary within healthcare that prevents those outside of a particular clinical area from applying change to the practice of others without first gaining the trust and respect of staff, particularly opinion leaders.

“'I'm a (...) I'm a GUEST in their ward, I can't come and say, "Now we have to do A, B, C", you know? Because if somebody did that on my ward, I would (...) tell people to buzz off. You can't do that. You got to build bridges and then say, "You know, in my opinion it might be an idea if you do this", so usually (...) usually people go through that without a shadow of a doubt, really. Cause the big thing is people skills. Without a shadow of a doubt.”

– P14, quality improvement nurse.

In addition to respecting clinical territories, building relationships with clinical staff is seen as a vital part in understanding the clinical context. Certainly, understanding context is essential in applying research findings to practice yet, furthermore, it fosters trust among clinical staff that the leader is fully versed in the complexities of their particular working environment. The primacy of understanding the clinical context in building relationships with clinical staff is supported by claims of participants with clinical-academic as well those with clinical research roles. These participants speak of how their role lends towards their credibility, by holding such dual roles while being present in the clinical area. This highlights the importance of positive interactions with clinical staff, particularly with opinion leaders of the clinical area who may then influence the views of others within their team.

Similarly, participants spoke about the advantage of having a strong clinical background in being sought for a job position of promoting practice change in clinical areas. Such experiences are consistent with the assumption that a person rooted in the clinical area would have an appreciation of their unique challenges and would be able to apply research accordingly.
This professional territorialism, as described by Baldwin (2007), is a normal manifestation of human nature centring around issues of power and authority. Further, professional territorialism becomes more complex as healthcare roles evolve and diversify, challenging existing assumptions of physical space and scope of practice (Baldwin 2007). The discourse on professional territorialism is common in the literature on interdisciplinary collaboration (Dombeck 1997; Lennon-Dearing et al 2009; Irajpour et al 2012; van Dongen et al 2016), indicating its relevance in the heterogeneous healthcare workforce. Certainly this is pertinent to research utilization as my findings will show the value of close collaborations among clinical, managerial, and academic staff, alongside clinically-based research champions. Amongst research findings aiming to alleviate professional territorialism and promote interdisciplinary working are suggestions of cultural sensitization (Dombeck 1997); inter-professional education (Lennon-Dearing et al 2009; Irajpour et al 2012); improving communication (Ballen and Fulcher 2006); and, indeed, transformational leadership in building mutual trust and working in partnership (Goldsberry 2018).

During my interviews, it was evident that relationships are key in bringing research findings into practice yet the position of task-oriented leadership remained untested. However, upon further probing, it became apparent that relationships are fundamental to research utilization in such a way that decisions are made to protect working relationships with clinical staff. This emphasizes the importance of relationship building hence putting forward relationally focused leadership styles rather than those that are more task-focused.
“So sometimes I cut them maybe just a bit too much slack? But (...) there is an element that I want to protect the working relationship that we have. Because I am VERY conscious of kinda (...) how busy people are. But I think it's important that I protect that relationship that I have. Because once you close that door, it's difficult to get back in, you know?”

– P14, quality improvement nurse.

A literature review found that ideal characteristics for leaders in research utilization include being supportive, encouraging, engaging, accessible and addresses individual concerns (Sandström et al 2011). This points toward relational leadership styles as facilitative of research utilization. The findings from my study further confirm this as participants view characteristics of leaders typical of transformational, resonant, and authentic leadership styles as essential for research utilization. This is perhaps due to a suggested increase in trust, both vertical and horizontal trust, for nurse leaders with relationally focused leadership styles (Cummings et al 2018). This would be consistent with studies from organizational psychology investigating the concept of trust in leadership and finding it especially essential in changing work environments (Norman et al 2010), consistent of that in research utilization for nursing.

5.3.2 Sharing leadership

Through my interviews, it was apparent that participants saw a power in being able to change practice. Hence, they viewed it as important in distributing this power by giving others the opportunity to lead where they are able. Conversely, participants viewed an authoritative culture at the ward level as particularly inhibitive of research utilization and practice change, as previously explored in section 5.2 shifting culture. This sub-category, sharing leadership, describes the significance of giving others the chance to lead in areas they are confident in to balance power dynamics and encourage individual growth. Listening to others, as will be discussed in this sub-category and in section 5.3.4, communicating openly, is essential in identifying their strengths in enabling them to lead. This strategy of enabling the strengths of others was done to encourage individual development. Notably, identifying and developing the strengths of others is core to relationally focused leadership theories (Bass 1999; Luthans and Avolio 2003; Boyatzis et al 2013).
Distributing power

A participant with a nursing clinical-academic role who asserted the importance of encouraging others to be vocal in questioning and changing practice further makes the role of empowerment in nurses’ research utilization apparent. This participant highlighted the value of sharing leadership in challenging authority and distributing power dynamics to apply meaningful change to practice. These findings further underline participants’ position in viewing the ability to change practice as one who possesses power.

According to the data, sharing leadership can exist between formal leaders as well as leader-staff and between other staff relationships. The notion of enabling others is associated with balancing the power dynamics across the organization, decentralizing authority so necessary for research utilization and practice development (Rodgers 1994; Greenhalgh et al 2004; Estabrooks et al 2006). This is similar to my participants’ shared views of needing proactive leaders who collaborate with others and enable staff to question their practice as opposed to authoritative styles. There apparently exists elements of macro culture in believing that an authoritative approach appeals to no one, particularly in healthcare. Participants had a balanced, realistic view of the need for high standards of practice and clear expectations although this needed to be complemented with the ability to empower others. They further acknowledge that authority may get a task done, however, would not build relationships vital to leaders of research utilization, indicating the priority of relationships in the change process. This was evident in participants’ understanding of power in leadership as important to be shared with others. Even though they recognize the structural hierarchy within a team, participants emphasized the importance of working together with others as equal partners in various aspects:

“Within the team, although I might have that slightly higher position, I think that we’re all quite equal, and anyone in the team at any point can be leading, supporting others. So I think (...) Within a team (...) Okay, you might have a hierarchy or a structure or whatever ((gestures with hand)) but (...) people can be leaders at any level in that team and in any aspect of the job that they do.”

– P1, senior research nurse.

My finding of lateral and vertical influence as experienced by participants is consistent with Pearce and Conger’s (2003) theory of shared leadership. Interestingly, several studies of leadership from the organizational psychology discipline recently shifted focus from individualized leadership to pluralized leadership (Currie and Lockett 2011; Martin and
Learmonth 2012; Fitzgerald et al 2013; White et al 2014). Studies on pluralized leadership suggest positive organizational outcomes, for example enhanced team performance (Ensley et al 2006; Hiller et al 2006; Carson et al 2007; Fernandez et al 2010), effective management (Fjellvaer 2010), and the formation of networks (Currie et al 2011).

However, leadership studies arising from nursing remain largely focused on a central outlook of leadership (Tyczkowski et al 2015; Dyess et al 2016; McKinney et al 2016). One study looked at the development of team leadership but this focussed on devising a leadership plan rather than scrutinizing power distribution or testing the effectiveness of shared leadership (Gifford et al 2011). Nevertheless, nursing leadership studies emphasize relational leadership styles, particularly transformational leadership (Cummings et al 2018), highlighting the importance of developing relationships with others. Nursing’s emphasis on transformational leadership has parallels to shared leadership as shared leadership was first identified by Avolio et al (1996) as transformational leadership exhibited at the group level in high performing teams.

Engaging input

As participants viewed implementation of change as a symbol of power, a vital part of sharing leadership is to include others in the decision-making process and consider the feedback of others in research utilization. Indeed, Carson and colleagues (2007) support participative decision-making as a key precursor to shared leadership and Fischer et al (2018) more recently found this relationship to be reciprocal. Similarly, participants viewed engaging clinical nurses in the change process as important rather than imposing new guidelines for others to follow. This involves presenting the related research to clinical nurses and encouraging them to reflect on their current practice and its outcomes.

“It’s about engaging staff from the ground floor to ask what are their views. I might say, “this is where we’re at, at the minute, been thinking about how we can improve that. There is this current paper out. What are your thoughts?” And I would actually try to get them to think about (...) whether or not THEIR practice – given that I’ve got some evidence about their practice, whether or not that is working and whether we can do it better.”

– P12, clinical-academic nurse.
Interestingly, the view of the participants, who were mostly research nurses, in engaging clinical nurses in the change process is consistent with findings from my interview with a staff nurse. From her point of view, changes are made sometimes without obvious reasons to those who work clinically and how clinical nurses would appreciate being able to input in resolving problems related to their area of practice. This would imply a lack of both structural and psychological empowerment as clinical nurses lack both participation in local governance and impact on their workplace.

“I: So what kind of person do you think has the best chances for leading change in practice?
P: Emm (pause) Probably the staff that are working on the - you know, they're the ones with the firsthand experience of what's going on in the ward emm (...) I guess that's not always the case, things are (...) decisions are made from high up and this (...) you know, sometimes things are - decisions are made, I can't think of anything off the top of my head, but (...) we think, "oh.. why is that? I mean, we've not heard anything about that". They've just (...) made that decision so (...) It'd be nice to have more of a (...) input as clinical staff with changes and stuff. Cause we're the ones that are doing it, in and out of the day.

– P16, staff nurse.

Studies on participative decision-making show positive outcomes for both nurses (Knoop 1991) and patients (Anderson and McDaniel 1999), although there is a paucity in recent studies as the discourse moves towards nurse autonomy and shared governance. Participative decision-making forms a part of shared governance (Currie et al 2005), an organizational process where nurses are in control of their practice and extends into other areas traditionally controlled by management (Hess 1994). Remarkably, shared governance has conceptual foundations with Kanter’s (1977, 1993) theory of structural empowerment, supporting the link between sharing leadership and empowerment. According to Kanter (1977, 1993), employee engagement within an organization was directly linked to the level of shared governance available to employees, especially in issues related to everyday tasks. Studies in nursing tend to focus on structural empowerment rather than shared governance specifically, although still finding improved outcomes for nurses (Trofino 2003) and patients (Laschinger 2008) alike. Correspondingly, the minority of studies that did look into shared governance consistently found positive outcomes for both nurses and patients (Stumpf 2001; Kutney-Lee et al 2016).
5.3.3 Demonstrating commitment

It is clear from the data that leaders worked to develop relationships with clinical nurses by encouraging those with interest in research. However, this needs to align with their initiation of structure, which is valuable in fostering trust to further enhance the working relationship. Accordingly, this sub-category describes the value of leaders acting in accordance to expressed values in showing commitment to nursing research.

Participants expressed concern for the lack of formal positions within the healthcare service for nurses to conduct clinical research despite claims of enthusiasm by senior management. The lack of action was construed as a lack of interest, eventually undermining the trust that leaders work hard to build in relationships:

“There’s a lot of interest, there’s a lot of enthusiasm about nurses doing research or bringing their research into practice. It’s all very well saying you’re interested but we need to see the investment in that. And I’m aware that is going on another level and people are trying but (...) it’s not there, then as far as I’m concerned the investment isn’t there.”

– P1, senior research nurse.

This value for action that is consistent with expressed interest is similar to the element of authentic behaviour in authentic leadership. According to Wong and Cummings (2009a), authentic behaviour is acting in accordance to one’s values rather than to please others or fulfill self-interests. Authentic behaviour develops trust amongst staff for the leader, which facilitates self-identification of staff to the leader and social identification with the organization (Avolio et al 2004a). The self-identification of staff with authentic leaders highlight the key role of research champions in clinical areas, as I will discuss further in section 5.4.3. It is further suggested that these effects on identities by the leader enhances performance outcomes (Avolio et al 2004a).

“If you do that then you have to (...) remain accountable to the fact that that’s what you said so you can’t go back on your word and say, “I know we said staff development’s really important but we’re really busy today so we can’t” ([laughing]) so it’s emm (...) it’s risky. But I think it’s (...) essential. And it’s essential for (...) staff retention. I think. I’d enjoy that.”

– P10, senior research nurse.
The participant account above highlights the key role of trust between leaders and staff. Participants recognized that authentic behaviour is risky for the leader yet rewarding for staff, leaders, and the organization overall. They understood the accountability involved for the leader in following up aspirations with actions. Participants also align with the findings of several nursing studies in perceiving authentic behaviour as an essential component for the retention of staff (Laschinger et al 2012; Laschinger et al 2013; Laschinger and Fida 2014), presumably through social identification with the organization as a consequence of developed trust (Avolio et al 2004a). Avolio et al (2004a) regarded trust as one of three components that mediate the effect of identification with the authentic leader to enhance staff work attitudes and behaviours.

There has been connections made in the literature between structural empowerment and authentic leadership. Indeed, Avolio and Gardner (2005) suggested that working environments with “open access to information, resources, support, and equal opportunity for everyone to learn and develop” (Avolio and Gardner 2005, pp. 327) will produce better outcomes for both leaders and staff. Kanter (1977, 1993) has long conceived structural empowerment as employee access to four key elements: information, resources, support, and opportunity. Accordingly, it has been found that structural empowerment mediates authentic leadership to achieve nurses’ improved performance and job satisfaction (Wong and Laschinger 2013). More specifically, the element of authentic behaviour in authentic leadership has been shown to increase nurses’ perceptions of structurally empowering conditions in the workplace, lowering burnout of nurses regardless of level of clinical experience (Laschinger et al 2013).

5.3.4 Communicating openly

Unsurprisingly, communication appears key in building relationships for research utilization. Though communication is a vast subject comprised of various aspects, this sub-category explores the significance of open communication as indicated by the data which is characterized by transparency and listening to the concerns of others.

Transparent leadership

Participants discussed the need for leaders to be transparent in admitting shortcomings and yet have sufficient knowledge to support the aspirations of others. This is consistent with the component of relational transparency in authentic leadership (Wong and Cummings 2009a). Participants viewed transparency as a necessary part for leaders to develop others, highlighting the need to balance power dynamics, aligning with the previous sub-category of sharing.
leadership in section 5.3.2. These values for transparency and balancing power dynamics between the leader and staff appear consistent with fostering trust in leaders, underscoring the role of trust for leaders in nurses’ research utilization as previously highlighted in section 5.3.1. In holding the importance of being transparent, participants value support and honesty over a knowledgeable façade:

“You need a transparent leader. By that I just mean someone who doesn’t pretend to know it all? Doesn’t have all of the answers and therefore uses and shares their knowledge but also enables other people.”

– P10, senior research nurse.

Similarly, proponents of authentic leadership understand relational transparency as a key component in authentic leadership and asserts its’ importance in fostering trust of staff in leaders (Wong and Cummings 2009b). Trust is defined as “a willingness to be vulnerable” in the leader-staff relationship (Norman et al 2010, pp. 350, also supported by Mayer et al 1995; Whitener et al 1998). Integral to this definition is the readiness to be exposed to and take risks with the trusted person (Mayer et al 1995). This is not unlike research utilization where staff would be exposing themselves to new experiences inherent of a learning environment.

Accordingly, nursing research suggests that trust in management is essential for staff to raise concerns and offer suggestions for workplace improvement (Wong and Cummings 2009b). There is further evidence from the leadership literature that shows the level of transparency and positivity of leaders had a significant impact on employees’ rated trust and perceived effectiveness of the leader (Norman et al 2010). This supports the finding from my study in emphasizing transparency in building a trusting relationship between leaders and staff, facilitating research utilization where uncertainty often exists.

Listening to concerns

Next, listening to concerns to gain clinical staff perspectives was deemed an important part of communication to the study participants. There was emphasis placed on standing back and listening to clinical staff to understand their position and concerns, acknowledging different views without judgment. Repeatedly, the importance of knowing the context of the practice area and the challenges present appeared key to understanding the concerns of others and respecting the culture of territorialism. Participants stressed the importance of not imposing
power and taking small steps towards changing practice with one way being to understand the concerns of others regarding change of practice.

“Most vital thing about communication, I think it’s about willing to stand back and listen and acknowledge that there’s different voices and they have different concerns which might be very different to mine. And I need to (...) stand back and listen. I think that’s an important thing about change. Umm so you can’t impose things on them cause they’re ALREADY an overworked, understaffed workforce. So imposing change on them is not gonna work. You’ve got to appreciate where they’re at and then bring them on.”

– P12, clinical-academic nurse.

It is intriguing that the aspect of communication that is seen as important for research utilization is understood as equally vital by participants in the conduct of research. One participant with management responsibilities for a clinical research team emphasized the need to invest time in building relationships with staff, especially with regards to listening to their concerns and aspirations. Consequently, professional development plans for each staff will differ according to their expressed needs and strengths.

“I: Yeah... and uhh... (pause) wh-what do you think about, cause I-I constantly hear about managing people instead of managing tasks in um in leadership in getting research into practice, what do you think about that?

P: So people often, in the NHS, people always say patients first.

I: Yeah

P: Yeah. I would say, staff first. Yeah? Because I think that... as a manager, if my staff or if my team are feeling well-supported, well-developed. You know, lots of educational opportunities umm time to do the work that they need to do, they will be better at protecting and caring for patients. Yup. So, although the patient is the priority in many ways, the patient – in my process, it’s the staff that I have to look after first. To be able to protect the patients. So in my world, the patients come second because if I don’t get the staffing right, the patients won’t be looked after properly. Yup. A lot of clinical nurses or managers would probably say that differently, they would say it the other way around. But I know for a fact that if you don’t
spend a massive amount of time talking with your staff or with your team, getting to know them, understanding what their path is, what they want for themselves, where they’re at, what development opportunities they need to be able to do what they are – what you’re asking of them, or what you aspire for them. Cause I have aspirations and expectations for each person in my team. And they’re all different. Umm you can’t possibly get the best out of people... it’s the same with patients, you spend time with them, their care will improve, simply by spending time with them if nothing else. And staff’s exactly the same, you have to be interested in what they’re doing, you have to be able to listen to them, you have to make time for them, even if you’re really busy.”

– P4, senior research nurse.

This reaffirms the participants’ perception in conceiving the conduct and use of research as part of the same process, though the agencies responsible for each component remains an issue of debate (further described in section 5.4.1). Moreover, this indicates the magnitude of relationships in leadership for both conducting research and utilization in practice, closing the loop of the research process for researchers in healthcare.

Listening to the concerns and perspectives of staff is central to relational leadership theories, especially in resonant leadership where emotional intelligence is said to be crucial (Boyatzis and McKee 2005) and authentic leadership that emphasizes the views of others in the leader’s decisions (Avolio and Gardner 2005). In constructing emotional intelligence, Heckemann et al (2015) reviewed nursing leadership literature and found empathy to form one of the aspects needed for nurse leaders to care for others. They found evidence that this in turn provides support for staff to preserve emotional balance, leading to decreased burnout and improved staff performance. Likewise, Wong and Cummings (2009b, pp. 20) proposed “listening to diverse points of view” as manifestation of a leader’s balanced processing, a core component of authentic leadership. They further found that leaders listening to multiple perspectives reduced burnout if only in non-clinical staff, though multi-collinearity was cited as a possible reason for non-significance with clinical staff.
5.3.5 Category summary

The focused code *building relationships* was raised as a main category due to its significance in my study as evidenced by participants’ quotes and supporting literature. From the data, it is apparent that relationships were formed with the aim of gaining mutual trust and respect while elements most valued within relationships are those that demonstrate commitment, communicates empathy, and balances power dynamics, as outlined in previous sub-categories. This main category presents the importance of relationship building with people from across the organization, aiming to gain their trust and recognize their goals in achieving quality healthcare.

It is known that leadership focussing on positive relations, new initiatives, and clear communication has a stronger relationship to creative work climates, stronger than the former with nurses’ job satisfaction (Sellgren et al 2008). Similarly, my findings point to relational leadership styles as critical to research utilization. Yet the significance of shared leadership cannot be ignored, creating a paradox between central and pluralized leadership. However, the findings from my study are consistent with current conceptions of leadership as practices embedded in a complex web of interdependencies at various levels of the organization. This contrasts with traditional notions of leaders as heroic individuals at the top of an organization giving direction and assuming authority (Fletcher and Kaufer 2003). It suffices then to clarify that findings from my study indicate that shared leadership that exists at any level of the organization, with a focus on relational practices, is most facilitative of research utilization.

Several links have been made in the literature between relational leadership theories and empowerment, supporting my findings from this study. It is known that all three relational leadership theories – transformational, authentic and resonant leadership – is related to structural and psychological empowerment, influencing the work environment for the better and suggesting its’ importance in the professional development of staff in improving healthcare (Avolio et al 2004b; Wong and Cummings 2009b; Giallonardo et al 2010; Wong and Laschinger 2013; Wong and Giallonardo 2013; Laschinger et al 2014; Bawafaa et al 2015; Heckemann et al 2015).

The emphasis on relationships and its’ effect on professional identity is clear within my data. For instance, a participant with experience of changing practice in clinical areas unfamiliar to them highlights the importance of building relationships with the clinical team, particularly opinion leaders. From this participant’s view, it was clear that working on relationships with
the team subsequently impacted their self-categorization, or how they understood this change agent in relation to themselves. Where the participant was first seen as an outsider with no authority to change their practice, developing relationships with team members rendered the participant as part of their team. This was facilitated by the participant’s perceived congruence with the group’s norms and values as a result of building relationships, demonstrating commitment, and communicating openly. Additionally, the team received both structural and psychological empowerment subsequent to relationship building and this was obtained in the form of information and resources in changing practice and the resulting meaning in achieving group goals. This effect on self-categorization points to the importance of placing leaders who champion research in clinical areas as clinical staff internalize the leader’s values to affect their professional identity, illustrated below:

“You know, people join the [anonymisation] because they want to do heroic stuff and save patients’ lives. And once we got an increase in survivors, makes a big difference I think. We also spend a lot of time developing a relationship with the [anonymisation], with individuals and the thought leaders, with people who could then cascade the message to the people who are trying to save lives out into the service. So initially there was some push back, there was some resistance to what we were trying to do. “Who are you to tell us how to do our job, we’ve been doing it for years, we know how to do it and we don’t need anyone else to tell us”, some of that sort of stuff. But we won enough hearts and minds who appeared at the time, for that group to be increasingly marginalized until they didn’t match anyone.”

– P9, medical consultant.
It is generally accepted that building relationships with a group affects the group’s self-categorization to either accept or reject the new leader, increasing the likelihood of success if the leader fits the group prototype (Hogg 2001; Haslam et al 2011). However, this relationship thus far has not been shown to be mediated by structural or psychological empowerment, indicating the significance of my study findings. From the data, it is clear that building relationships through elements of sharing leadership, communicating openly, and demonstrating commitment affects a group’s social identity via self-categorization. This relationship is mediated by both structural and psychological empowerment, as Figure 14 shows.

![Diagram showing the relationship between building relationships, sharing leadership, demonstrating commitment, communicating openly, psychological empowerment, structural empowerment, self-categorization, and professional identity.](image)

**Figure 14**  Building relationships and the link to professional identity, mediated by empowerment

As shown above, elements of sharing leadership, communicating openly, and demonstrating commitment form the main category of building relationships. The principal contention of this main category is to develop relationships across clinical and academic settings through distributing power, active listening and communicating transparently, as well as authentic behaviour in espoused values to achieve mutual trust and respect. Quite notably, the main category here is directly linked to psychological empowerment, in contrast to the core category integrating research into the nursing role (described in section 5.4.6). This highlights the crucial need for organizational support for research to be part of nursing practice which can only then result in psychological empowerment, while underscoring the psychological effect of building relationships.

Nevertheless, my data points to how building relationships empowers others both structurally and psychologically to influence individual self-categorization. A change in how the individual
understands themselves in relation to research and/or leaders of research utilization in relation to the in-group, as previously shown by the data, further affects their understanding of their social identity. This shift in understanding the occupational group social identity can result in the conception of research and research utilization as part of nursing’s professional identity.
5.4 Main/core category: Integrating research into the nursing role

As my study is in the area of research utilization and having purposely selected nurses who have an interest in research as the starting point of my data collection, it is expected that interviews explore the nature of research in nursing. This section presents the sub-categories from my study on the disposition of research in the nursing profession to facilitate the outcome of research utilization. The final sub-section will then discuss the main category as a whole, delineating how the sub-categories are built into the main category’s attributes and its relation to both empowerment and professional identity.

5.4.1 Separating research from nursing

“Whereby you have research who’s doing research, clinical doing clinical...”

– P4, senior research nurse

One of the first things to arise from early interviews was the view of clinical nurses perceiving research as a separate entity within nursing, as evident in the above participant quote. Participants understood clinical nurses’ view of research as clearly sitting separate from their clinical responsibilities. This sub-category explores the viewpoint of participants in highlighting the perception of clinical nurses that research has limited relevance in the work of a clinical nurse. This assertion was present throughout almost all of my interviews, especially those with nurses, establishing its relevance in nursing research utilization. Moreover, the separation of research from nursing practice is evident in clinical nurses’ perception of nurse researchers in their clinical area. As shown in the following participants’ quotes in this section, this distinction manifests in both the workplace culture and organizational structure. This is similar to other studies where it was found that a distinction exists between “academic nurses” and “ward nurses” (Salhani and Coulter 2009).

Perceiving research in practice

Among the most distinctive insights gained from the data was how participants conceive conducting research and using research in clinical practice. It was clear that participants saw research utilization as part of the research process. However, they claim research utilization to be part of clinical practice and a lack of organizational support to be involved in clinical areas mean they have less influence for translating research into practice. Coming from a largely research nurses’ perspective, they thus saw their responsibility as promoting research awareness for clinical nurses rather than using research in practice. Additionally, it is
interesting how research utilization was perceived by the participants, as it was apparent that the focus of research utilization was wholly on instrumental use and less so on conceptual and persuasive use. This underscores the arguments made by Squires et al (2011a) on using quantitative research methods to measure self-reported research utilization and assuming nurses are aware of their use of research, leading to research utilization being under-reported.

Nonetheless, participants saw research utilization as part of the loop of research, although they asserted that using research in practice was outside the remit of research nurses and was more suited towards those who are more clinically focussed, ideally for nurses who have a clinical-academic role:

“So from my role right now, I’m (with) a research team, what the clinical environment do with that research is up to them. That’s not my responsibility. But there are consultants and other nurses who (...) work clinically and in research and I think it’s more their responsibility to implement it.”

– P4, senior research nurse.

Several participants cited a clear career pathway in academia as the main motivation for doctorate nurses to leave clinical practice and join a university after completing their studies. Contemporarily, there exists some joint clinical-academic posts in several healthcare facilities, most of which are taken up by medical staff. The cultural separation of academia and clinical practice, along with its related beliefs, are indeed persistent so much so that even participants in these joint posts struggle with their sense of belonging in the workplace, as told by a study participant. Moreover, there apparently exists an expectation to enter academia after doctorate studies, either by the doctoral nurse herself or by colleagues who may have a professional bias against nurses who study at that level in perceiving that they do not belong in clinical practice.

“So what has happened is that most nurses, who have done their doctorates, go to university to work. I think that’s why they almost go directly into education because there’s a clearly defined role to be a lecturer nurse, to be lecturing. I think most nurses don’t appreciate colleagues who’ve studied to that degree? And I guess there’s probably some sense of professional BIAS towards nurses who aspire to that level of academic study? Not in a positive way, in a negative way.”

– P11, senior nurse manager.
Additionally, a scope of the literature shows that it is this unclear career pathway and role ambivalence of doctorally prepared nurses that affects how clinical nurses’ perceive and value their role (Woodward et al 2007; Stevenson et al 2011; Udlis and Mancuso 2015). This points to the urgency of organizational structures to firmly support the place of doctoral nurses in clinical practice, lest the important role of clinical-academic nurses continue to be challenged. Yet, participants maintain research utilization’s link to clinical practice, claiming clinical nurses lack awareness of their important role.

“In their... best that they actually do, you know, they implement change. And I think downstairs (in the unit), we do have a really good culture of that. So... it’s not for me to convince, I think it’s to- for me to kind of make people realize that this is really an important part of their job.”

– P11, senior nurse manager.

Aside from organizational factors, participants understood the importance of knowing the ward context and culture in research utilization. This led them to believe clinical nurses are better positioned to do this rather than research nurses. The limitations research nurses perceive in being involved with clinical areas for research utilization affirms the perception of research and clinical nursing occupying separate worlds, a long-standing notion in the literature (Greenwood 1984; Mulhall 1997; Hendricks and Cope 2017). Indeed, the concern participants had of being familiar with ward context is justified as several scholars attribute the theory-practice gap to the mismatch of paradigms and culture between the producers and intended users of research (Greenwood 1984; Mulhall 1997; Le May et al 1998; Ion et al 2019).

More recently, the UK Clinical Research Collaboration (UKCRC) (2007) recognized this problem in their efforts of introducing a clinical-academic pathway for nurses. This initiative aims to generate research evidence relevant to both nurses and patients within their context, closing the aforementioned gap. While this venture is very much welcomed, it remains problematic that only a select few may enjoy such a career, as clinical-academic collaborations implementing this new nursing role outlines, “pre-registration study also provides an opportunity for spotting future talent, so nurses with clinical academic aptitude and capability can be identified early” (Coombs et al 2012, pp. 1086).

Clearly, this would aggravate the already prevalent view of research as a specialist and elitist activity, as clinical nurses currently experience research in the clinical area conducted by non-nursing or specialist nursing groups. Research nurses, as a participant points out, are often
unable to do more than run clinical trials due to funding constraints. The unintentional consequence of this is the limited interaction between research and clinical nurses, often only for the purpose of patient recruitment. These limitations imply research as a specialist activity in nursing, signalling the inaccessibility of research to the observing clinical nurse. This clear separation of research from nursing practice probed my curiosity around the experienced relationship between academia and clinical practice for nurses in the clinical area, as I suspected this to be one of the reasons for the fracture of research from nursing practice.

**Research as elitist**

Subsequent interviews found that the clinical-academic relationship was distant and clinical nurses understood evidence-based practice only as a requirement of their professional regulator instead of being actively involved in research. Additionally, participants claim clinical nurses see research as an elitist activity. They ascribe this to the experience of seeing minimal involvement of nurses with research and the gatekeeping procedures involved for clinical nurses wanting to conduct research. The impact of this perceived elitism is clear to the extent that many clinical nurses felt unprepared to do research due to its perceived unobtainability. This assertion of clinical nurses lacking organizational support to conduct research in their clinical areas further imply a lack of empowerment:

“I: what do you think is the relationship like between clinical and academia?

P: I think it can be slightly distant? I think there’s an element where nurses need to have research and evidence-based practice. I think they see that as a thing for NMC. But I also think they don’t see that that’s an essential part of like, nursing and research together? Because I think sometimes there’s external groups that may come in to do research so therefore I think that makes a distinct, sort of separate entity almost, which is confusing. And actually it’s probably a lot of nurses in that department who’d really like to do a bit of research and so they’re embedded in the clinical area. They know what they want to look at, they just don’t have the tools to do it or tools to change.

– P10, senior research nurse.

The proposition of research in nursing as elitist has long been made (Rolfe 1998), highlighting the need to involve clinical nurses in the conduct of research to challenge long-held views. Inevitably, the perception of research as separate from nursing fosters mixed attitudes of
clinical nurses towards research, though participants most notably emphasized negative views. In some instances, there was a perceived resentment among clinical nurses towards research agencies, which participants credited to the latter increasing their workload.

“The clinical nurses do not consider research to be important. They consider it to be umm (...) a nuisance. Because normally when you’re doing research, you’re always asking them to do more for you. Everything is extra to standard care. And (...) It’s more work for the clinical nurses.”
– P3, senior research nurse.

The perceived separation of research from practice hampers research utilization, as those in clinical areas do not trust researchers unless nursing leaders in their areas are supportive of research, a key discussion in the following sections. According to my data, the divide between clinically focussed nurses and those who are more academically prepared stem from clinical nurses’ mistrust of both research and researchers. This mistrust revolves around the issue of context and how people outside of the clinical area do not understand the struggles healthcare workers face in the clinical area. This further emphasizes the role of self-categorization in that clinical nurses view nurse researchers as out-groups unfamiliar to their in-group norms and goals.

This view presents a challenge for nursing research utilization as doctorate nurses move out of the clinical area into academia as a consequence of this mistrust and lack of value that persists in the absence of organizational structures to support doctorate nurses in clinical practice. Subsequently, these doctorate nurses then lose valuable trust and credibility they once had as a member of that clinical area. It was evident from my data that clinical nurses perceived their clinical area and its challenges as unique and having a qualified nurse researcher familiar with their context was seen as key in trusting the applicability of the research to their particular context.

However, the account of one participant differed slightly from the accounts of other participants although this was subject to various conditions as, upon further probing, it was found that the university lecturers who worked with this participant had built a rapport with clinical nurses in the unit.
Additionally, the research question for the particular research in the unit arose from the staff within the unit itself, with the senior charge nurse contacting the university lecturers to initiate research. This shows a relationship between the sub-categories building relationships and forming workplace culture, as explored in sections 5.3.1 and 5.2.1 respectively.

Furthermore, participants claim that clinical nurses, especially those who are non-degree trained, view the educational qualifications needed to conduct research as reaffirming their stance of research as an elitist activity. This echoes the consistent findings of several studies that found challenges for research utilization by clinical nurses who have more clinical experience and qualified at a time when research was not an integral part of the nursing curriculum (Lacey 1994; Closs et al 2000; Kajermo et al 2008; Saunders et al 2016). It is also apparent that self-categorization as in SIT (Haslam et al 2003) plays a role in clinical nurses defining research as separate from their identity, perceiving it to be “an ivory tower”. This elitist perception further impedes research utilization by developing a mistrust for research among clinical nurses:

“Another challenge would be that a lot of nurses, particularly (...) older nurses, really lack confidence. Quite a lot of them don’t have a degree, will have never had exposure to research methods or evidence-based practice THEORETICALLY. So I think there’s an organizational mistrust

– P13, senior charge nurse.
among some nurses that nursing research is very academic, it’s done by other people, it’s kind of an ivory tower, it’s not for us.”

– P8, chief nurse.

Next, it is evident from the data that this perceived separation of research from nursing has consequences for how nurses value research in relation to their clinical practice, being unable to make the connection between research and clinical practice. Most participants shared the opinion that frontline clinical nurses who form the majority of healthcare staff have little appreciation on how research informs their practice:

“Whether you’re in a research nurse position or you’re a nurse researcher, or you’re a nurse working in the ward or (...) it should be part of what you do in your practice. We wouldn’t have all the treatments that we can offer now if we weren’t engaged in research and I think.. (pause) clinical staff... I don’t know that they necessarily always associate that with research, so it’s just trying to remind people that actually, what we’re doing is because we found out that this is the best thing to do through doing research.

– P1, senior research nurse.

Participants claimed negative attitudes tended to view research as elitist, leading to a perceived disconnection of research from practice. However, Le May et al (1998) found that although clinical nurses may view research as elitist, they acknowledge research as important to practice. Clinical nurses in that study claimed to be unable to take part in “the world of research” (Le May et al 1998, pp. 435) due to working commitments, an assertion that is consistent over time (Kajermo et al 2010). This points to the role of leadership in providing clinical nurses with the socio-structural resources to facilitate engagement of clinical nurses at all levels with research, consistent with Kanter’s (1977, 1993) theory of empowerment.
5.4.2 Changing research engagement

Following the majority of participants describing clinical nurses’ perception of research as separate from nursing, several assertions arose on the way nurses are allowed to engage with research. The concerns with research engagement traversed traditional pathways within the profession, encompassing issues in education, research, and clinical nursing. This sub-category therefore presents the participants’ views on improving the way nurses engage with research across the profession to challenge the perception of research as separate from the nursing role.

Involving clinical nurses in research

Certainly, participants’ prevailing notion was to involve more clinical nurses in conducting research to make research more equitable for all nurses and entrench research into nursing practice. There were suggestions for nurses to rotate between clinical and research roles but concerns were had for the reluctance of both sides to be involved in the role of the other. Many reasons were cited – lack of support from management and differing interests and competencies, among others. Yet, participants were keen to involve clinical nurses in research, with the aim of bringing research squarely into nursing practice:

“I think by (…) Getting more nurses to do their own research. And that nurses emm (…) is part of your practice, not an added extra, it’s something that we all should be involved with and take part in. Or look at opportunities, to introduce, or read about.”

– P5, senior research nurse.

Similarly, Bostrom and Suter (1993) suggested involving clinical nurses in the process of clinical research to increase research use in practice. Their study found that clinical nurses’ involvement in collecting data and collaborating in research was a stronger predictor for research use than attitude towards research, education, position, or clinical experience. More recently, a systematic review by Squires et al (2011) presented involvement in research activities as an inconclusive individual determinant for research utilization due to a small number of studies in this area. Since then, contemporary studies on reducing the theory-practice gap recommend clinical-academic collaborations, citing a higher exposure of research for clinical nurses as facilitative of evidence-based practice (Heaton et al 2016; Huston et al 2018). Inevitably, as clinical-academic collaborations become a norm and nurses have increasing involvement with research in the clinical area, there is support from the organizational behaviour field that this new culture for research is internalized via nurses’ identification with
the profession, i.e. professional identity (Ashforth and Mael 1989). This would achieve the participants’ aim of embedding research within the nursing role, leading to sustained research utilization.

Making the connection

Further, I gleaned from the data that the motivation to spread awareness of research to others is commonplace for participants in this study. This clearly shows their enthusiasm in bridging the gap between research and practice through changing the way clinical nurses engage with research. Given that most participants were research nurses or had conducted research as part of their educational qualification, this reinforces the findings of Björkström and Hamrin (2001) that involvement with research resulted in better commitment to research. Additionally, their perceived need to highlight contributions of research to nursing practice further underscores the disconnection between clinical nurses and research.

“There was actually one of the advanced nurse practitioners was having a discussion with a couple of nurses and I was walking past and she said to me “do you remember when this is what we used to do and this was right (...) and now we’re doing this.” So I took that as a prime opportunity to highlight the fact that (...) “well actually, that’s because of the findings that we’ve had from research that this is why we now do it this way, we now know that this way is better, so(...)” while on a daily basis you’re always engaged with staff and talk about research (...) you can find opportunities that you can just emphasize the point as well.”

– P1, senior research nurse.

The aspiration of changing research engagement in nursing extends further into education. Importantly, participants acknowledged the diversity of teaching methods in nursing research that exists in different nursing programmes at different universities, noting how this would lead to various outcomes for the individual nurse. Nevertheless, the overall view was for nursing students to have practical engagement with research in the clinical area for them to be able to apply research in their practice. The views on teaching research to undergraduate nursing students revolved around making research more tangible rather than abstract, emphasizing the value of experiential learning. This value for experiential learning could stem from nursing’s development of knowledge, where nurses were traditionally apprentices in hospitals before moving to universities for formal education (Rodgers 2005):
“The training that the staff get at university does not reflect real life. It does not reflect clinical research. And I think they just (...) the word research conjures up the wrong ideas for nurses. Because they are not used to doing it in their training, you have the research module to do (...) and it’s not a clinical (...) it’s never a clinical project? And I think they need to be doing a clinical project or they need to be doing an audit. Where they actually see what happens and what they can change.”

– P3, senior research nurse.

The consequences of separating research from nursing practice is evidently far-reaching as a participant with experience of teaching post-registration nursing programmes comments on how nurses struggle in situating their research knowledge within nursing practice. The failure of nurses to combine their clinical knowledge with their knowledge of research further emphasizes the consequences of incongruence between research and nursing practice paradigms (Mulhall 1997):

“They couldn’t really understand WHY they were doing something? So they knew about research, they could tell you about research design. But if you said, “why are you doing it that way?” they could give you the evidence but they couldn’t tell you why they were doing it. They couldn’t join the dots of why they’re doing things as a nurse. They just don’t understand that.”

– P12, clinical-academic nurse.

Nursing scholars have consistently suggested that researchers make the real-world research process more explicit and to increase engagement with clinical practice in order to alleviate this perceived competing paradigm (Mulhall 1997; Kajermo et al 2000; Scala et al 2016). Moreover, participants suggested dissemination of findings to clinical nurses in areas where the research was conducted and including them in study designs that were relevant to clinical nurses:
“Always go back and talk to the people that enabled that work to happen, because often, a lot of the nurses (...) one area has sort of done really well and as an undergraduate, any work that you were doing, you just presented what you done, what you find. Did it in whatever way, you know, a poster, notes about it, put it up on a pin board, but it just meant that everybody in that ward got feedback on what was going on. But I don’t see a lot of that necessarily going on in the areas that I work.”

– P10, senior research nurse.

The issues raised in this sub-category revolved around the participants’ perception of improving the engagement of clinical nurses with research. This relies partly on the value of experiential learning, in line with the development of nursing knowledge, and evidence from the literature of competing paradigms between research and nursing practice. Participants also described their view of clinical nurses’ inequity in the level of engagement they are allowed to have with research, indicating issues of socio-structural empowerment.

“I: What do you think – what kind of culture is needed to support enabling others to use research in practice?
P: (long pause) emm one that’s equitable. So (...) where everyone may be able to feel that that was something that they can have involvement with as well. And (...) one that enables so they can problem solve and find solutions in order to help people achieve different aspects, whether it’s in education or research. Emmm (...) and I guess one that if that – yeah, doesn’t box people in. I think the minute we start to box people into roles, then that’s like a supressing culture. Cause we’re not all (...) built the same way or think the same way or practice the same way so (...) I think nurses should be allowed to have the freedom to practice their nursing practice, practice their research, practice their education in their way. Maybe (...) still kind of supported within their clinical environment to do that. I think it’s possible.”

– P10, senior research nurse.

Kanter (1977, 1993) conceived empowerment as access to organizational structures of support, resources, information, and opportunity. This is consistent with the participants’ assertions of the involvement of all clinical nurses with clinical research activity and processes as one way of bringing the two separate worlds of research and nursing practice closer together. While the barriers within this is well-known in the literature (Scala et al 2016), it is undeniable
that consistently engaging nurses at all levels with research is prerequisite to developing a positive research culture within nursing (Edward 2015; Berthelsen and Hølge-Hazelton 2016).

5.4.3 Clinical staff investment

Following on from problematizing research as separate from nursing practice and aspiring to change nurses’ research engagement, participants emphasized the need to have clinical staff invested in research. This sub-category presents participants’ views on enabling clinical staff to drive the change process, revolving around their clinical questions and priorities.

Conducting research in practice

Focussing on embedding research within nursing practice, the participants underscored the need for clinical nurses to conduct research of their own. This proposition was substantiated by accounts from participants where clinical nurses were already involved with research in their clinical area, and it was apparent that findings from their study were easier to implement. Alternatively, for clinical nurses unable to provide input to changes in their clinical area, there was an apparent feeling of powerlessness in being unable to contribute to the practice change, manifested by the view of decisions being made “from high up”. This reaffirms the significance of sharing leadership in balancing power dynamics and making decisions together, previously discussed in section 5.3.2. The notion of empowerment as a prerequisite to research utilization is evidently related to autonomy. Several participants spoke of the autonomy they themselves or others gained through being empowered by conducting research. Yet other participants shared experiences of facilitating practice change by granting others the autonomy to choose what they want to change in their practice and self-develop a plan for the said change.

Evidence from the literature supports my findings, with studies showing clinical nurses’ direct involvement with research projects as a significant predictor for research utilization (Tranmer et al 2002). In my study, the involvement of clinical nurses in research within their own clinical area exists, though sporadic and dependent on the value of research to the relevant nurse managers for that area. This is consistent with a systematic review that found both nursing and managerial leadership support as essential for clinical nurses to be involved with research activities (Scala et al 2016). Furthermore, participants believed that having clinical nurses drive the research and initiate the research question would bring research squarely into nursing practice and facilitate the implementation of research findings to practice:
“So that we start changing this concept whereby you have research who’s doing research, clinical doing clinical. It should be that all clinical staff are engaged in research activity and therefore they see the process, they see the results. And they’re the ones who’s actually have asked the initial questions, therefore it’s in their investment. In their (...) best that they actually do you know, they implement change.”

– P4, senior research nurse.

The account of one staff nurse demonstrates the significance of having clinical nurses invested in research. She described how open everyone was to changing their practice according to research findings from a study that was driven by their own clinical problem. In this scenario, nurse academics collaborated with clinical staff through initiation by their senior charge nurse. All clinical staff worked together with the nurse academics on managing alcohol withdrawal for inpatients where this previously caused aggression towards clinical nurses. Through my interviews, I found further examples of research by clinical nurses in topics ranging from clinical nurses’ break times to patient discharge. Clinical nurses conducted these studies with support from their senior charge nurse and were able to apply research findings. Though it has to be noted here that some challenges existed, for instance, the resistance of medical colleagues as previously described in section 5.2.3 navigating professional boundaries.

During data collection, I came across several research initiatives by clinical nurses that were deemed as “quality improvement (QI)”. The confusion between QI and research deepens the gap between research and nursing as several scholars attempt to clarify the difference (Newhouse et al 2006; Shirey et al 2011; Arndt and Netsch 2012). QI projects reinforce the notion of research as elitist and separate from nursing practice, while limiting clinical nurses’ development and use of robust methods to investigate clinical problems. QI projects also affect nursing as a profession as opportunities for dissemination of findings are more limited (Newhouse et al 2006; Shirey et al 2011), narrowing the capacity to build nursing scholarly practice and advancing the profession. Nevertheless, clinical nurses’ motivation to investigate issues affecting patient care paints an encouraging picture, pointing to the necessity of nurse researchers in the clinical area to guide and act as research champions.

Identifying research champions

This aligns with participants’ view of the role of champions for each clinical area who have an appreciation for individual ward cultures. In emphasizing the need to consider the input of
clinical nurses, it was clear that direct experience of the clinical area was valued in determining how and what changes were to be made in that clinical area. From my interviews with participants who work in diverse roles, it was comprehensible that working clinically was in good standing with clinical nurses to ensure that the producers of research fully understood their unique clinical context. Having current clinical experience was seen as a coveted characteristic of a leader, to the extent that it implied a certain level of membership with the clinical nurses, which further relates to self-categorization. According to the data, several factors contributed to this perception of membership, including recentness of clinical experience, hours worked, attire worn to the clinical area, and the willingness to be involved in direct patient care.

“Being there from 7 in the morning till 6pm at night, day after day after day. They have to be visible. Because as soon as the clinical team thinks that we’re always in an office, sitting there you know, drinking tea. Which is the perception. We lose an opportunity to say actually, we’re in with this, with you. We’re in it together.”

– P4, research nurse manager.

The criteria of research champions as equally balanced in academic qualifications and clinical experience shows the magnitude of self-categorization in nurses’ research utilization. The data shows that the credibility gained from being seen as a member of the clinical area is vital in both the conduct of research and use in practice. Indeed, several participants spoke on the disadvantage of removing oneself from the clinical area in being able to change practice and promote research. Likewise, a systematic review looking at building clinical nurses’ research capacity in practice (Lode et al 2015), identified the role of research champions, most likely nurse researchers, as key in developing a research culture in clinical areas. This is similar to the participants’ view for research champions to facilitate clinical nurses’ investment in research.

“If they’re not engaged then we could probably do nothing, we could throw as many people at it as they like but it won’t change practice umm (...) so... we need – I suppose we need those champions, we need those influencers, we need people to take on the ward and run with it.”

– P15, chief nurse.

Finally, participants called for formal organizational processes to allow clinical nurses to conduct research in their working time and highlighted the benefits of making research
equitable for all nurses in closing the gap between research and clinical practice. Notably, the manner in which nurses were to be *permitted* rather than encouraged to be involved with research points to structural barriers within the organization that prevents this from happening:

“And allow people permission to do that if you know, as part of their role, or in their working time. And therefore you’ve got an entire ward, the department, that’s INVESTED rather than having somebody who’s known as a research person. Cause again, I think it just gives you that (...) impression that it’s not for everybody? It’s for (...) that one person?”

– P10, senior research nurse.

Participants viewed the participation of clinical nurses in studies of self-identified clinical problems within their own context as a solution to the perceived elitism of research. They also saw research arising from clinical nurses as easier to implement as it is based on research questions of relevance to them. They perceive the guidance of clinically based research champions as essential in driving the research process, additionally addressing the specific culture and context of the clinical area.

This last piece of data from this sub-category shows a clear connection between the sub-category *clinical staff investment* and the next sub-category, *spending time on research*. The assertion made from the data is for clinical nurses to be given opportunities via deliberate organizational structures and policies to enable them to conduct and/or participate in research within their clinical areas. The next section explores this concept in more depth, including the concept of lack of time, which is the most commonly cited barrier to research utilization (Kajermo et al 2010).

### 5.4.4 Spending time on nursing research

Participants discussed the variety of reasons clinical nurses have limited involvement with research with the majority citing a lack of resources, especially in terms of time constraints. Accordingly, this sub-category discusses the issues inherent in giving nurses the non-clinical time they need to understand and be involved with research as indicated by the data.

*Time and culture*

It was clear from the data that participants strongly believed clinical nurses needed time during their working hours to understand research and question their practice to increase their involvement in research. Participants saw the importance of giving clinical nurses the space and time necessary to reflect and improve patient care. This differed from the culture of
busyness valued in healthcare, emphasizing time for delivering direct patient care (Scott-Findlay and Golden-Biddle 2005; Thompson et al 2008; Antinaho et al 2015).

Additionally, participants revealed that the organization gave priority to hands-on training for staff over nursing research and education. This, once again, reflects the assertion of nursing scholars of the prevailing culture of busyness in healthcare (Scott-Findlay and Golden-Biddle 2005; Thompson et al 2008). Characteristic of the culture of busyness is physical action and motion (Thompson et al 2008), here demonstrated to be valued over reflection and reading activities typical for research:

“The problem is (...) most ward or department based nurses don’t get any non-clinical time. Apart from mandatory training or potentially for (...) education. So until (...) I think you can’t give people time that’s not direct patient care, then it’s kinda impossible. To do.”

– P6, senior research nurse

While some participants maintained that those in senior management posts were supportive and encouraging of research or QI efforts, it remained consistent that direct patient care was prioritized and nonclinical time for research was a rare occurrence. Although some in leadership positions may be encouraging of research, it proves to be challenging when others in higher management positions do not share this view. According to a participant, non-clinical time for research activities are often redirected towards direct patient care due to the perceived higher need for clinical nurses delivering care than involvement in research activities. Interviews with those in senior management positions reaffirm the value of mandatory training, often involving technical education, over research activities that foster critical thinking.

Further evidence from my interviews point to the impact of organizational priority on moving patients through the healthcare system on the ability of clinical nurses to use research in their practice. Participants were united in their view of research being low on the priority list for the healthcare service, with patient flow being one of the top. Interestingly, this is consistent with a recent study in Sweden that found research-based guidelines were less likely to be implemented when it contradicted the “flow culture” of a clinical unit (Kirk and Nilsen 2016). This suggests an inherent value for patient flow in healthcare across contexts, a troubling notion as it apparently hampers research utilization. Participants in my study were certainly
of this view, emphasizing that research utilization is not seen as a priority and hence tends to be less encouraged by managers.

“And I think it’s just much harder for people to have time to think beyond the word “flow”? That is the driving force in healthcare. Is maintaining flow. Patients coming in the front door and the patients being discharged. And that, to some degree is what people focus on. There’s very little recognition of the fact that actually doing research might be one of the solutions to this problem.”

– P8, chief nurse.

It is perhaps this organizational priority on patient flow that explains my data showing managers’ value of clinical nurses as an important commodity in delivering patient care. Consequently, constraints exist on human resources in allowing nurses the time they need for professional development and improving patient care, including research. The naming of this sub-category as spending time on research acknowledges healthcare managers’ competing priorities and view of nurses as a commodity in healthcare. This further emphasizes the necessary financial investment in fostering a research culture for a return in nurses’ research utilization to improve quality of care. The returns for investing in a research culture in healthcare extends beyond research-based practice as both my data and literature has indicated clinical pressures and focusing on patient flow as one of the causes of burnout (Lee and Akhtar 2011; Prapanjaroenrisin et al 2017). Clearly, as a participant describes, engaging clinical nurses and their managers in research can be a challenge yet is a welcome break for them from the pressures faced in a clinical unit.

Next, it was encouraging to find that performance indicators on nurse managers’ annual appraisals included an item on personal development plans, often on supporting others’ post-qualification professional development. However, these tend to exclude further academic education or research efforts with a focus on mandatory practical training, leading to priority given by managers to these. This demonstrates how organizational culture feeds into managerial priorities and influences leadership decision-making:

“I: Are there any performance indicators in their (nurse managers) roles in relation to research?

P: No. There’s nothing at all, I mean, some would have a PDP, personal development plan? You know, the kinds of things you’d do if you were
working in critical care. IVs, or trachy or whatever technical bits of it but they’re NOT kinda post graduate or masters level and actually, it’s hard enough to let staff off the wards just to do those things? Let alone attend for research modules or other things. The PDP part is therefore predominantly focused on what might your mandatory training plans be? Rather than, you know, so would you like to do a little bit of research in X or Y.”

– P11, senior nurse manager.

Previously, it has been suggested that inculcating support for research and evidence-based practice into performance appraisals for nurse managers will improve research utilization (Funk et al 1995a; Gifford et al 2007). This further emphasizes organizational value for nursing research, acting as an artefact for underlying assumptions that drives organizational culture (Scott-Findlay and Golden-Biddle 2005; Schein 2010). Similarly, others have found healthcare organizations that embed values of Magnet hospitals, such as encouraging nurses to think critically of their own practice, perceive less barriers to research utilization (Karkos and Peters 2006).
Participants further discussed the issue of time for research from the perspective of nurses’ use of personal time for research. According to a participant, the busy nature of her particular clinical area led clinical nurses to prefer their off days to be undisturbed hence most were unlikely to pursue opportunities that would require an investment of time outside their working hours. The challenge of involving clinical nurses in research is inevitable for those who perceive research negatively yet for those who are interested and keen on research, finding time for research remained an obstacle. From the interview, it was apparent that a lack of organizational support for clinical nurses to conduct research led to their disempowerment to be involved with research. This further underscores Kanter’s (1977, 1993) definition of empowerment as access to organizational structures of support, resources, information, and opportunity:

“I: Why is it that nurses don’t really do their own research?
P: I think nurses just don’t get the same access to research, perhaps? Or encouragement. Yeah, and having time to do things like that, you know, to take time out to do a research study, nurses – certainly when I did my dissertation, they were telling me anything (...) additional to their clinical work was often done in their own time at home. Studying and things like that, so (...) it’s probably that as well.”

– P7, senior nurse practitioner

In the above interview, the participant worked clinically and was one hour late to the interview, looking flustered and out of breath. Throughout this study, I found it difficult to secure interviews with nurses who worked clinically as compared to those in management or research positions, reflecting the minimal time they had to spend on research. The one staff nurse I did get to interview was recommended by the senior charge nurse, highlighting the key role of nurse managers in supporting research in clinical settings. Likewise, interviews with clinical nurses who claimed exceptional support for research by their nurse managers reflected a more positive culture for research in their clinical area.

Lack of time as a barrier to research utilization is well-known (Kajermo et al 2010), with scholars owing this to an inherent culture of busyness in healthcare (Scott-Findlay and Golden-Biddle 2005; Thompson et al 2008). Similarly, the existing pressure for clinical nurses to complete clinical tasks relating to patient care is a shared view of all participants regardless of role and professional background. Several participants spoke of clinical nurses not having time
for anything other than direct patient care. Participants describe the need to constantly attend to patient care as draining of energy, leading to burnout that puts staff at a disadvantage for the mental capacity needed for research utilization in practice. Even when currently not attending to patients, participants with previous and current experience of being a clinical nurse share the experience of constantly thinking about the next task they needed to do and the next patient they had to see. These pressures of having to attend to patients linger cognitively for clinical nurses, making it challenging to engage them in anything other than direct patient care. All participants recognize the vital role clinical nurses play in the daily functioning of the ward, however, they express concerns on how this feeling of pressure and being constantly needed may impact on their ability to fully participate in the patient’s care in a meaningful way.

Participants with senior managing responsibilities acknowledge the existence of these clinical pressures for nurses, citing it as one of the main reasons for research and research use to be undervalued in clinical practice. The context of the clinical area, along with managerial support for research, is significant in enabling clinical nurses to embed research utilization in their clinical practice. Participants in senior managing positions recognize the benefit of taking time for reflection that is involved when clinical nurses actively participate in research and use research in practice. While this is encouraging, it is worrying that their peers in similar organizational decision-making positions do not necessarily share this view.

“It’s a big, big workforce. And those nurses that I talk about are overwhelmed in their area with their priorities and pressures. That managing those systems around and unfortunately research is often the thing that’s probably last on their minds.”

– P11, senior nurse manager.

Interestingly, Adamsen et al (2003) found that nurses exposed to an educational programme on research perceived less barriers regarding lack of time in being involved with research in both their working and leisure times. Thompson et al (2008) concluded that nurses perceived lack of time because of a lack of leadership support for research and the absence of a research culture in their clinical area. Additionally, Thompson and colleagues (2008) suggest that nurses use busyness as a defence mechanism in response to the unfamiliarity that is research to the clinical nursing identity. This highlights that non-clinical time for research, while helpful, is unlikely to achieve sustained research utilization alone as compared to a concerted effort in providing nurses with the socio-structural resources needed to foster a culture of research in clinical areas.
I also found that inequity exists in funded research for clinical staff to afford them the time for research. Participants commented on how these opportunities went mostly to fund research for medical staff rather than nursing. This shows the importance of financial investment in affording clinical nurses time for research, inevitably influencing their perception of research in relation to the nursing role. The lack of formal structures to support nursing research in clinical practice further emphasizes research as separate from nursing.

“But those projects are funded. And are for (...) medical staff. There are not enough nurses doing their own research. They don’t have time. You know, you would have to have some time allocated. Outwith your clinical role, clinical responsibilities.”

– P5, senior research nurse.

This sub-category explored participants’ perspectives on time for clinical nurses’ to conduct and be involved in research. While participants discussed the need for time to be involved with research during working hours, a review of the literature uncovered the role of culture. Thompson et al (2008) explicated the role of a supportive research culture for clinical nurses and its impact on how nurses perceived time for research utilization. This was consistent with my data, which showed how organizational culture influenced leadership priority for research and subsequently affected the research culture for their clinical area.

5.4.5 Fulfilling graduate potential

Through early interviews, it was clear that most participants gained their motivation for research through their education and similarly claimed that new nursing graduates had an appreciation for research. This sub-category explores sustaining that motivation for research in clinical practice upon entering as a novice.

Most participants educated at baccalaureate level and above spoke highly of their research training. Still others maintained the value of experiential learning and claimed their interest in research stemmed from being involved with clinical research. This perhaps highlights the diversity of education for research in nursing programmes, resulting in varying graduate outcomes. However, the efforts of nurse academics in fostering motivation and value for research in student nurses needs to be supported in practice to build on the foundations laid during undergraduate training. The role of workplace culture in providing a continuous environment where research is supported is significant in facilitating nurses’ research use in practice:
“My impression is when nurses come out of university, they are keen as mustard. They know research, they really do know that. Umm I think when they get into clinical practice, I think that (...) if you’re in an area that doesn’t value research, then that enthusiasm will go. Because it’s not supported and engendered and developed”.

– P12, clinical-academic nurse.

Maben et al (2006) confirms the influence of organizational culture and leadership support on newly graduated nurses’ professional values. In a longitudinal study investigating newly qualified nurses’ experience of applying theory to practice, Maben et al (2006) found that organizational context significantly affected graduate nurses’ ability to transfer learnt ideals to reality. This included research-based practice and patient-centred care, which participants in that study found near impossible to incorporate in their care due to organizational and cultural factors. This is consistent with the findings of Forsman et al (2009) who found that newly graduated nurses used research in practice lesser at three years after graduation than at one year.

Similarly, a participant in my study pointed to how nurse graduates’ analytical ability changes after being enculturated in a clinical setting that varies greatly from their university environment that prioritizes learning. This shows the impact of workplace cultures on the professional socialization of student nurses, also supported by several nursing scholars (Maben et al 2006; Feng and Tsai 2012; Gibbon and Crane 2018). Further, this finding emphasizes the urgency of improving engagement in nursing across the profession to provide a consistently positive research culture:

“Their critical enquiry about things and their kind of analytical quality a bit and just become almost like (...) they become uhh adjusted to the system which is you’re not thinking about it that way, they’re thinking about it from a purely practical basis.”

– P11, senior nurse manager.

This sub-category presented the findings within my data on how organizational culture of clinical areas affect the professional values and motivation of new nursing graduates in realizing their ideals for research-based practice. Data from my interviews align with current literature that underlines the disequilibrium between nursing practice and nursing education to impact on the ability of nurse graduates to fulfil their potential for research utilization (Florin et al 2012).
5.4.6 Category summary

The sub-categories clustered under this main category described research as distinct from nursing practice, limiting the involvement of nurses outside academia. Participants asserted the need for research to be more equitable within nursing to encourage the involvement of all nurses with research. Participants thought this would firmly place research within the nursing role and facilitate clinical nurses’ research utilization. Hence, these sub-categories were gathered under the main aim recognized as integrating research into the nursing role, forming the code for this main category. Moreover, it was apparent from the data that participants were of the view that research needs to be at the core of nursing for research utilization to occur and be sustained. This indicates the significance of this main category in explaining the findings of this study as the other two main categories, shifting culture and building relationships work to serve the main aim of bringing research in from the peripheries of nursing practice. As the main category with the best illumination of my study findings, I identified integrating research into the nursing role as the core category in the theoretical model.

Integrating research into the nursing role begins from undergraduate education and is consistent throughout nursing practice, extending further into the norms of nurse researchers and academics who engage clinical nurses in research. The integration of research into the nursing role is further reflected by local processes of research that fund nursing research to be done in a clinical capacity with academic involvement. The notion of this main category revolves around the recognition that research is an integral part of nursing for all nurses at all levels. Participants saw this as the ideal position of research in nursing and suggested various factors in organizational structure that impedes this as mentioned in individual sub-categories.

Kanter (1977, 1993) defines empowerment as access to organizational structure of support, information, resources, and opportunity. Similarly, my analysis of this main category shows that increasing nurses’ access to organizational structures that prioritise research and research-based practice in these four domains could affect nurses’ conception of their professional identity. This highlights the essential organizational support nurses need to achieve research utilization.

There is growing evidence that suggests structural empowerment influences psychological empowerment (Spreitzer 2008). This parallels with data from my study, which suggests clinical nurses function best when given the autonomy and sense of ownership that research provides:
“I think you find that people who’re doing research, they flourish because they do their own thing. And they can do things their way, they are seen as an independent practitioner, they can make judgment calls on the patients without having to go and ask anyone. You don’t have that autonomy in a ward. And I think there’s been a couple of people that I’ve employed who have been, let’s say (...) nurse manager hasn’t thought much of them in the clinical area. And I brought them out, put them into research and my god, this is a band 5 who is now acting band 6. She’s incredible. Because she’s never been allowed to flourish. She’s never been allowed to think on her own. And have ideas and be listened to.”

– P3, senior research nurse

The quote above demonstrates the provision of psychological empowerment from conducting and being involved in research. Conger and Kanungo (1988a) first defined psychological empowerment as the identification and removal of conditions that foster powerlessness, which enhances feelings of self-efficacy among organizational members. Spreitzer (1995) further refined this into four dimensions of equal importance in achieving psychological empowerment. These dimensions are – meaning in one’s work; competence as in self-efficacy; self-determination that reflects autonomy in self-efficacy; and impact in influencing outcomes at the workplace. The main category integrating research into the nursing role manifests all four dimensions of psychological empowerment. Meaning in one’s work is achieved through better alignment of academic and clinical values, meeting the expectation of research-based practice by new nurse graduates. Feelings of competence and self-determination would be enhanced as clinical nurses’ take ownership of their practice and can be confident that they are providing research-based patient care. This would also provide impact for the nurse within the clinical area as they answer relevant questions to their context and further contribute to meaning, fulfilling all areas of psychological empowerment.

Illustratively, a participant shared that her perception of research changed after working as a research nurse, influencing her values for evidence-based practice. This shows that access to organizational structures that prioritizes research for clinical nurses can affect how nurses perceive research in relation to nursing practice.
"So actually working as research nurse, it just (...) I suppose it takes the fear out of research or the illusion of it, which is not what the reality is. And I think it’s a real shame because as clinical practitioners, as doctors, nurses, we all should be working from evidence-based practice.”

– P4, senior research nurse.

The removal of fear of research and understanding research as part of nursing practice indicates that structural and psychological empowerment influences aspects of professional identity as constructed by SIT. Moreover, the psychological empowerment gained from making autonomous decisions, as in most research, is similar to that found by others studying organizational behaviour (Wallach and Menller 2006). Additionally, van Knippenberg and Ellemers (2003) proposed that perceived autonomy facilitates an individual’s motivation to perform well on behalf of the group one identifies with. This has also been found to be true from a nursing perspective, as Rafferty et al (2001) found that autonomy and teamwork had a synergetic relationship, improving group performance with increased autonomy. This supports my finding that autonomy and ownership of practice, as in clinical nurses’ involvement in research, increases performance. Group performance is further guided by the group’s goals and norms and internalized by clinical nurses via identification with a professional group (Willetts and Clarke 2014). Hence the main category integrating research into the nursing role can affect nurses’ professional identity via structural and psychological empowerment, as shown in Figure 15 below.

![Diagram](image)

**Figure 15** Integrating research into the nursing role and the relationship with empowerment and professional identity
The above diagram succinctly depicts the theoretical links of my study findings for this main category. As seen above, the individual subcategories feed into the main category, forming the main attributes of integrating research into the nursing role. This is a large and complex main category with several issues, as previously highlighted, yet it can be surmised participants were of the view that clinical nurses perceive research to be separate from clinical practice, giving rise to significant barriers with research engagement. Participants then propose clinical nurses’ investment in research of their own clinical area, acknowledging the need for leadership support at an organizational level for this investment to come to fruition, which includes maximizing the potential of new nurse graduates. Structural empowerment was key to embedding research in the nursing role, which leads to psychological empowerment. Both forms of empowerment were then shown to effect individual motivation to collectively improve group performance and eventually influence professional identity. My data further indicates the assertions of participants that the conceiving research as part of the nursing identity ensures sustained research utilization.

5.5 Summary

My study data points to leadership as key to empower nurses structurally and psychologically to embed research in the nursing professional identity to achieve research utilization. This chapter discussed in detail the three main categories encompassing leadership for research utilization – shifting culture, building relationships, and integrating research into the nursing role. Each section ended with an explication of how the sub-categories fed into the main categories and its link to empowerment and professional identity as conceptualized by SIT. Additionally, leadership as defined in this study as an agent of change was apparent throughout this chapter. Participants’ views of leadership as a process of empowering others rather than focussing on the privileged few follows recent trends in the leadership literature. Professional identity, SIT, and empowerment is discussed at length in the next chapter, Chapter Six: Theoretical discussion, with cross-references where relevant to this chapter to evidence findings.
CHAPTER SIX
Theoretical discussion

6.1 Introduction
Contemporary leadership scholars suggest that leadership expectations within the last decade has shifted from an authoritative, powerful, hierarchical leader to one that is empowerment-based and develops other leaders (Fletcher and Kaufer 2003; Dambe and Moorad 2008; Haslam et al 2011; Northouse 2016). The findings from my study support this assertion in showing both structural and psychological empowerment as key in leadership for nurses’ research utilization. Few studies have suggested this relationship between empowerment and research utilization (Belden et al 2012; Kang 2015), however, knowledge of this remains on a descriptive level. This further underlines the value of qualitative research in leadership, particularly grounded theory in uncovering social processes. Using constructivist grounded theory, I have innovated a theoretical model through analysis of my study data using situational analysis as an analytical tool. Subsequently, I have found empowerment to influence research utilization via professional identity, an assertion that is missing from the current body of knowledge.

Previously, Chapter Five: Research findings has outlined my study findings and relations to the literature of the three main categories – integrating research into the nursing role, shifting culture, and building relationships. I made links from the data to empowerment and elements of SIT to conceptualize professional identity, hence this chapter now focuses on explicating these theories to clearly show theoretical links between them as well as with the data. I do this by elaborating on each theory and cross-referencing with my data where relevant in addition to supporting literature, underscoring significant contributions of my findings to current knowledge.

I begin by discussing the current state of knowledge for nurses’ professional identity, indicating how my findings fill an identified knowledge gap. Next, I briefly explore other theories that were used to underpin professional identity and elaborate on SIT, evidencing where concepts relate to my data. I describe the advantages of conceiving professional identity using SIT, as perceived by my participants. Finally, I explain structural and psychological empowerment as it is known in the nursing literature and its’ relationship to SIT in both the literature and my data. I summarize the arguments I put forth for this chapter at the end.
6.2 Professional identity

Nursing professional identity is of high interest to contemporary nursing research, as evidenced by several emerging studies investigating professional identity from different angles (e.g. Deppoliti 2008; Miró-Bonet et al 2013; Mazhindu et al 2016), indicating a developing area of inquiry. It was recently recognized that professional identity is complex and multifaceted hence various operationalization of studies into professional identity is desirable and even necessary, especially for developing professions (Barbour and Lammers 2015) such as nursing. Accordingly, a review of the nursing literature shows a varied approach to studying professional identity, from symbolic interactionism (Fagermoen 1997; Deppoliti 2008), to communities of practice theory (Andrew et al 2009; Andrew 2012), and even genealogy (Miró-Bonet et al 2013). This results in a diverse understanding of nursing’s professional identity (Fagermoen 1997; Willetts and Clarke 2014) that would be an interesting subject for a systematic review as none currently exists. The lack of a systematic review synthesising nursing’s multifaceted professional identity into a comprehensive research area complicates current understanding of professional identity as competing interests rather than multidimensional in nature. Indeed, studies of nursing professional identity often characterize this highly potential research area as contested rather than complex and fail to note their findings as part of a larger whole within nursing’s professional identity (e.g. Öhlén and Segesten 1998; Mazhindu et al 2016).

A scope of the nursing literature shows that research into professional identity is often segregated into specific roles, for example nurse anaesthetists (Aagaard et al 2016), nurse practitioners (Tye and Ross 2000), prison nurses (Goddard et al 2019), mental health nurses (Crawford et al 2008), nurse academics (Andrew et al 2009; Findlow 2012), and student nurses (Grealish and Trevitt 2005; Marañón and Pera 2015). As a developing profession, it is apparent and reasonable that professional identity studies in nursing focus on developing new roles, either as a means of developing such roles in practice or understanding professional identity formation for educational purposes. However, this has led to a paucity of studies exploring in-hospital nurses’ professional identity, which constitutes the majority of nurses in the UK (Marangozov 2017), leaving much of nursing’s professional identity unexplained. The move of nursing into higher education institutes in the UK within the past two decades further indicates this to be a fertile area of inquiry. Moreover, it has been suggested that nurse retention and job satisfaction is closely related to professional identity (Horton et al 2007; Cowin et al
2008), pointing to the urgency of scholarship in this area in the face of a worldwide nursing shortage.

Although definitions vary according to the paradigm and purpose of a study, most nursing scholars define professional identity as nurses’ self-understood philosophy of nursing in relation to self and others in healthcare, which influences their perception of relevant work roles (Fagermoen 1997; Deppoliti 2008; Andrew et al 2009; Aagaard et al 2016). Other studies external to nursing similarly define professional identity as both intra and interpersonal constructs (Gibson et al 2010) based on factors such as attributes, beliefs, values, motives, and experiences (Slay and Smith 2011). Professional identity has been explored from several angles, for instance role identity (Currie et al 2010), socialization (Price 2009), and professional identity formation (Crigger and Godfrey 2014). However, it is important to note that these concepts are not synonymous yet are related to professional identity.

Role identity refers to the close interaction of one’s defined work role and the understanding of their self-concept in enacting said role (Chreim et al 2007). Thus it has been suggested that individuals may seek a change in roles should this not match their perceived self-concept (Nicholson 1984), as similarly found in the younger nursing generation where conflicting personal and organizational values affected the job satisfaction of novice nurses (McNeese-Smith and Crook 2003). Nevertheless, professional identity is distinct from role identity as the former deals with the philosophy of professionalism specific to different occupations (Trede et al 2012) while the latter is the enacted behaviour of individuals or groups as defined by said philosophy and the interacting self-concept (Siebert and Siebert 2007). This distinction also applies to the separate concepts of socialization and professional identity formation. Socialization is the process of adaptation to social conforms of a group (Price 2009), while professional identity formation is an educational process in establishing the values of a profession in its students (Crigger and Godfrey 2014).

The term “professional” implies both specialist knowledge of a workforce and the social group of this workforce as separate from other vocations (Cruess et al 2004), making SIT a befitting theoretical framework as suggested by some nursing scholars (Falomir-Pichastor 2009; Willetts and Clarke 2014) and further affirmed by several examples in my data (e.g. section 5.3.1 building relationships; section 5.2.3 navigating professional boundaries). The sociological study of professions is heavily contested with the definition of a profession (Saks 1983; Barker 1992), though it can be generally understood as an advanced occupation with...
status and prestige in society, accordingly rewarded with significant pay and privilege (Yam 2004). The use of a list of attributes to achieve professional status has been criticized as characteristically patriarchal and inapplicable to nursing (Forsyth 1993; Liaschenko and Peter 2004). However, this approach is still widely used, and although its attributes has shifted over time, below are generally the traits an occupation is expected to show to achieve professional status (Adams 2010):

1. A body of specialized knowledge.
2. A legitimate expertise in a specialized field.
3. An altruistic commitment to service.
4. An unusual degree of autonomy in work.
5. A code of ethics and conduct overseen by a body of representatives from within the field itself.
6. A personal identity that stems from the professional’s occupation.

The use of this list of professional attributes is contestable, as it has been argued that the concept of professions should be redefined in the face of a postmodern world (Saks 2012) and its very notion challenged in the ongoing proletarianization and depprofessionalization debate (Yam 2004). Indeed, the rise of managerialism in healthcare (Correia 2013), the reformation of healthcare as market-focused rather than medical modelled (Allsop 2006), and the decreasing monopoly of knowledge in a digital age (Hardey 1999; Powell et al 2003) impacts on the contemporary understanding of a profession. These current issues of professionalism brings urgency to nursing research utilization as healthcare research and higher education institutes are increasingly being called upon to contribute to society and demonstrate their worthiness for public investment (Calhoun 2006; Martin 2008). Expediting nurses’ research utilization by conceiving it as part of their professional responsibility and providing the necessary empowering features as outlined in my findings (e.g. section 5.4.3 clinical staff investment and section 5.4.4 spending time on nursing research) would contribute to achieving this goal and generate benefits for both public health and financial costs of healthcare.

The conception of nursing as a profession itself has often been debated (Salvage 1988; Rutty 1998; Liaschenko and Peter 2004). As a result of the introduction of Project 2000 by the organization that is now the NMC, nurse education shifted into universities in the early 90s in the UK and signalled its move towards professional status (Findlow 2012). Central to the debate of nursing as a profession is the need for a bachelor degree as entry-level education for nurses and their ability to practice autonomously (Parkin 1995; Wade 1999; Wynd 2003).
Additionally, the very concept of a profession contrasted with nursing’s image as a feminine and caring vocation, as the former encompasses ideas of power and autonomy, problematizing acceptance of nursing professionalization (Parkin 1995; Yam 2004; ten Hoeve et al 2014).

Some assertions exist of professionalism as a continuum, on which particular occupations are measured and described as either non-professions, semi-professions or true professions (Greenwood 1957; Goode 1969). Law, medicine, and clergy are examples of traditionally recognized true professions, while less specially trained and occupations involving more common knowledge such as waitressing and cleaning sit at the opposite end as non-professions. Other occupations that may possess some or all traits of a true profession to a lesser degree are located between these two ends of the continuum and, indeed, where nursing sits on this continuum continues to be debated across the globe (Brown et al 1987; Çelik et al 2011; Saied et al 2016).

However, the evidence that indicates nursing professionalization as a positive impact is undeniable, not only for the nursing workforce, moreover on individual, organizational, and health system outcomes (Gunn et al 2019). For instance, higher nursing education, typical of professionalization, is inextricably linked to lower patient mortality and improved patient outcomes (Kutney-Lee et al 2013; Aiken et al 2014; Cho et al 2015). Additionally, autonomy for nursing practice and participation in decision-making has been shown to improve quality of care, retain experienced nurses and thus reduce healthcare costs (O’May and Buchan 1999; Boyle 2004). This points to nursing professionalization as a necessity for quality healthcare rather than achieving nursing’s own professional project, as suggested by some (Salhani and Coulter 2009).

Nursing professionalization is characterized by higher standards of education and qualification to gain expertise; the creation and adherence to professional standards and ethical codes that relate to specialized knowledge; increased professional autonomy and involvement in organizational decision-making; and, finally, active professional associations (Gunn et al 2019). Interestingly, several of these aspects relate to empowerment, particularly structural empowerment. For example, strengthening education and nursing qualifications to build areas of specialized knowledge requires opening channels of information, resources, and opportunities to nurses (Marsden et al 2003), simultaneously providing structural empowerment of the nursing workforce. Additionally, equipping nurses with increased professional autonomy needs to be alongside access to support, resources, and information.
(Sabiston and Laschinger 1995; Rao et al 2017), creating a reciprocal relationship between empowerment and professionalization. Hence empowering nurses towards research utilization as indicated by the three main categories of my theoretical model: *integrating research into the nursing role, building relationships,* and *shifting culture,* contributes to professionalization of the nursing workforce and impacts the wider society as it has been shown that nursing professionalization relates closely with welfare state policies (Gunn et al 2019).

Moreover, professional identity remains pertinent for recruitment and retention purposes. Previous studies have pointed to nurses’ low morale and poor public image as the main reason for high turnovers and poor recruitment, exacerbating the global nursing shortage (Somers et al 2010; Aboshaiqah 2016; Marc et al 2018). A decreased sense of professionalism has also been found to be the result of a lack of educational and decision-making opportunities for nurses (McCloskey and McCain 1987; Tanaka et al 2016), both important features of structural empowerment. Similarly, it has been asserted that organizational culture influences nurses’ professionalism (Manojlovich and Ketefian 2002), providing further support of my findings that indicate structural empowerment impacts nurses’ professional identity as I illustrated in section 5.2.4. The theoretical model of my study findings could potentially address these concerns relating to the recruitment and retention of nurses by improving nursing work conditions to foster a highly innovative nursing workforce that contributes to healthcare beyond direct patient care. Likewise, it has been suggested that an innovative nursing workforce is essential to the quality of healthcare and the financial performance of healthcare services (Kaya et al 2015).

Arguably, much of studies on nursing professional identity has largely focused on the socialization of student nurses (Deppoliti 2008; Johnson et al 2012; Marañón and Pera 2015), concentrating knowledge of this area to nurse education. Other aspects such as clinical and social performance of nursing in relation to their professional identity exist as a minority in the body of literature, for example exploring the nursing professional identity from viewpoints such as their public image (ten Hoeve et al 2014), professional values (Fagermoen 1997), perceived working lives (Crawford et al 2008), self and team expectations of role (Aagaard et al 2016), and current standing within the UK higher education setting (Andrew et al 2009). This speaks to the nuanced nature of professional identity, yet connections between nursing research utilization and professional identity remains absent in the literature.
My study found that clinical nurses’ understanding of their professional identity influences their receptivity of research in practice, as highlighted by the data in Chapter Five: Research findings (e.g. section 5.4.1; section 5.4.6). Participants in my study asserted that clinical nurses perceive research and researchers to be elitist and separate from their role. Additionally, there were suggestions of a lack of credibility of researchers due to their removal from clinical practice, demonstrating a clear outgroup perception. Although participants had nuanced views on research utilization, the perception of nurses experienced in research as a separate group to clinical nurses was consistent across participants, indicating this to be a significant view. However, participants who were exposed to research as part of their role had positive perceptions of research and saw themselves as having a role in research utilization (see section 5.4.2). This clearly shows the impact of empowerment on research utilization, affirming findings from other studies that used quantitative methods (Belden et al 2012; Kang 2015). Additionally, change agents intending to apply research to practice were only perceived to be in-group members once they were evaluated to share the group’s values and motivations which involved a significant degree of relationship building (see section 5.3.5). These findings are the first to link professional identity with research utilization, showing a significant contribution to knowledge and opening new avenues for future research.

The majority of professional identity studies limit professional identity as a concept at the individual level, due to their use of theoretical underpinnings that focus on self-concept (Johnson et al 2012). The tendency to use self-concept theories as a conceptual lens for professional identity captures just one dimension of this multifaceted area of inquiry, limiting our full understanding of professional identity. Conceiving professional identity at the group level further extends knowledge by enabling researchers to scrutinize its impact on the nursing workforce as a collective, similarly suggested by Willetts and Clarke (2014). The use of SIT as a theoretical framework evidently suits the concept of professional identity as SIT takes into account both individual and social elements in conceiving identity at the group level (Ellemers and Haslam 2012; Willetts and Clarke 2014). Additionally, the dynamic nature of professional identity and the influencing role of context has been consistently acknowledged in studies of professional identity, parallel to SIT. From my data, it is apparent that SIT fits participants’ notion of professional identity in relation to research utilization, providing support to nursing scholars calling for its use in exploring professional identity (Falomir-Pichastor et al 2009; Willetts and Clarke 2014).
6.3 Social identity theory

Consistent with the notion of professional identity as multi-dimensional, studies of professional identity varied in their use of a theoretical framework to conceive professional identity (Beijaard et al 2004; Trede et al 2012; van Lankveld et al 2017). Currently, limited studies exist that use SIT to underpin professional identity though its suitability has been suggested (Willetts and Clarke 2014; Barbour and Lammers 2015). Studies that have used SIT seek to understand group behaviour and/or intergroup relations of particular professions and this has often been used in the healthcare context (e.g. Hekman et al 2009; Burford 2012; Thomson et al 2015), including nursing (see Falomir-Pichastor et al 2009). The use of SIT as a theoretical framework for professional identity in my study is the result of my analysis of participants’ views, consistent with a constructivist paradigm that guides this research. Some suggest SIT and identity theory as one and the same, only defined by differing emphasis (Stets and Burke 2000), however, my data shows that this differing emphasis is necessary in broadening our understanding of professional identity, as will be further discussed.

Moreover, SIT enables researchers to study professional identity based on the concept of group identification. It is asserted that group identification is inevitable and arguably necessary for individuals to function within an organization (Ellemers et al 2004). Henri Tajfel and John Turner first coined SIT as a means of understanding the effect of groups on human psychology (Tajfel and Turner 1979; Turner 1975), much to the opposition of psychological studies at the time that focussed on individual perspectives (Haslam 2001). SIT centres around the argument that members of a social group will favour other perceived group members over others based on the need for self-esteem through the process of social comparison (Hogg and Terry 2001). In fact, it is known that individual self-esteem and their self-identified group membership are closely related and reciprocal (Martiny and Rubin 2016), showing the significance of social identity to each individual. It is important to note that SIT is separate from self-categorization theory (SCT), which has derived from SIT and elaborates on the process of depersonalization and social categorization that gives rise to the phenomena of social identity (Turner and Reynolds 2012).

SIT proposes that individual self-esteem and their perceived social category are intertwined and provide a basis for their self-concept, hence motivating them to favour in-group members and a commitment to maintain positive group identity. It is suggested that these social categories are discrete and, depending on salience, provides a foundation for behaviour and cognition according to group norms in any given situation (Hogg and Terry 2001). This
assertion has been used in previous studies on nursing professional identity, for example, to understand the determinants for flu vaccination among nurses (Falomir-Pichastor et al 2009). Using SIT, it was found that nurses who identified strongly with the nursing profession perceived flu vaccination for nurses as a professional responsibility to protect their patients from flu, even more so than for self-protection. As a consequence, nurses with a strong professional identity were more likely to be vaccinated and it was recommended that efforts to increase flu vaccination among nurses should adopt the approach of vaccination as a professional responsibility rather than depend on vaccine information alone (Falomir-Pichastor et al 2009).

Most frequently used to underpin studies of professional identity external from nursing are Erikson’s (Stevens 2008) psychosocial theory and Holland and colleagues’ (1993) personality type theory. Erikson’s theory of psychosocial development describes the development of identity in line with human growth and development. According to this framework, genuine identity is not achieved until the person experiences trust, autonomy, industry, and initiative at the inception, infancy, and development levels (Stevens 2008). While this affirms, to an extent, the findings from my study of the magnitude of empowerment, Erikson’s theory of psychosocial development is apparently limited as a framework in my study as participants did not explore aspects of psychosocial growth. The psychosocial theory also corroborates with several other studies that suggests professional identity as dynamic, aligning with the impact of context as in SIT. Meanwhile, Holland et al (1993) constructed a scale of measuring what they called “vocational identity” using an 18-item questionnaire to measure individual confidence of one’s career goals, interests, and strengths that the authors believe determines decision-making ability in ambiguous organizational contexts. Though this facilitates individual career development and further personality research (Holland et al 1980), it is individual-oriented and limits our understanding of contextual factors that has since then shown to be significant in both professional identity (Clandinin et al 1999; Beijaard et al 2004; van Lankveld et al 2017) and research utilization (Estabrooks 2003; Scott et al 2008; Glisson and Williams 2015).

Meanwhile, studies on nursing professional identity have used several theoretical frameworks, one being symbolic interactionism, which interestingly also informs grounded theory (Charmaz 2008, 2014). Studies using this approach assert that professional identity is developed through a pattern of experiences with others and has suggested its utility in developing nursing’s professional identity in the past (Reutter et al 1997; Fagermoen 1997;
Carlson 2012). Nevertheless, the focus of these studies were on the values and attributes of nursing while my study addresses a clear gap in the professional identity literature on the disposition of research in nursing.

Notably, a unique approach using a Foucauldian view of genealogy (Miró-Bonet et al 2013) adds important meaning to the nuanced understanding of nurses’ professional identity. This approach emphasizes the importance of context in the evolution of professional identity as well as the influence of history and globalization. The emphasis on context is similar to assertions within SIT that underline socio-structural characteristics in social mobility (Ellemers and Haslam 2012) and has the added advantage of enabling historical and political analysis to question and transform nursing professional identity. Alternatively, SIT has the advantage of being a long-established psychological theory and tested in several organizational studies over time.

Importantly, social identity is complex and dynamic, bringing social identity salience into play. Tajfel (1978) conceived social identity salience as a continuum, with interpersonal behaviour on one end and intergroup behaviour on the other. This meant that an individual’s behaviour can be motivated purely by self-interest and character alone at one extreme or, alternatively, derived from an individual’s perceived group membership (Haslam 2001). It is further hypothesized that this behaviour is seen in an individual’s treatment of outgroups either uniformly or otherwise, based on their perception of outgroup heterogeneity or homogeneity. This was also thought to be associated with either social mobility or social change beliefs, that if change is to be achieved by a single individual altering their group membership or acting as a group to modify their perceived social identity (Haslam 2001). Hence, social identity salience involves the assessment of others as either out-group or in-group, with relevant group membership dependent upon the context of the social interaction. The assessment of others as either out-group or in-group is seen in my data where a participant working with the ambulance service gained in-group status by gaining the trust of influential group members and highlighting the alignment of group goals with his own (section 5.3.5). This clearly evidences social identity salience at play, providing one of several examples from my data supporting the use of SIT to conceive professional identity in my theoretical model.

Categorization and self-enhancement are the two main socio-cognitive processes asserted to underlie the social identity phenomena. Categorization clarifies group boundaries by assigning self and others into the contextually relevant social category, on which stereotypical
perceptions are based. This is important to people as it reduces uncertainty about themselves and others in social situations as it provides a guidance for appropriate behaviour according to the relevant context (Hogg and Terry 2001). Meanwhile, self-enhancement is founded on the assumption of the basic need for a positive self-concept that is achieved by social comparison and favours in-group norms (Ellemers and Haslam 2012).

Both processes are apparent in my data, for example, the sub-category of navigating professional boundaries (section 5.2.3) explicate the struggle for power as a result of categorization that occurs both within nursing and between nursing and medicine. Additionally, categorization is also apparent in clinical nurses’ understanding of research as “an ivory tower” and separate from their role (section 5.4.1). This leads to self-enhancement where research is perceived to be a burden (section 5.4.1) and regarded with caution unless credibility is established, either through positive relationships between researchers and clinical staff/leaders or the perception of shared values or both. Interestingly, my findings on building relationships is acknowledged in SIT, where categorization and self-enhancement is said to depend on subjective belief structures, specifically the quality of intergroup relationships (Hogg and Terry 2001). This intergroup relationship is characterized by perceived legitimacy, stability and social mobility of one social group in comparison to another where the lower status group may adopt the identity of a higher status group if this is perceived to be psychologically supported (Ellemers and Haslam 2012). This corroborates with my theoretical model of leadership empowering clinical nurses’ professional identity as characterized by shifting culture, building relationships, and integrating research into the nursing role, to achieve sustained research utilization. From my data, this can be attained by empowering nurses both structurally and psychologically to perceive research as part of their professional responsibility, expediting research utilization in clinical contexts.

There are significant examples of social identity shifts in the nursing literature, for example studies looking at the early professional socialization of nurses (Price 2009) or registered nurses moving into advanced practice roles (Beal et al 1996; Ares 2014). Aside from aiding the successful completion of nursing programmes and improving retention rates (Evans 2001), the development of a nursing professional identity points to a shift in social identity. This body of literature is an important resource for workforce development efforts into reconstructing the nursing professional identity to include research and research utilization as a professional responsibility.
In this regard, it is consistently shown that nursing students identify more strongly with the nursing profession when provided with support by the practising nurse while on clinical placement, particularly with positive interpersonal relationships between the nurse and student (Walker et al. 2014; Clements et al. 2015). Additionally, it was also found that novice nurse practitioners became more confident in their new role after receiving positive feedback from patients. This gave meaning and a feeling of competence, pointing to the role of psychological empowerment in supporting their shift of professional identity (Brown and Olshansky 1997).

Further, it has long been suggested that managers should support an organizational context that supports learning and information for nurses to adopt new roles (Sofarelli and Brown 1998; Ewens 2003), aligning with my findings of structural empowerment as key to developing a nursing professional identity inclusive of research utilization. The findings from these studies support the contention from my study that structural and psychological empowerment constructs facilitate in shifting the nursing professional identity. Used strategically for research, such as providing time and resources for research while on the ward (section 5.4.4) and increasing the number of clinical-academic nurses as one of the resources for research information to clinical nurses (section 5.4.3), may assist in the reconstruction of the nursing professional identity to achieve sustained research utilization.

Furthermore, SIT lends itself to studies on group performance as organizational psychologists explore how best to motivate employees as a collective and increase organizational commitment. Such studies use SIT to propose that collective identification and the resulting motivation to perform is more likely to be achieved in situations where external and internal definitions of self are compatible (Ellemers et al. 2004). This is significant to issues within the nursing workforce where new graduates within their first year of practice find conflicting values in clinical areas as compared to their developed identity in the academic setting (Maben et al. 2006; Feng and Tsai 2012; Parker et al. 2014; Leong and Crossman 2015). While the public image of nursing has yet to promote research as part of the role (ten Hoeve et al. 2014), most nursing undergraduate programmes in higher education institutions around the globe have long highlighted research as part of nurse education (Leach et al. 2015; Reid et al. 2017). This sends a clear message to nursing students being socialized into the profession that research is an expected part of nursing practice.

Consequently, new graduates struggle with the professional socialization process in their clinical areas, with negative outcomes such as burnout, intention to leave, and a high turnover within the first year (Phillips et al. 2014; Edwards et al. 2015). Differences in patient care values
and priority for evidence-based care were amongst the most commonly reported value incongruence for new graduates (Maben et al 2006; Mooney 2007; Monaghan 2015). This is supported by the consistency of studies reporting new graduates’ role conflict and associated inability to use research in practice across the globe (Gerrish et al 2008; Wangensteen et al 2011; Labbrague et al 2018). Importantly, research utilization aligns with the nursing code of conduct in the UK and most other developed countries. As outlined in The Code, under the professional standard “practice effectively”, registered nurses in the UK are required to practice in line with the best available evidence. It is further explained that evidence may come from a variety of sources and although not explicitly mentioned, it is clear that research is one of the sources, from further elaboration of the judicious collection and storage of research findings (NMC 2018b). It follows that using research in practice is expected of graduate nurses and a misalignment of educational and professional values with clinical expectations of the nursing role has shown to result in a “reality shock” that leads to a high turnover rate (Evans 2001; Cowin et al 2006).

It has been suggested that a common nursing identity is necessary for the development of the profession (Öhlén and Segesten 1998), yet studies looking at professional identity in nursing tend to study personal, inter personal or intradisciplinary attributes (Fagermoen 1997; Johnson et al 2012). Although this acknowledges the multi-faceted nature of professional identity, very little studies in nursing conceive professional identity as a collective and how this collective impacts on psychological function as illuminated in SIT. Nevertheless, there are some recent examples of nursing research into professional identity that takes a collective approach. Similar to the previous example of how nurses who identified strongly with the profession perceived flu vaccination as a professional responsibility (Falomir-Pichastor et al 2009), others have found that working towards common purposes and goals may assist in the development of professional identity (Woods et al 2016).

The study by Woods and colleagues (2016) reviewed the literature of nursing professional identity studies that took a communities of practice (CoP) approach and focused particularly on the nurse educator identity. CoPs, originally proposed by Wenger (1998), is a model of collaborative learning among peers that is guided by knowledge rather than task. According to the CoP approach, professional identity is shaped by workplace communities mutually engaging members across different communities toward a common domain such as knowledge, community, and/or practice (Andrew et al 2008). It is further suggested that clinical nurses perceive scholarship to be an academic undertaking separate from nursing as a resulting lack
of collaboration between the nurse academic and clinical nursing communities (Andrew and Wilkie 2007), echoing my study findings, especially those highlighted in the core category *integrating research into the nursing role*. Conceiving nurses as collective communities according to their workplace is similar to SIT and demonstrates a great potential for developing the nursing professional identity by exploring its socio-cognitive impact. This would establish further understanding of the nursing professional identity, critical to all areas of nursing and significant to important healthcare outcomes.

SIT defines professional identity according to its social performance, i.e. how nurses interact with other groups and sources of motivation, including group norms. SIT suits the conception of professional identity in this study as research utilization encompasses inter as well as intra professional dynamics, as discussed in section 5.2.3. Indeed, the multidisciplinary nature of today’s healthcare warrants the use of SIT in understanding the nursing professional identity. Recent studies in nursing professional identity acknowledge that professional identity is dynamic and dependent on context (Crigger and Godfrey 2014; Clements et al 2015), both important aspects of SIT (Hogg and Terry 2001; Ellemers and Haslam 2012).

The achievement of individual goals (e.g. pay raise) through collective goal attainment (e.g. organizational profit) is already at play in the current market-focused healthcare (Ellemers et al 2004). In much the same way as organizational psychology was initially focused on individual needs and desires, the body of literature on research utilization has moved from an individual perspective to a collective view. This puts SIT in a suitable position to explain current phenomena in research utilization and my findings on professional identity timely.
6.4 Empowerment

Nursing professionalization and the urgent need to address a global shortage catalysed the discussion of empowerment for nursing’s female-majority workforce, establishing a long tradition of empowerment studies in nursing research. Specifically, Kanter’s (1977, 1993) structural empowerment theory has often been used to study nurses’ workplace empowerment in relation to job satisfaction and burnout/work engagement (Sarmiento et al 2004; Laschinger and Finegan 2005; Greco et al 2006; Cicolini et al 2014), patient care quality (Laschinger 2008), and turnover (Nedd 2006; Cai and Zhou 2009). To a lesser extent, it has also informed studies on nurse/patient empowerment in patient care (Laschinger et al 2010), its relation with organizational trust and impact on work commitment (Laschinger et al 2000), and leadership (Laschinger et al 1999; Patrick and Laschinger 2006).

The initial focus of empowerment studies in nursing were on structural empowerment, however, psychological empowerment has since been recognized as an important response to structural empowerment (Laschinger et al 2001). Spreitzer’s (1995) theory of psychological empowerment has more recently gained attention in nursing for use in organizational and workforce research, for example, its relation to job strain and satisfaction (Laschinger et al 2001; Casey et al 2010; Mirkamli and Nastiezaie 2010; Chung and Kowalski 2012), work engagement (Wang and Liu 2015), and staff retention (Meng et al 2015). Additionally, psychological empowerment has also been used to study the emotional aspects of nursing and its impact on healthcare, for example perceived respect (Faulkner and Laschinger 2008), conflict management (Pines et al 2011), and moral distress (Browning 2013) in both educational and clinical settings. Contemporary studies more commonly explore both structural and psychological empowerment as related variables, indicating an increasing recognition of a link between the two (Wagner et al 2010).

As a result of an extensive organizational ethnography study, Kanter (1977, 1993) posits that employees derive power through formal or informal power that provides access to four structural characteristics of an organization: opportunity, information, resources, and support. Formal power is understood as positions of high visibility in organizations and require independent decision-making while informal power is gained from networking with peers and subordinates (Knol and van Linge 2009). Both sources of power are essential to access organizational empowerment structures of opportunity – being autonomous to learn and grow within the organization and feeling sufficiently challenged; information – having the relevant data, technical knowledge and expertise to accomplish expectations of one’s role; resources –
the acquisition of time, supplies, funding, and materials needed to fulfil organizational targets; and support – guidance and feedback from colleagues and managers of one’s job performance (Havens and Laschinger 1997). Correspondingly, Spreitzer’s (1995) psychological empowerment elaborates the experience and perspectives of employees in the application of these structures (Çavuş and Demir 2000) and is present when employees derive motivation from the workplace (Manojlovich and Laschinger 2007).

Spreitzer (1995) developed an instrument to measure psychological empowerment in organizations using four cognitive dimensions that explicate the sources for employees’ feelings of empowerment based on known studies of psychological empowerment (Conger and Kanungo 1988a; Thomas and Velthouse 1990). These four cognitive dimensions are: meaning – compatibility between work roles and personal values; competence – self-confidence to accomplish work goals; self-determination – personal sense of control in performing work activities; and lastly, impact – the ability to influence pertinent work outcomes (Thomas and Velthouse 1990).

It is known that psychological and structural empowerment share a significant positive relationship for nurses at all levels, particularly for workforce outcomes (Wagner et al 2010). Importantly, psychological empowerment has been shown to act as a mediator and is partly responsible for the influence of structural empowerment on innovative behaviour in clinical nurses. It is further notable that informal power was the most important sub-variable in structural empowerment to account for the significant relationship with innovative behaviour (Knol and van Linge 2009). This supports my findings of building relationships as a category for socio-structural empowerment that enables nurses’ research utilization as part of their professional identity. Meanwhile, the impact of informal power was found to be most statistically significant in the relationship between psychological empowerment and innovative behaviour (Knol and van Linge 2009). This supports my study findings for both shared leadership within building relationships and clinical staff investment in integrating research into the nursing role. Both sub-categories are consistent with the component of impact in psychological empowerment in enabling nurses to influence their work outcomes.

It is suggested that social identity and, indeed, professional identity are dynamic concepts and dependent on contextual factors, particularly socio-structural characteristics (Ewens 2003; Ellemers and Haslam 2012). These characteristics are said to be subjective perceptions of the legitimacy of the current identity and the possibility of successful transition, which depend
mainly on perceptions of opportunity and motivation (Ellemers and Haslam 2012), underlining a link with psychological empowerment. Certainly, this can be seen in several nursing studies that concluded with components of both structural and psychological empowerment such as collegial support and advocacy, opportunities for growth and learning, self-determination in accomplishing work goals, as key in developing a professional identity in nursing (MacIntosh 2003; Deppoliti 2008; Trede 2012; Franco and Tavares 2013). This is consistent with a long-made assertion that nurses lack a development of personal and professional pride to increase their self-esteem, impeding the progress of the nursing profession (Roberts 2000), although explicit connections between empowerment and professional identity has yet to be made, making my study findings a significant contribution to the body of nursing knowledge.

I began this study with the aim of uncovering the leadership process of nurses’ research utilization and the resulting role of empowerment in my findings support the notion of a shift in the leadership paradigm. Contemporary literature on leadership places emphasis on leaders to empower and develop other leaders, moving on from past studies that focused on leader traits and characteristics (Dambe and Moorad 2008; Haslam et al 2011; Northouse 2016). Leadership for nurses in the UK was only first made explicit to the nursing profession by the NMC in a revision of The Code in 2015 (NMC 2015) (also see NMC 2008 for absence of leadership). Previous codes of conduct for nurses did not explicate responsibilities for leadership in nursing, indicating a growing interest and recognition of the importance of leadership for nurses at all stages of their career. Hence, developing leadership for nurses will take time and investment in providing nurses sufficient support and resources for taking a leading role in healthcare, underlining the value of my research findings on empowerment.
6.5. Comparison to previous models

As mentioned in Chapter Two: Literature review, theories on research utilization have previously been conceptualized, most notably the PARiHS framework (Kitson et al 1998) and Stetler model (2001).

The Stetler model (2001) appears to focus on direct application of research to practice and involves a prescriptive, step-by-step approach to achieve this, limiting it to the instrumental use of research. In contrast, the theoretical model from my study facilitates all three types of research utilization, particularly conceptual and persuasive use as well as instrumental use if the core category of integrating research into the nursing role is to be realised. This parallels Nilsen’s (2015) assertion that models, such as the Stetler (2001) model, is descriptive and more narrowly defined, whereas my theoretical model is both descriptive as well as explanatory, as is the nature of a theory.

Frameworks, alternatively, do not typically provide explanations, rather describe phenomena by conceptualizing them into categories (Nilsen 2015). Similarly, the PARiHS framework (Kitson et al 1998) posits that successful research use is the result of inter-relations between three main concepts of evidence, context, and facilitation. More detailed discussion on what evidence (Rycroft-Malone et al 2004), context (McCormack et al 2002), and facilitation (Harvey et al 2002) entails is found in further publications, yet scholars often revisit the concept of facilitation (Dogherty et al 2010; Berta et al 2015) and have evaluated its use in a randomised controlled trial more recently (Seers et al 2018; Harvey et al 2018). Facilitation has been described as encompassing both an individual role and a group process with leadership as a vital component (Dogherty et al 2010), drawing the findings of my study within the remit of knowledge for the concept of facilitation.

A focused review to further understand the concept and meaning of facilitation concluded that the term relates to both practical strategies as well as supportive relationships to enable clinical nurses to improve their practice through research implementation (Dogherty et al 2010). Whilst other studies have focused on developing our understanding of interventions for facilitating research implementation in nursing practice (Seers et al 2018; Harvey et al 2018), the findings of my study illuminates the lesser understood component of interpersonal relationships occurring in a context of an acknowledged need for improvement (Stetler et al 2006), as explicated by main categories building relationships and shifting culture, to arrive at the core
category *integrating research into the nursing role*, which also forms several interrelations with the other two main categories, as explored in Chapter Five: Research findings.

Additionally, there has been a paucity of studies in research utilization, with the majority of scholars moving towards evidence-based nursing/evidence-based practice, however, as pointed out in Chapter One, section 1.2., this entails a different body of knowledge than research utilization. Other than the contributions to knowledge described above, the results of my study acts to stimulate discussion in the field of research utilization, particularly what is needed of leadership for nurses’ research utilization.

### 6.6 Summary

In this chapter, I discussed my use of SIT (Tajfel and Turner 1979) in conceiving professional identity and how it affects research utilization through Kanter’s (1977, 1993) and Spreitzer’s (1995) structural and psychological empowerment theories. This theoretical discussion clarified how leadership aspects of my data, embedded as structurally and psychologically empowering features in the categories *integrating research into the nursing role*, *shifting culture*, and *building relationships*, influences clinical nurses’ understanding of research in relation to nursing. The data indicated that a lack of empowerment within the organization led to nurses perceiving research as separate from their practice, while nurses who gained access to structural and psychological empowerment understood research and subsequent use of research in practice as an integral part of nursing. These findings have important implications to policy, practice, and nursing education, which will be explored in the subsequent Chapter Seven: Conclusions.
CHAPTER SEVEN

Conclusions

7.1 Introduction
In this chapter, I will conclude my study by first providing a summary supplemented with personal reflections before moving on to implications and recommendations arising from the findings. Implications range from the healthcare workforce policy to nursing education and nursing research funding. Finally, I will offer recommendations for future research at the end.

7.2 Limitations of the study
This study was designed and conducted in careful attention to relevant literature as well as under the close supervision of my supervisors, both of whom are experienced nurse researchers. However, some constraints to this study could not be avoided and I discuss them in further detail in this section. I will first discuss limitations of this study concerning methodology before moving on to those of the research process itself, as similarly organized within the chapters of this thesis.

One highly contested issue in grounded theory, as with most qualitative research, is the generalizability of findings. Generalizability is defined as the extension of the study’s findings or conclusions, whether it be internal generalizability (i.e. validity of the findings) or external generalizability (i.e. extension of findings to the general population) (Maxwell 2013). This type of generalizability, whilst most popular, entails only one type of generalizability, that is statistical-probabilistic generalizability, and does not fit with qualitative research for two reasons.

Firstly, it is incongruent with the ontological and epistemological underpinnings of multiple realities and constructed knowledge that drive qualitative research as opposed to the objective, single reality of discovered “truths” assumed by the majority of quantitative research from which statistical-probabilistic generalizability is derived (Smith 2018). Secondly, achieving this type of generalizability is not a meaningful goal for qualitative research as it seeks what is known as thick description (Geertz 1973), that is the in-depth understanding of an area of interest in its particular social world (Bryman2015). This parallels with the inception of grounded theory which aimed at in-depth understanding to construct basic social processes (Glaser and Strauss 1967). To achieve in-depth understanding, it is necessary for qualitative
researchers to sample a small yet purposeful number of individuals which is the strength of qualitative research in forming knowledge that is revealing of the nature of the phenomena being studied (Morse 2007; Maxwell 2013; Smith 2018). Similarly, my study aimed to illuminate a social process of an ideal type and this is not based on explicit sampling from a larger, defined population to which results can be extended. Thus, extending study findings to different contexts is not the aim of qualitative research as it may be in quantitative research, making it inappropriate to define the limitations of qualitative research on grounds of statistical-probabilistic generalizability.

Instead, qualitative research brings the opportunity for expanding the traditional notions of generalizability (Corbin and Strauss 1990; Smith 2018) to influence various perspectives of our understanding of important phenomena and impact people’s lives. One such expansion of traditional generalizability is that of transferability, also known as inferential generalization (Lewis et al 2014), which occurs when research findings resonates with the reader to the extent that they judge it to be applicable to their circumstances (Tracy 2010; Smith 2018). As transferability involves processes done by the reader, it is therefore imperative for researchers to present rich data coherently and write accessibly to invite transferability (Smith 2018). This is facilitated in grounded theory by taking concepts as the unit of analysis rather than instances, increasing transferability of findings with increasing abstraction of the core category (Corbin and Strauss 1990). However, this is contingent upon the size of theoretical sampling of a study in order to maximize variation of participants and increase understanding of the influence of various contextual factors (Corbin and Strauss 1990).

According to these criteria to determine transferability, the findings of my study is limited in its transferability by the characteristics of my study participants who were mostly well-versed in research and had post-graduate qualifications. The challenge of recruiting clinical nurses in my study limits widespread theoretical sampling, impacting the study’s transferability of findings, however, rich accounts of the data and its contextual background is presented for readers to assess the extent to which findings are applicable to their circumstances or otherwise.

Further, limitations exist as to the transferability of my study findings as the resulting theoretical model is a middle-range rather than formal theory. Whilst middle-range theories form part of the structure of a professional discipline, it is limited to the substantive knowledge of that particular discipline (Smith and Liehr 2018), seen here as nursing. As opposed to a formal grounded theory, a core category from a middle-range theory cannot be extended
beyond the immediate substantive area (Glaser 2001). For this particular study, the immediate substantive area is that of nursing, hence the resulting theoretical model from my study will not extend to the general population of healthcare. However, the core category of this study may be used to generate a formal theory by looking at my study’s data within the wider healthcare system using the constant comparative method (Glaser 2001) which future studies can build on and arrive at a formal theory regarding healthcare use of research in practice.

It is often contended that the researcher is the instrument in qualitative research (e.g. Pezalla et al 2012), necessitating a scrutiny of researcher involvement in this study. Much of the criticism against qualitative research stems from a mistrust of findings due to researcher subjectivity (Williams and Morrow 2009), however, I have made my stances and personal convictions known, particularly in section 3.9, facilitating reader judgement of trustworthiness. Moreover, the process of analysis is made explicit in Chapter Four: The research process, accompanied by paper trails in the appendixes. My educational and professional background as a registered nurse in both the UK and Malaysia brings credibility to this study as I am an insider to the profession, assuring resonance of issues I raise of the nursing profession. However, I have not practised clinically as a nurse in the UK, placing me as an outsider in that respect. I have explored the implications of both my representations in section 3.9.

While I used several methods through situational analysis to supplement my analysis, my data source was primarily of participant interviews only. Considering my novel use of situational analysis within constructivist grounded theory, this was appropriate in the context of a doctoral study. Additionally, interviews as a sole source of data was sufficient in this study’s framework of co-construction of knowledge, however, future studies could enhance the resulting theoretical model by collecting data from multiple resources.

Lastly, due to time and resource constraints in conducting a doctoral study, data collection focused on in-hospital staff and involved mainly research nurses with postgraduate degrees. Considering my lack of experience working in the UK clinical setting and the limited timeframe and resources typical of doctorate studies, clinical staff recruitment to this study was challenging. Future studies can further enhance the theoretical model by testing its application in community and general practice settings, preferably with the involvement of more clinical nurses with varying qualifications and research experience.
7.3 Quality of study

The criteria for judgment of quality of qualitative studies have long been a subject of debate as a plethora of qualitative studies exist with equally diverse theoretical underpinnings (Miles et al 2014). In introducing the methodology, founding fathers Glaser and Strauss (1967) set out the concepts of fit, work, relevance, and modifiability in appraising the quality of a grounded theory study. Later, Corbin and Strauss (1990) further elaborated the cannons and procedures of grounded theory studies for judgment of quality and, additionally, in classifying a study as a grounded theory study. More recently, Charmaz (2014) further outlined a set of quality criteria for constructivist grounded theory studies that resonate that of the founding fathers – credibility, originality, resonance, and usefulness.

In this section, I will first describe how my study used the canons and procedures as delineated by Corbin and Strauss (1990) to be credible as a grounded theory study and, additionally, how my study meets the quality criteria originally set out by the founders when introducing the grounded theory methodology (Glaser and Strauss 1967). The following section will further focus on the quality criteria according to Charmaz (2014) and how my study has met all criteria.

Firstly, Corbin and Strauss (1990) asserts that a quality grounded theory study should conduct data collection and analysis as an interrelating process. As outlined in Chapter Four: The research process, my study has followed an iterative process between data collection and analysis, best seen in Figure 5. Corbin and Strauss (1990) further argues that a quality grounded theory study uses concepts as the basic unit of analysis and this is also shown in Chapter Four where coding of the data embraced concepts and became increasingly abstract, resulting in the concepts of professional identity and empowerment as shown in the theoretical model.

The development and interrelations of categories is shown in detail in Chapter Four and consequently elaborated in Chapter Five, including the relationships between categories, meeting the cannon for developing and relating categories (Corbin and Strauss 1990). This also meets the quality criteria of fit (Glaser and Strauss 1967), in that the developed categories are coherent and explain the gathered data rather than being forced into preconceived categories (Hallberg 2006). As categories were developed according to the data and participants were those who were most experienced with research utilization, my study meets the criteria for relevance (Glaser and Strauss 1967) as the resulting theoretical model was conceptualized based on data from those who were most acquainted with research utilization. Alternatively, the theoretical model would benefit from development with data from those less experienced
with research and would serve to verify the current theory. Aligning with grounded theory procedure, sampling in my study began purposively and expanded as indicated by the developing theory, as shown in Chapter Four, demonstrating that sampling in my study was based on theoretical grounds (Corbin and Strauss 1990).

I used constant comparison throughout analysis to develop the categories and scrutinize their relationships, following the essential criteria of a grounded theory study, (Corbin and Strauss 1990), additionally in decisions to focus or otherwise on certain parts of the data based on its relative significance in the data resulting from the constant comparison process. This additionally enabled me to account for patterns and variations (Corbin and Strauss 1990) as discussed in Chapter Five and additionally in the variations made apparent by the positional map in Chapter Four, section 4.4.8. Accounting for patterns and variations also provides explanations and interpretations of nurses’ research utilization and, to an extent, predictions of research use, meeting the quality criteria of work (Glaser and Strauss 1967).

A clear process can be seen in the theoretical model, arising from the three main categories as concepts of empowerment and influencing professional identity to lead to research utilization, meeting the cannon of building process into theory (Corbin and Strauss 1990). Essential to the theory building process was theoretical memo writing (Corbin and Strauss 1990), and memos accompanied the analytic process in my study, as exampled throughout Chapter Four and shown in Appendix H for memos of my analysis as the core category developed.

I conducted this study with the guidance of my supervisors who are both experienced researchers in the substantive area that my study attempts to address, namely nursing, following the procedure for verifying with colleagues (Corbin and Strauss 1990). Analysing structural conditions (Corbin and Strauss 1990) was considered explicitly in my study from the beginning with it forming my second research question on contextual factors. Consideration of contextual factors was enhanced by using situational analysis as an analytical tool. Additionally, this would presumably facilitate in the modifiability of the resulting theoretical model as contextual factors have been made explicit in my study and further research is needed to affirm qualifications of the theoretical model to change and adapt to new data.

This evidences my study fulfils the basic tenets of a grounded theory study, yet the diversity of paradigms underpinning qualitative studies further underscores the importance of theoretical perspectives to guide research and avoiding methodological slurring, as explored earlier in section 3.4. Therefore, the criteria for quality in my study is further guided by the constructivist
grounded theory perspective, as outlined by Charmaz (2014) and detailed in the following subsections.

7.3.1 Credibility

Credibility is demonstrated in my study by the transparency I show from study design through analysis and conclusion of this study. Strong logical links between the data, my resulting analysis and the body of literature are outlined in both Chapter Five: Research findings and Chapter Six: Theoretical discussion. I have provided evidence, including of a paper trail, for various stages of the research process, as seen in Chapter Four: The research process, and in the appendixes. Moreover, the development of the theoretical model has followed theoretical sampling and iteration between data collection and analysis, both of which has been suggested to be a valuable verification strategy (Morse et al 2002). The findings of this study were informed by interview data and field notes, providing in-depth, rich descriptions of the study context. I decided to gather participant feedback on my research findings instead of member checking or member validation as for qualitative research findings at an abstract level following analysis it can be challenging for participants to comprehensively agree on findings (Morse 2015b). Nevertheless, the theoretical model, along with illustrative quotes of each main category, were shared with participants who were all supportive of the findings (see Appendix F for findings newsletter and participants’ e-mail replies).

7.3.2 Originality

New insights were offered with the development of the theoretical model as no evidence currently exists linking professional identity and research utilization. While several existing literature supports the content of the main categories, it has yet to be conceived as such categories, nor have they previously been perceived as empowerment for research utilization. The use of situational analysis as an analytical tool in this study also provides new insights as previous studies using such an approach did not include positional mapping. The use of positional mapping in my study, as shown in section 4.4.8, contributes to further understanding of the role of context for research utilization and assisted me in consolidating the constructs of empowerment from the three main categories to feed into the theoretical model. Additionally, my construction of the social world/arenas map as illustrated in section 4.4.7, is the first to map the research utilization arena.
7.3.3 Resonance
Resonance was achieved in my study both within the data and externally with dissemination. Within the data, I have portrayed the fullness of the studied phenomenon with the use of situational analysis, especially with the social world/arenas map and positional mapping. Silent, taken for granted issues were brought forward with both social worlds/arenas map and positional mapping, particularly for the role of empowerment in different contexts and its impact on research utilization that I demonstrated in positional mapping in section 4.4.8.

External resonance was achieved with dissemination as I shared the findings of my study at the Royal College of Nursing International Research Conference 2019, held at Sheffield Hallam University (abstract and pictures in Appendix G). My presentation on the theoretical model was well-received and there were more comments on its usefulness rather than questions at the end, evidencing resonance. A number of studies at the conference also revealed similar insights to mine regarding clinical nurses’ view of research as separate and alien to nursing (e.g. Tinkler et al 2019a, 2019b; Nightingale et al 2019) further underscoring resonance for my findings. However, no other studies to date related this to professional identity or SIT. My sharing of the theoretical model at a poster presentation at the U21 Health Sciences Group Annual Meeting Doctoral Forum also resonated well and I subsequently won best poster (picture in Appendix G).

7.3.4 Usefulness
The usefulness of my study is demonstrated in the practical implications and recommendations, as well as suggestions for future research, as I describe towards the end of this thesis in section 7.6.

7.4 Summary and reflections
My venture into this study first began with my interest in improving nursing work conditions. While reviewing the literature on this broad topic, I came across the Nursing Worklife Model, which consisted of “a nursing model of care” as one of its components (Manojlovich and Laschinger 2007). In order to implement this nursing model of care, it was clear to me that nursing practice had to be based on sound evidence, one of which will be research and thus nurses would need to be well-informed of research. This led me down the research utilization pathway and I decided to conduct my study here in Scotland rather than my home country, Malaysia, where research utilization barriers would be significant (Martis et al 2008; Lai et al 2010; Leng et al 2016). As barriers of nurses’ research utilization across the globe is now well-
known (Funk et al 1995b; McCleary and Brown 2003; Carrion et al 2004; Kajermo et al 2010; Sanjari et al 2015), this raised the question of leadership within this area and moving the focus towards facilitative strategies that are better placed to support research utilization rather than identifying barriers. I gained support from both my supervisors for data collection in Scotland, where nursing research was gaining pace with the development of clinical-academic careers for nurses beginning in 2009 (Baltruks and Callaghan 2018).

After an initial review of the literature, my aim for this study was to gain a theoretical understanding of the role of leadership in nurses’ research utilization. Next, I constructed the following research questions at the beginning of this study:

1. How is leadership related to nurses’ research utilization?
2. How do contextual factors influence leadership in nurses’ research utilization?

Data collection and analysis was iterative, typical of grounded theory. Theoretical sufficiency was reached at 20 interviews when the dimensions of my categories were defined, within and between the categories. The use of situational analysis, particularly situational mapping, aided my analysis to focus on data relevant to leadership in research utilization. Situational analysis also brought the role of context forward for my study, embedding it into the findings of the theoretical model, also facilitated by mapping out the context in the social world/arenas map. Both the social world/arenas map and positional maps fed into the construction of the theoretical model through the constant comparison process by informing relationships between important stakeholders within the main categories and consolidating empowerment constructs. Analysis continued as I wrote my findings which encompassed all the categories and I expanded my reading to enhance my theoretical sensitivity (Glaser 1978).
Through my analytic journey, I found leadership to encompass the three main categories in the form of structural and psychological empowerment which influenced nurses’ understanding of their professional identity, impacting upon their research utilization. These three categories are – shifting culture, building relationships, and integrating research into the nursing role. Shifting culture highlights the importance of clinical leaders as role models of their respective clinical areas while building relationships emphasizes shared leadership focused on relational practices. Essentially, the core category integrating research into the nursing role explicates the participants’ views of the role of leadership in recognizing research as an integral role for all nurses at all levels. All three categories were shown to encompass both structural and psychological empowerment through participant quotes in Chapter Five: Research Findings. It was also shown how empowerment affected the participants’ experiences of professional identity, best reflected in SIT. Consequently, the data indicated that professional identity was influential of research utilization, a notion that is currently absent in the nursing literature. I explored SIT and structural and psychological empowerment theory in relation to my findings in Chapter Six: Theoretical Discussion. I detail in the following section how my findings have answered my research questions and met the aim I set when I first began this study as outlined in Chapter One: Introduction.

7.5 Answering research questions

At the beginning of this study, I aimed to gain a theoretical understanding of leadership in nurses’ research utilization. I have achieved this aim with the conception of the theoretical model showing the role of leadership in empowering nurses’ to affect their professional identity, leading to research utilization.

Additionally, at the outset of my study, my research questions were:

- How is leadership related to nurses’ research utilization?
- How do contextual factors influence leadership in nurses’ research utilization?

However, within the process of data collection and analysis, I later refined my research questions to better reflect the study context. My updated research questions are as below, followed by the answers as indicated by my findings:

1. How do nurses understand the role of leadership in their use of research in practice?

Participants indicated that nurses understood leadership in research utilization as empowerment constructs, specifically in terms of structural or psychological empowerment. There were less emphasis on specific individuals and their practices as leadership examples, rather participants
saw concepts of empowerment, for instance, time to conduct research as part of the nursing role and sharing leadership, as key to research utilization.

2. What conditions best facilitate leadership for nurses’ research utilization?

My findings have shown that, ideally, research utilization needs to be facilitated at the organizational level for it to be equitable and sustainable for the nursing workforce. A value for research needs to be embedded in organizational structures to support both formal and informal leaders to champion research utilization.

The study’s implications and recommendations are discussed in the following sections.
7.6 Implications and recommendations

My findings on empowerment affirms current trends in leadership that focuses on empowering others and developing other leaders as opposed to a narrow outlook that revolves around certain practices and behaviours that would have limited application (Hutchinson and Jackson 2013; Ola 2017). My study extends current knowledge on the understanding of leadership as empowerment in nurses’ research utilization, where currently few studies exist, both of which employ quantititative methods (Belden et al 2012; Kang 2015), giving us only a descriptive understanding. My qualitative approach provided rich data to further our understanding of how leadership impacts nurses’ research utilization via professional identity. The findings of my study have important implications for healthcare policy, nursing education, and research funding bodies, as outlined below.

7.6.1 Healthcare policy

The theoretical model from my study clearly indicates that research utilization would need significant investment by healthcare authorities to empower nurses both structurally and psychologically. Organizational structures need to underscore support for nurses’ research utilization by providing time for nurses to be involved in research and other research-related activities while on the ward. This is an important step in fostering a research culture in any healthcare organization and has long been suggested to improve nurses’ research utilization (Closs and Cheater 1994; Scott and Pollock 2008). By displaying an organizational value for research, it implicitly implies the value for reflection in nursing practice, a much needed balance for the value of action so embedded in most hospital-based nurses (Scott and Pollock 2008; Thompson et al 2008).

Congruent with an organizational value for research, the findings of my study also imply that appointed formal leaders need to be supportive of research utilization. This can be done via two means – appointing formal leaders who are supportive of nursing research and research utilization, and inculcating evidence for nursing research and research utilization activities into annual performance reviews of formal leaders (Funk et al 1995a; Gifford et al 2007; Scala et al 2016). Both strategies convey the organizational value for research in practice and ensures the sustainability of nurses’ research utilization. Evidence of developing others’ research capacity is similar to the policy of Magnet hospitals in the United States, where formal leaders would have to present evidence of assisting in the development of other Magnet hospitals to renew their Magnet status (Aiken 2019, personal correspondence, 5 September 2019). Having formal leaders supportive of research utilization is key, not only in providing nurses with access.
to organizational structures for research utilization, yet additionally to provide nurses with essential psychological empowerment. Certainly, both constructs of empowerment is shown to be vital in affecting the nursing professional identity to include research as part of the nursing role.

From my data, it is apparent that clinical nurses are not currently provided protected time within their clinical role for any research or research utilization activity. However, where this is done successfully, it has been shown to improve clinical nurses’ involvement with research (Gawlinski 2008; Scala et al 2016), indicating this to be key for research utilization. Investing in protected research time for all nurses makes research equitable for all nurses, as indicated by my data. This further implies a need for organizations to provide this protected research time for nurses at all levels, consistent with a value for research utilization across the organization.

7.6.2 Nurse education

From both my data and a review of the literature, it can be gathered that nurse education in much of the developed world engenders a passion for research and commitment to evidence-based practice in their graduates (Callister et al 2005; Florin et al 2012). However, participants in my study argue that the dissonance experienced by these graduates of the differing values held for research between clinical practice and academia limits their research utilization. Therefore, my study findings imply a need for better clinical-academic collaborations in terms of conducting and using research in practice for both practicing and student nurses. My study data supports the need for a consistent value for research between academia and the clinical area for research utilization to be sustainable.

Importantly, the NMC has recently produced new standards for nurse education, aligning with a revised standards of proficiency for registered nurses. These new standards of proficiency were published in May of 2018 and outlines the levels of expected competence for new nurses at the point of registration. Although the revised standards have an apparent focus on increasing professionalism (NMC 2018a), the decreased emphasis on research and research utilization is apparent, shown in the following comparison of the new 2018 standards of proficiency and the previous 2010 standards:
“Demonstrate an understanding of research methods, ethics and governance in order to critically analyse, safely use, share and apply research findings to promote and inform best nursing practice”.

(NMC 2018a, pp. 8)

“All nurses must appreciate the value of evidence in practice, be able to understand and appraise research, apply relevant theory and research findings to their work, and identify areas for further investigation”.

(NMC 2010, pp. 14)

As these statements outline the standards of proficiencies expected of registered nurses, it influences the value of research in both nurse education and clinical practice. Clearly, there is a shift away from a commitment for research to be part of the nursing professional identity in the UK, which is troubling given the repeated calls for healthcare services to value research utilization for nurses to improve the quality of patient care (Scott-Findlay and Golden-Biddle 2005; Squires et al 2013; Kirk and Nilsen 2016). To reap the benefits of research utilization to both the nursing workforce and patient care, the findings from my study and those of several others (Granger et al 2012; Johnson et al 2016) indicate this to only be possible by forming strong collaborations between clinical and academic institutions.

Forming strong clinical-academic partnerships can be done with the aid of research champions within the clinical area, for example with the clinical nurse research consultant role (Currey et al 2011). The positions of such specialist nurses are essential as mediators between clinical and academic settings, providing clinical and student nurses with access to research expertise (Currey et al 2011). Further examples of close collaborations between clinical and academia can be found in my study and those of others (e.g. Johnson et al 2016) in assisting clinical areas with identifying and resolving locally identified clinical problems through research. Additionally, consistence in demonstrating the value for research in resolving clinical problems relevant to their context reinforces the importance of research utilization in clinical decision-making. It also examples to student nurses in clinical placement on forming clinical questions and using research to resolve them, a much needed skill indicated by the lack of clinical education in playing an active role in EBP education (Florin et al 2012). The role of leadership in forming strong collaborative relationships between clinical and academic contexts is essential, underscoring the issues raised in the implications for healthcare policy in conveying organizational values for research utilization.
7.6.3 Nursing research funding

My study findings support the assertions of some nurse scholars on the lack of funding for nursing research (e.g. Rafferty et al 2003; Gill 2004), most recently in an address by Professor Hugh McKenna, chair of the unit of assessment (UoA3) panel of the Research Excellence Framework (REF) here in the UK, who reported at the recent Royal College of Nursing (RCN) International Research Conference 2019 in Sheffield, that most nursing research was self-funded. Alternatively, it is known in the UK that most funded healthcare research are granted to medical staff (Rafferty et al 2003) yet, importantly, it has also been found that a dominance for medical research in the healthcare environment hinders nursing research (Kelly et al 2013).

The lack of funding for nursing research and clinical-academic posts for nurses limits opportunities to explore important aspects of nursing care for implementation into nursing practice. Moreover, a lack of investment in nursing research communicates to nurses that research is not integral to their profession, influencing nurses’ perceptions of their professional identity in relation to research.

The findings from my study indicates the significance of investing in structural support for nursing research, such as a nursing research council, clinical lectureships, and clinical post-doctoral opportunities. The existence of such structures ensures the continuity of a clinical nursing research continuity in the healthcare service, simultaneously acting as a visual reinforcement of nursing as a research-based profession, similarly envisioned by the NMC (NMC 2018a,b).

7.7 Future research

My study opens new research avenues for research utilization, especially in terms of nurses’ professional identity. This area is currently unexplored and further testing is warranted, most likely in the form of an action research study. The findings of my study can be used to construct pilot programs for research utilization that bridges across the clinical and academic settings, providing valuable opportunities for post-test evaluations. Additionally, through the conduct of my study, I have found the absence of a systematic review of nursing professional identity studies. Such a study would act as an important foundation in beginning to explore the relationship between nurses’ professional identity and research utilization.

Additionally, my study findings that reflect SIT prompted me to reflect on my own social identity, as I have found Haslam et al (2003) to be correct when he asserted that it was impossible to consider others’ social identity without inadvertently examining your own.
Through this reflection, I found that I still very much identify with my Malaysian roots and want to keep the passion to develop the Malaysian nursing workforce that first drove this study. Therefore, I intend to pursue further studies exploring research utilization and professional identity in Malaysia, with possible cross-cultural collaborations here in Scotland that would give a further understanding of important facilitators in research utilization across different contexts.
7.8 Summary

In this study, through analysis of 20 interviews using a constructivist grounded theory framework and complemented by situational analysis, I have illustrated that nurses’ research utilization is the result of their perceived professional identity that stems from their experience of leadership support in the form of both structural and psychological empowerment in relation to research in practice. Studies have shown that research-based nursing practice produces better outcomes in healthcare (Melnyk et al. 2014). However, the extent to which nurses use research in their practice is questionable (Squires et al. 2011). Previous research has pointed to the importance of leadership and contextual factors in nurses’ research use. At the beginning of this study, I aimed to gain a theoretical understanding of the role of leadership and its related contextual factors in getting nurses to use research in practice.

I have conducted a total of 20 interviews with participants over a range of roles and levels within the NHS to show that leadership can take the form of socio-structural factors of empowerment that affect nurses’ understanding of their own professional identity to impact either positively or negatively on research utilization. The three main categories that form part of my theoretical model explicate the following to be most significant in affecting nurses’ professional identity for research utilization – the supporting work culture, where clinical opinion leaders have important impact; building high quality relationships between the producers and users of research; and, finally, nurses’ involvement with research in their practice. These findings can serve as an important starting point for the development of collaborative efforts between healthcare services and universities to support nurses both in the development of nursing research structures and policy to eventually make research a firm part of the nursing role.
References


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Books.


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# Appendix A

Search terms and Boolean operators used in Chapter Two: Literature review

<table>
<thead>
<tr>
<th>No.</th>
<th>Search terms</th>
<th>CINAHL</th>
<th>DiscoverED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Evidence-based nursing OR research-based practice OR research utilization in nursing</td>
<td>33,872</td>
<td>292,050</td>
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<td></td>
<td>Updated in 2019</td>
<td>36,864</td>
<td>367,920</td>
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<tr>
<td>2.</td>
<td>Leadership</td>
<td>53,209</td>
<td>7,116,354</td>
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<tr>
<td></td>
<td>Updated in 2019</td>
<td>65,034</td>
<td>8,975,047</td>
</tr>
<tr>
<td>3.</td>
<td>1 AND 2</td>
<td>1,116</td>
<td>284,886</td>
</tr>
<tr>
<td></td>
<td>Updated in 2019</td>
<td>1,411</td>
<td>359,382</td>
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</tbody>
</table>
## Appendix B

### Table of characteristics of included studies

<table>
<thead>
<tr>
<th>No.</th>
<th>Author &amp; Year</th>
<th>Aim of study</th>
<th>Sample characteristics</th>
<th>Method</th>
<th>Main findings</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Aarons (2006)</td>
<td>To examine the relationship between leadership and mental health providers’ attitudes toward implementing EBP.</td>
<td>303 mental health clinicians and case managers.</td>
<td>Cross-sectional survey using MLQ and EBPAS to measure leadership and attitudes towards EBP respectively.</td>
<td>Higher perceptions of both transformational and transactional leadership associated with openness to implement EBP. However, variance existed to suggest other factors other than leadership should be considered.</td>
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<td>2.</td>
<td>Aarons et al (2012)</td>
<td>To examine different types of leadership styles on team innovation climate and attitudes toward EBP adoption.</td>
<td>140 service providers working in 30 teams providing home-based services to families involved with the child-welfare system in the USA.</td>
<td>Survey of experimental study using 3 questionnaires to measure transformational leadership, leader-member exchange, and innovation climate.</td>
<td>Quality of leader-provider relationship significant for usual care, transformational leadership significant for group implementing EBP. Transformational leadership strongly associated with innovation climate.</td>
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<td>3.</td>
<td>Aarons et al (2014)</td>
<td>To describe the role of leadership and actions of leaders that can foster a climate for EBP.</td>
<td>No sample. Theoretical paper.</td>
<td>Schein’s framework of “climate embedding mechanisms”.</td>
<td>How the actions of formal leaders at both system and unit levels communicate value for EBP throughout the organization via primary</td>
<td>Used transformational leadership as example of leader actions.</td>
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<tr>
<td></td>
<td>Study</td>
<td>Purpose</td>
<td>Methods</td>
<td>Findings</td>
<td>Notes</td>
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<td>4.</td>
<td>Alleyne and Jumaa (2007)</td>
<td>To facilitate primary care nurses to link management and leadership theories to clinical practice to improve delivered care.</td>
<td>Six district nurses and two doctoral candidates in the UK NHS. Case study using Clinical Nursing Leadership Learning and Action Process (CLINLAP) model for implementation of co-coaching and group clinical supervision sessions.</td>
<td>Structured approach to negotiate change facilitated implementation. Participants found it helpful that roles and boundaries were clear. Participants also developed leadership skills to question current practice and challenge physician dominance.</td>
<td>Used leadership and management interchangeably.</td>
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<td>5.</td>
<td>Anderson and Whall (2013)</td>
<td>To clarify basic assumptions about opinions, the individual attributes of opinion leaders and characteristics of the context in which they are effective.</td>
<td>No sample. Theoretical paper. Used Walker and Avant’s (2005) theoretical development procedures to develop model using philosophical theories on belief formation.</td>
<td>Model highlights role of context and multilevel interactions of opinion leadership that would be difficult to test empirically.</td>
<td>Opinion leader defined as informal leaders who are influential of others’ decisions on innovation adoption.</td>
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<td>6.</td>
<td>Bianchi et al (2018)</td>
<td>To review role of leadership in promoting and sustaining EBP in healthcare.</td>
<td>28 papers included. Integrative literature review of three databases.</td>
<td>Characteristics of leaders matter in implementation of EBP as nurses may have higher knowledge and readiness for EBP. Transformational leadership key to creating an empowering environment for EBP.</td>
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<td></td>
<td>(APNs) can take to effect practice change.</td>
<td>change to describe stages of changing practice.</td>
<td>develop solutions, implement change, and reestablish balance. Also outlined steps to take when overcoming resistance.</td>
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<td>8.</td>
<td>Burns et al (2009)</td>
<td>To describe an initiative to develop an EBP infrastructure and culture in a hospital.</td>
<td>One acute care hospital in Pittsburgh, USA.</td>
<td>Staff nurses reviewed EBP models and selected the Rosswurm-Larrabee model of EBP implementation.</td>
<td>Encouraged nurses to question and develop their own practice in collaboration with an academic center for educational support. Key to success was the Chief Nursing Officer (CNO) acting as champion for this project, the direct involvement of staff, access to expertise, and continuing education.</td>
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<td>10.</td>
<td>Caine and Kenrick (1997)</td>
<td>To explore the role of clinical directorate managers in facilitating EBP.</td>
<td>Ten directorate managers of two teaching hospitals in one UK NHS Trust.</td>
<td>Semi-structured interviews followed by thematic content analysis.</td>
<td>Managers verbalised desire for EBP but this was inconsistent with their actions that constrain EBP. Main themes explored were: clinical managers; understanding of EBP; organizational</td>
<td>One manager of a higher educational level expressed a different view from the others and was treated as a deviant case</td>
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<td><strong>11.</strong></td>
<td>Caramanica and Roy (2006)</td>
<td>To describe an initiative to fostering a research culture in one hospital by creating a research utilization alliance.</td>
<td>No sample. A reflective paper.</td>
<td>A reflective exploration of the impact of the alliance activities.</td>
<td>The alliance consists of nine healthcare and academic organizations that organizes specific activities to increase nurses’ ability for research utilization. All activities uses an EBP framework to involve both nurses and students to critically appraise and apply research in practice. A further RN EBP fellowship was created.</td>
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<td><strong>12.</strong></td>
<td>Carlson et al (2012)</td>
<td>To identify key behaviours of supervisors that influence the implementation of three EBP practices in a mental health setting.</td>
<td>37 experts in EBP surveyed to identify important supervisory behaviours in EBP implementation nationally across the USA.</td>
<td>Expert rating on a survey developed by a group of EBP consultants and trainers, included one qualitative question.</td>
<td>Experts agreed on the importance of behaviours in areas of facilitating team meetings, building and enhancing staff skills, monitoring and using outcomes, and continuous quality improvement activities.</td>
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<td><strong>13.</strong></td>
<td>Cheng et al (2018)</td>
<td>To explore the leadership of nurse managers in implementing EBP.</td>
<td>15 nurse managers in China.</td>
<td>Qualitative secondary data analysis from a grounded theory study. Analysis was by directed content analysis, using the Kouzes &amp; Posner Five Practices of</td>
<td>All five leadership practices from the framework were identified in the data, with 2 additional categories – getting oneself prepared; keep it going.</td>
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<td>14. Crow (2006)</td>
<td>To discuss leadership structures to support an evidence-based practice culture.</td>
<td>No sample. Discussion paper.</td>
<td>Exemplary Leadership model as a framework.</td>
<td>Stress and resistance to change is inevitable as it is a change in culture. Eight strategies proposed to lead change effectively, centering on attention to emotional response to change.</td>
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<td>15. Cummings et al (2007)</td>
<td>To develop and test a theoretical model of organizational influences that predict nurses’ research utilization.</td>
<td>Secondary data of 6526 nurses across Alberta, Canada.</td>
<td>Discussion paper conceptualizing and EBP culture as an information culture.</td>
<td>Responsive administration similar to resonant leadership found to be most important in the leadership aspect.</td>
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<td></td>
<td>16. Cummings et al (2010)</td>
<td>To describe the relationship between constructs of context with nurses’ research utilization.</td>
<td>248 various healthcare professionals working in three paediatric units in Alberta, Canada.</td>
<td>Model developed from statistical analysis based on PARIHS framework.</td>
<td>Nurses in contexts with strong leadership, positive feedback and culture reported more instrumental and conceptual research utilization than nurses working in less positive contexts.</td>
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<td>17. Cutcliffe and Bassett (1997)</td>
<td>To examine the issue of change in nursing to move from task-oriented to science-based practice.</td>
<td>No sample. A theoretical paper exploring strategies of change.</td>
<td>Three approaches to change is discussed – the power/cohesive approach; the rational/empirical approach; and the normative/re-educative approach.</td>
<td>Cultural change is inherent in changing practice and the identity of change agents may not always be obvious. There are several ways to bring about change, dependent on the needs of the context and change agents need to have</td>
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<td></td>
<td>Author(s) and Year</td>
<td>Purpose</td>
<td>Study Details</td>
<td>Methodological Approach</td>
<td>Findings</td>
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<td>18.</td>
<td>van der Zijpp et al (2016)</td>
<td>To describe the interaction between managerial leaders and clinical leaders acting as facilitators in implementing EBP.</td>
<td>105 managers and 22 clinical leaders in 24 sites across England, Netherlands, Ireland, and Sweden.</td>
<td>Semi-structured interviews in a pragmatic RCT followed by interpretive analysis.</td>
<td>Three themes identified: realising commitment, negotiating conditions, and encouragement to keep the momentum going. The relationship between clinical and managerial leaders crucial to successful EBP implementation.</td>
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<td>19.</td>
<td>Dogherty et al (2010)</td>
<td>To examine the current state of knowledge on facilitation in research utilization.</td>
<td>39 articles from a systematic search of databases.</td>
<td>Systematic review of the literature.</td>
<td>Facilitation strategies included: increasing awareness of a need for change; leadership and project management; relationship-building and communication; importance of the local context; ongoing monitoring and evaluation.</td>
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<td>20.</td>
<td>Drury et al (2016)</td>
<td>To investigate the views of nurse managers on leadership ability, attitudes and belief on EBP, and readiness for change.</td>
<td>19 nurse managers in stroke units in NSW, Australia.</td>
<td>Survey consisting of Self-Leadership Practices Inventory (LPI), Organizational Learning Survey (OLS), and Seven-S model.</td>
<td>Overall nurse managers reported high leadership skills and a positive culture of learning and favourable EBP views. However, they perceived colleagues’ EBP views to be less positive and almost half indicated insufficient resources for EBP implementation.</td>
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<tr>
<td>21.</td>
<td>Duffy et al (2011)</td>
<td>To describe the benefits of a joint</td>
<td>27 clinical leaders</td>
<td>An evaluation survey was given to all participants of</td>
<td>Results indicated improved knowledge of statistical</td>
<td>Leadership not defined but</td>
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<tr>
<td>No.</td>
<td>Authors (Year)</td>
<td>Aim</td>
<td>Methodology</td>
<td>Findings</td>
<td>Significance</td>
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<td>22.</td>
<td>Edgar et al (2006)</td>
<td>To propose a theoretical model, the Joint Venture Model of Knowledge Utilization (JVMKU)</td>
<td>No sample. A theoretical paper.</td>
<td>Model made up of the components: leadership; emotional intelligence; the person; the message; knowledge utilization; the outcomes; the working environment and socio-political environment.</td>
<td>Asserted to be broad and applicable across settings.</td>
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<tr>
<td>23.</td>
<td>Everett and Sitterding (2011)</td>
<td>To explore a structure for nursing leadership for EBP implementation.</td>
<td>No sample. A reflective paper.</td>
<td>Leadership needs assessment was explored followed by a restructuring of nursing leadership, including a revision of roles to support EBP and share leadership.</td>
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<td>24.</td>
<td>Fleiszer et al (2015)</td>
<td>To describe how actions of nursing unit leaders influenced the long-term sustainability of EBP implementation.</td>
<td>39 clinical leaders at a large teaching hospital in Canada.</td>
<td>Two overarching strategies: maintaining priorities; reinforcing expectations followed by six specific activities: extending initial implementation; educating and training; using reminders; communicating and discussing; evaluating.</td>
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<td>25.</td>
<td>Fitzgerald et al (2013)</td>
<td>To describe the pattern and impact of distributed leadership in affecting service improvements in healthcare.</td>
<td>10 healthcare sites in England, a total of 160 semi-structured interviews.</td>
<td>An exploratory, inductive, multiple case study design with semi-structured interviews, observations, and documentary analysis.</td>
<td>Critical to distributed leadership were the facilitative role of clinicians in hybrid roles and the pre-existence of good working relationships.</td>
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<tr>
<td>26.</td>
<td>Gifford et al (2007)</td>
<td>To describe leadership activities of managers that influence research utilization and identify interventions to support nurse managers for research utilization.</td>
<td>12 studies (8 quantitative, 4 qualitative), in Ottawa, Canada.</td>
<td>Integrative review.</td>
<td>Three activities were found in quantitative studies that influenced nurses’ use of research: managerial support, policy revisions, and auditing. Qualitative studies showed organizational issues as barriers to managers’ abilities to affect research use, while role modeling and valuing research facilitated research use. Intervention to support managers needs further development.</td>
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<tr>
<td>27.</td>
<td>Guerrero et al (2016)</td>
<td>To identify strategies implemented by leaders for new EBP implementation.</td>
<td>18 program leaders of addiction treatment programs in the USA.</td>
<td>Staged and iterative mixed methods approach – focus groups and semi-structured interviews, surveys, and consensus group.</td>
<td>Top strategies: recruitment and selection of staff members receptive to change; offering support and requesting feedback during implementation; offering hands-on training.</td>
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<td>No.</td>
<td>Reference</td>
<td>Study Purpose</td>
<td>Methods</td>
<td>Findings</td>
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<td>28.</td>
<td>Halm (2010)</td>
<td>To review literature for studies that highlight how leaders shape context receptive to EBP.</td>
<td>6 studies retrieved – 1 integrative review, 2 surveys, 3 qualitative studies.</td>
<td>Strategies corresponded to both transactional and transformational styles.</td>
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<td>Search of CINAHL database.</td>
<td>Leadership behaviors that create an EBP receptive context: role modeling value/expectation for research use; showing clear commitment to research through strategic goals/resources; encouraging clinical inquiry; staff development opportunities; performance appraisal expectations; basing policies on research; and auditing practice.</td>
<td></td>
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<tr>
<td>29.</td>
<td>Harrow et al (2001)</td>
<td>To describe the process of EBP implementation, highlighting role of nursing leadership.</td>
<td>One surgical unit involving 28 patients modifying pre-operation clear fluids fasting from 10 hours to 2-4 hours.</td>
<td>Reflective paper.</td>
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<td></td>
<td></td>
<td></td>
<td>Role of leadership in empowering nurses to pursue practice inquiries and challenging other healthcare professionals.</td>
<td></td>
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<tr>
<td>30.</td>
<td>Hauck et al (2013)</td>
<td>To assess the impact of leadership facilitation strategies on nurses’ beliefs of EBP.</td>
<td>469 nurses responded to a survey pre and post strategies.</td>
<td>Prospective, descriptive comparative design using 3 surveys to measure change before and after facilitation strategies.</td>
<td></td>
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<td></td>
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<td></td>
<td>Interventions focused on 3 major areas: incorporating EBP outcomes in strategic plans; supporting mentors; and advocating for resources for education and</td>
<td></td>
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<td>31.</td>
<td>Henderson et al (2005)</td>
<td>To describe how nurse executives at one hospital created infrastructures to support research and education at the core of nursing.</td>
<td>No sample. Reflective paper.</td>
<td>Reflective paper on an ongoing initiative in Australia.</td>
<td>Nurse executives used the following strategies: motivation and knowledge development; education sessions and workshops for nurses; research champions made up of internal facilitators.</td>
<td></td>
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<tr>
<td>32.</td>
<td>Henderson et al (2009)</td>
<td>To describe how an impetus to build research capacity has been built by aligning research activity with executive responsibility.</td>
<td>No sample. Reflective paper.</td>
<td>Reflective paper using an initiative at an Emergency Department in Australia as an example.</td>
<td>Nurse executives are seen as the critical factors for EBP success, hence a strategic research plan was developed and engaged with nurse executives to make visible. Research activities need to be made meaningful to staff and nurse specialists can act as champions.</td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>Innis and Berta (2016)</td>
<td>To understand how nurse managers can facilitate EBP by using absorptive capacity.</td>
<td>No sample. A scoping literature review including 30 studies.</td>
<td>Scoping review searching four databases and used qualitative synthesis.</td>
<td>Absorptive capacity asserted to influence uptake of knowledge and this is reflected in staff routines hence suggestions are made on aspects of nurse managers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Study</td>
<td>Purpose</td>
<td>Methods</td>
<td>Findings</td>
<td></td>
<td></td>
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<td></td>
<td>Facilitation in the form of champions who use interpersonal and group skills to effect change. Successful facilitator expert in decentralizing techniques rather than top-down approach.</td>
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<td></td>
<td>Active top leadership commitment was seen as most influential for EBP implementation at high fidelity sites. This commitment was in the form of clear expectations, active involvement in implementation, and created opportunities for communication to raise awareness. Most important was that this commitment remained consistent over time.</td>
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<td></td>
<td>Steps explored for implementation: creating EBP team; creating initial plan which includes education and team buy-in; establish an EBP infrastructure; establishing</td>
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<td></td>
<td>Leaders as both formal and informal.</td>
<td></td>
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<td></td>
<td>Marchionni and Ritchie (2008)</td>
<td>To discuss organizational factors relevant to implementation of best practice guidelines and report on a small pilot study as an example.</td>
<td>Two in-patient units in a teaching hospital in Canada.</td>
<td>Cross-sectional survey using the OLS and MLQ instruments.</td>
<td>Both units demonstrated high organizational learning and transformational leadership scores yet EBP implementation was variable.</td>
<td>Nurses’ social desirability answering.</td>
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<td>37.</td>
<td>Matthew-Maich et al (2013)</td>
<td>To explore the implementation of a breastfeeding guideline.</td>
<td>112 participants from a range of healthcare professional roles at three hospitals in Canada.</td>
<td>Constructivist grounded theory with triangulation from document and field note analysis.</td>
<td>In two sites where guideline uptake happened, the following were crucial factors: ongoing passionate frontline leaders; use of multifaceted strategies; and processes that occurred at organizational, individual, leadership, and social levels.</td>
<td></td>
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<td>38.</td>
<td>McCormack et al (2002)</td>
<td>To explore the concept of context in implementing evidence into practice.</td>
<td>No sample. A conceptual paper.</td>
<td>Conceptual analysis using PARIHS framework.</td>
<td>Inclusion of all workers at all levels as leaders, implicit link between leaders and culture as workers tend to engage in places where they feel valued and have autonomy.</td>
<td></td>
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<tr>
<td>39.</td>
<td>Newhouse (2007)</td>
<td>To describe the organizational infrastructure needed to enable</td>
<td>No sample. Theoretical paper.</td>
<td>Theoretical paper using Greenhalgh’s (2004) conceptual model of diffusion.</td>
<td>EBP implementation is a long-term process where leadership is key to ensure infrastructures support EBP.</td>
<td></td>
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<tr>
<td>No.</td>
<td>Author(s) and Year</td>
<td>Objective</td>
<td>Methodology</td>
<td>Findings</td>
<td>Framework and Evidence Base</td>
<td></td>
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<td>41.</td>
<td>Ovretveit (2005)</td>
<td>To provide leaders of improvement with current evidence on leadership roles.</td>
<td>Systematic review – did not mention how many included studies.</td>
<td>Systematic review focusing on empirical papers only.</td>
<td>Limited evidence for proving importance of leadership in healthcare through observational studies. Role of both formal and informal leaders recognized. Provides guidance for both senior leaders and leaders for improvement at the end.</td>
<td>Post-positivist.</td>
</tr>
<tr>
<td>42.</td>
<td>Porter-O’Grady and Malloch (2008)</td>
<td>To explore leadership and management infrastructure, processes, and behaviours that support EBP.</td>
<td>No sample. Theoretical paper with an examplar.</td>
<td>Theoretical paper based on models for EBP.</td>
<td>Several infrastructure elements were presented along with leadership strategies and an EBP leadership evaluation model.</td>
<td>Cautions against following EBP fad.</td>
</tr>
<tr>
<td>43.</td>
<td>Reichenpfader et al (2015)</td>
<td>To systematically review published literature on leadership in implementation of EBP.</td>
<td>17 studies included.</td>
<td>Systematic review with narrative synthesis.</td>
<td>Issues with variable definitions and insufficient level of analysis presented. Implications for measuring leadership.</td>
<td></td>
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<tr>
<td>44.</td>
<td>Sandström et al (2011)</td>
<td>To systematically review literature on leadership and its influence on process of EBP implementation.</td>
<td>7 papers included.</td>
<td>Systematic review with narrative synthesis.</td>
<td>Leadership and organizational culture inextricably linked for EBP implementation.</td>
<td></td>
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<tr>
<td></td>
<td>Authors (Year)</td>
<td>Objective</td>
<td>Methods</td>
<td>Findings</td>
<td>Notes</td>
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<td>45.</td>
<td>Stetler et al (2014)</td>
<td>To identify leader roles and actions at various organizational levels to sustain EBP.</td>
<td>Two hospital sites in the USA.</td>
<td>Mixed methods explanatory case study.</td>
<td>Leadership behaviours categorized as strategic and functional whilst a third was termed cross-cutting leadership behaviours. A framework of leadership behaviours supportive of EBP institutionalization was constructed.</td>
<td></td>
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<td>46.</td>
<td>Udod and Care (2004)</td>
<td>To explore the challenges of nurse leaders in implementing research-based practice.</td>
<td>117 nurse managers in a hospital setting in Canada.</td>
<td>Secondary data analysis from a previous study using critical incident technique to identify best examples of leadership.</td>
<td>Explicated the role of the organization and leaders in implementing EBP, including societal influences and the role of shared leadership. Used research-based practice and EBP interchangeably.</td>
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<td>47.</td>
<td>Wilkinson et al (2011)</td>
<td>To investigate the role of nurse managers in EBP implementation.</td>
<td>51 interviews, documentary, and observational data.</td>
<td>Case study approach.</td>
<td>Findings explicated nurse manager roles as leaders and champions of EBP; acting as links in the EBP process; and empowering nurses for EBP.</td>
<td></td>
</tr>
<tr>
<td>48.</td>
<td>Weng et al (2015)</td>
<td>To explore the impact of transformational leadership on nurse innovation behaviour and organizational climate as mediator.</td>
<td>439 frontline nurses in Taiwan.</td>
<td>Questionnaire survey of nurses with hierarchical regression model analysis.</td>
<td>A patient safety and innovation climate were found to be mediators between transformational leadership and innovative behaviour. Stated innovation to include research.</td>
<td></td>
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</tbody>
</table>
Appendix C

Broad interview guide at start of data collection

**Opening questions**

Could you clarify your current job title and role in the NHS? How long have you held this role?
Could you tell me about the educational preparation you’ve had leading up to your current role?
Can you describe to me a typical day at work for you?
Can you tell me about your experience with research so far?

**Intermediate questions**

Do you think research is important for practice? Why so?
Tell me about your role in getting research applicable to practice.
How much, do you think, of healthcare practice is informed by research?
Has there been anyone who has motivated or influenced you in your experience with research?
How do you think they did that?
Have you adopted any of their views? How did that happen?
Has there been instances where practice was changed based on research findings? Could you tell me how this was done?
What were the main challenges in changing those practices in accordance with research?
Were there anyone or anything that made it easier in changing that practice? How so?
Has the organization been supportive of getting research into practice? How so?
How do you think can the organization be more supportive of getting research into practice?
Has there been instances where you felt that the organization constrained the use of research in practice? How so?
Is there anything that you would change about the organization in order to be more effective? Why?
On a scale of 1 to 5, 1 being not at all satisfied and 5 being fully satisfied, how would you rate your job satisfaction? Why so?
What do you think of the environment of your place of work?
How do you think that your workplace environment can be improved?

**Ending questions**

Tell me about the strengths you have gained through your experience with research.
Tell me about the strengths you have gained throughout your experience working with the NHS.
Key:

Blue – questions regarding leadership

Green – questions regarding context

Bold – main question

Underlined – prompts
Appendix D

Ethical approval from NHS R&D and University of Edinburgh, including amendments

University Hospitals Division

DY/CF/approval
28 August 2017
Mrs Khairul Azwa Binti Mohd Shamsudin
University of Edinburgh
Room 2.04
24 Buccleuch Place
Edinburgh
EH8 8LN

Dear Mrs Shamsudin:

R&D Project No: 2017/0228
REC No: N/A
Title of Research: Leadership in Nursing Research Utilization: A Grounded Theory Study
Participant Information Sheet:
Version 1.0, dated 7 August 2017

I am pleased to inform you this letter provides Site Specific approval for NHS [Redacted] for the above study and you may proceed with your research, subject to the conditions below.

We note that this project includes a researcher who will require a Letter of Access from NHS [Redacted]. The individual concerned Khairul Shamsudin should contact our offices with a view to applying for the necessary documentation. Please note all final paperwork will have to be signed and returned to our R&D offices before the researcher can commence work on the project.

Please note that the NHS [Redacted] R&D Office must be informed of any changes to the study such as amendments to the protocol, funding, recruitment, personal or resource input required of NHS [Redacted]

Substantial amendments to the protocol will require approval from the ethics committee which approved your study and the MHRA where applicable.

Please keep this office informed of the following study information:

1. Date you are ready to begin recruitment; date of the recruitment of the first participant and the monthly recruitment figures thereafter.
2. Date the final participant is recruited and the final recruitment figures.
3. Date your study / trial is completed within NHS [Redacted].
I wish you every success with your study.

Yours sincerely

Principal R&D Manager

CC: [Redacted]
University Hospitals Division

KSL/M
20 November 2017

Mrs Khairul Azwa Binti Mohd Shamsuddin
University of Edinburgh
Room 2.04
24 Buccleuch Place
Edinburgh
EH8 8LN

Dear Mrs Binti Mohd Shamsuddin

REC No.: N/A
R&D Project ID No.: 20170228
Amendment: Minor amendment dated 16 November 2017
Title of Research: Leadership in Nursing Research Utilisation: A Grounded Theory Study

I am writing in reply to recent correspondence in relation to an amendment(s) to the above project and the subsequent updated documents as follows:

- Participant Information Sheet and Consent Form Version 2, dated 16 November 2017

We have now assessed any consequential changes and can confirm that NHS Lothian management approval is extended to cover the specific changes intimated.

Yours sincerely

[Redacted]
NRS Generic Review Manager
Dear Mrs Binti Mohd Shamsuddin

REC No: N/A
R&D Project ID No: 2017/0228
Amendment: Minor amendment dated 27 November 2017
Title of Research: Leadership in Nursing Research Utilization: A Grounded Theory Study

I am writing in reply to recent correspondence in relation to an amendment(s) to the above project and the subsequent updated documents as follows:

- Participant Information Sheet and Consent Form Version 3.0, dated 27 November 2017

We have now assessed any consequential changes and can confirm that NHS management approval is extended to cover the specific changes intimated.

Yours sincerely

[Name]
NRS Generic Review Manager
Dear Azwa,

APPLICATION FOR LEVEL 1 APPROVAL

PROJECT TITLE: LEADERSHIP IN NURSING RESEARCH UTILIZATION: A GROUNDED THEORY STUDY

Thank you for submitting the above research project for review by the Section of Nursing Studies Ethics Research Panel.

I can confirm that the submission has been independently reviewed and was approved on July 11, 2017.

Should there be any change to the research protocol, it is important that you alert us to this as this may necessitate further review.

Yours sincerely

Susanne Kean
Researcher/Lecturer
Nursing Studies

Sarah J Rhynas
Teaching Fellow
Nursing Studies
Dear Azwa,

APPLICATION FOR LEVEL 1 APPROVAL - AMENDMENTS

PROJECT TITLE: LEADERSHIP IN NURSING RESEARCH UTILIZATION: A GROUNDED THEORY STUDY

Thank you for submitting amendments relating to the above research project for review by the Section of Nursing Studies Ethics Research Panel.

I can confirm that the submission amendments have been independently reviewed and were approved on November 27, 2017.

Should there be any further changes to the research protocol, it is important that you alert us to this as this may necessitate further review.

Yours sincerely

Susanne Kean
Researcher/Lecturer
Nursing Studies

Sarah J Rhy nas
Teaching Fellow
Nursing Studies

The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC002336.
Appendix E
Participant information sheet, all versions

Participant Information Sheet

Leadership in Nursing Research Utilization: A Grounded Theory Study

I would like to invite you to take part in a research study. Before you decide whether or not to take part, it is important for me to share information about the study to ensure you understand why the research is being done and what it will involve. Please take time to read the following information carefully. Talk to others about the study if you wish. Contact me 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.

What is the purpose of the study?

It has often been discussed that leadership is crucial in nurses’ research use, yet the aspects of leadership needed in this important aspect of nursing practice is unknown. Further, it has been emphasized that context matters in leadership but the exact organizational and larger context needed to advance leadership in research utilization has yet to be identified.

This study is conducted as part of a doctoral study and aims to gain a theoretical understanding of the role of leadership in nurses’ research utilization as well as the impact of contextual factors on leadership. I am a PhD researcher and will be conducting multiple, sequential, interviews with healthcare professionals within NHS [redacted].

Why have I been invited to take part?

You have been asked to take part as you are a healthcare professional employed by NHS [redacted] and are a member of a research support group or have experience in a leadership position or are in a nursing position where you may or may not have been involved in research.

Do I have to take part?

No, it is up to you to decide whether or not to take part. Taking part in the study is voluntary. If you do decide to take part you will be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. Deciding not to take part or withdrawing from the study will not affect your employment. You may choose not to take part or subsequently cease participation at any time.

Do take note that, due to the methodological nature of this study, should you choose to withdraw, your interview content will be excluded from further analysis but the part of your interview content that has already been analysed cannot be withdrawn. However, you will be excluded from further interviews and your interview content that has been analysed will not be used as publishable quotes in the future. It is for this reason that you are advised to contact me as soon as possible if you are unsure about continued participation in this study.
What will happen if I take part?

You have up to 1 week to decide to take part. I will provide an explanation of the consent process before taking your signature on the consent form. Subsequently, you will be asked some questions and a discussion will ensue in an interview regarding research and research use as well as leadership and organizational context. For your convenience, the interview time and place will be decided by you, providing the venue is a public space or your place of employment. An interview takes a maximum of 60 minutes of your time. If you are willing, I may approach you for a follow-up interview and informed consent will be taken each time. You have the right to refuse subsequent interviews and may withdraw at any time. Interview transcripts will be transcribed by a contracted third party.

What are the possible benefits of taking part?

There are no direct benefits to you taking part in this study, but the results from this study might help to improve leadership education for future healthcare leaders, advance nurses use of research in practice, develop a better working environment for healthcare professionals and, subsequently, further enrich the healthcare of patients in the future.

What are the possible risks/disadvantages of taking part?

This study involves interviews which may take up to 60 minutes of your time and, with your agreement, follow-up interviews may be needed. As this study will discuss practices relating to your clinical work, any disclosures of harm or threat of harm to patients may need to be reported.

What happens when the study is finished?

This study will be written up as a doctoral thesis. The findings of this study may be shared for research dissemination that may include journal publications, conferences, poster presentations, etc. You will not be identifiable in any published results.

The findings of this study may also be used for future leadership developments and you will not benefit financially from this. Upon completion of this study, anonymised data will be kept for further studies or deposited into a research data bank for future research use. For this purpose, all names will be changed to pseudonyms and only non-identifiable demographic data will be shared.

You may choose to be informed of the study’s findings by stating your e-mail on the consent form and a newsletter will be sent to you when the study is complete, outlining key findings.

Will my taking part be kept confidential?

All the information I collect during the course of the research will be kept confidential and there are university policies in place which safeguard your privacy at every stage. However, if a disclosure is made (e.g. criminal, threat of harm to self or others or child protection issues), I am obligated to report this to your immediate supervisor and discuss it with my supervisors in the university.

With your permission, interviews will be digitally recorded using an encrypted device, transcribed using a transcribing service, and analysed on a password protected, university computer that only I have access to. All paper trails will be kept at the University of Edinburgh. Only the research team will have access to this data. Data will not be used for anything other than research purposes.
Who is organising and funding the research?

While this study has not received any funding, my doctorate study is jointly sponsored by the Ministry of Education, Malaysia and the National University of Malaysia. The study is being organized and sponsored by the University of Edinburgh.

Who has reviewed the study?

The study proposal has been reviewed by a member of the research ethics committee of Nursing Studies in the School of Health in Social Science of the University of Edinburgh, Dr. Susanne Kean, and has been approved on 11 July 2017. The study has also received NHS Management approval.

Researchers Contact Details

If you have any further questions about the study please contact me:
Arwa Shamsuddin
PhD Researcher
Nursing Studies
School of Health in Social Science
University of Edinburgh

You can also contact my supervisors:
Dr. Elaine Haycock-Stuart
Senior Lecturer
School of Health in Social Science
University of Edinburgh

Dr. Sheila Roogers
Senior Lecturer
School of Health in Social Science
University of Edinburgh

Independent Contact Details

If you prefer to discuss the study with someone who is independent of the study, please contact:
Dr. Sarah Rhynas
Teaching Fellow
School of Health in Social Science
University of Edinburgh

Complaints

If you wish to make a complaint about the study please contact the University of Edinburgh's Research Governance team via email at: resgov@accord.scot
CONSENT FORM
Leadership in Nursing Research Utilization: A Grounded Theory Study

1. I confirm that I have read and understand the information sheet (07 08 2017 v1.0) for the above study, I have had the opportunity to consider the information, ask questions and have had these questions answered satisfactorily.

2. I understand that relevant sections of data collected during the study may be looked at by individuals from the regulatory authorities and from the Sponsor (the University of Edinburgh) or from the other NHS Board(s) where it is relevant to my taking part in this research. I give permission for those individuals to have access to my records.

3. I understand that my participation is voluntary and that I am free to withdraw at any time during the study without giving any reason and without my employment being affected.

4. I understand that I may withdraw at any time but the extent to which my interview content has been analysed cannot be withdrawn.

5. I understand that the results of this study may be used for future research dissemination and/or leadership development and I will not benefit financially from this.

6. I agree for anonymised data to be available for ethically approved future research projects or deposited into a research data bank.

7. I agree to my audio recorded interview being transcribed by a third party contractor.

8. I agree to take part in the above study.

9. I want to be informed of the study’s findings (please state e-mail) __________________________

_________________________    ___________    __________________________
Name of Participant          Date          Signature

_________________________    ___________    __________________________
Person taking Consent        Date          Signature

Original (x1) to be retained in site file. Copy (x1) to be retained by the participant.
Participant Information Sheet

Leadership in Nursing Research Utilization: A Grounded Theory Study

I would like to invite you to take part in a research study. Before you decide whether or not to take part, it is important for me to share information about the study to ensure you understand why the research is being done and what it will involve. Please take time to read the following information carefully. Talk to others about the study if you wish. Contact me 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.

What is the purpose of the study?

It has often been discussed that leadership is crucial in nurses’ research use, yet the aspects of leadership needed in this important aspect of nursing practice is unknown. Further, it has been emphasized that context matters in leadership but the exact organizational and larger context needed to advance leadership in research utilization has yet to be identified.

This study is conducted as part of a doctoral study and aims to gain a theoretical understanding of the role of leadership in nurses’ research utilization as well as the impact of contextual factors on leadership. I am a PhD researcher and will be conducting multiple, sequential interviews with healthcare professionals within NHS [ ].

Why have I been invited to take part?

You have been asked to take part as you are a healthcare professional employed by NHS [ ] and are a member of a research support group or have experience in a leadership position or are in a nursing position where you may or may not have been involved in research.

Do I have to take part?

No, it is up to you to decide whether or not to take part. Taking part in the study is voluntary. If you do decide to take part you will be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. Deciding not to take part or withdrawing from the study will not affect your employment. You may choose not to take part or subsequently cease participation at any time.

Do take note that, due to the methodological nature of this study, should you choose to withdraw, your interview content will be excluded from further analysis but the part of your interview content that has already been analysed cannot be withdrawn. However, you will be excluded from further interviews and your interview content that has been analysed will not be used as publishable quotes in the future. It is for this reason that you are advised to contact me as soon as possible if you are unsure about continued participation in this study.
What will happen if I take part?

You have up to 1 week to decide to take part. I will provide an explanation of the consent process before taking your signature on the consent form. Subsequently, you will be asked some questions and a discussion will ensue in an interview regarding research and research use as well as leadership and organizational context. For your convenience, the interview time and place will be decided by you, provided the venue is a public space or your place of employment. An interview takes a maximum of 60 minutes of your time. If you are willing, I may approach you for a follow-up interview and informed consent will be taken each time. You have the right to refuse subsequent interviews and may withdraw at any time. Interview transcripts will be self-transcribed by me.

What are the possible benefits of taking part?

There are no direct benefits to you taking part in this study, but the results from this study might help to improve leadership education for future healthcare leaders, advance nurses use of research in practice, develop a better working environment for healthcare professionals and, subsequently, further enrich the healthcare of patients in the future.

What are the possible risks/disadvantages of taking part?

This study involves interviews which may take up to 60 minutes of your time and, with your agreement, follow-up interviews may be needed. As this study will discuss practices relating to your clinical work, any disclosures of harm or threat of harm to patients may need to be reported.

What happens when the study is finished?

This study will be written up as a doctoral thesis. The findings of this study may be shared for research dissemination that may include journal publications, conferences, poster presentations, etc. You will not be identifiable in any published results.

The findings of this study may also be used for future leadership developments and you will not benefit financially from this. Upon completion of this study, anonymised data will be kept for further studies or deposited into a research data bank for a maximum of 5 years for future research use. For this purpose, all names will be changed to pseudonyms and only non-identifiable demographic data will be shared. No personal data will be stored for longer than 12 months after this study has ended.

You may choose to be informed of the study’s findings by stating your e-mail on the consent form and a newsletter will be sent to you when the study is complete, outlining key findings.

Will my taking part be kept confidential?

All the information I collect during the course of the research will be kept confidential and there are university policies in place which safeguard your privacy at every stage. However, if a disclosure is made (e.g. criminal, threat of harm to self or others or child protection issues), I am obligated to report this to your immediate supervisor and discuss it with my supervisors in the university.

With your permission, interviews will be digitally recorded using an encrypted device, transcribed using a transcribing service, and analysed on a password protected, university computer that only I have access to. All paper trails will be kept at the University of Edinburgh. Only the research team will have access to this data. Data will not be used for anything other than research purposes.
Who is organising and funding the research?

While this study has not received any funding, my doctorate study is jointly sponsored by the Ministry of Education, Malaysia and the National University of Malaysia. The study is being organized and sponsored by the University of Edinburgh.

Who has reviewed the study?

The study proposal has been reviewed by a member of the research ethics committee of Nursing Studies in the School of Health in Social Science of the University of Edinburgh, Dr. Susanne Kean, and has been approved on 11 July 2017. The study has also received NHS Research & Development approval on 28 August 2017.

Researchers Contact Details

If you have any further questions about the study please contact me:

Azwa Shamsuddin
PhD Researcher
Nursing Studies
School of Health in Social Science
University of Edinburgh

You can also contact my supervisors:

Dr. Elaine Haycock-Stuart
Senior Lecturer
School of Health in Social Science
University of Edinburgh

Dr. Sheila Rodgers
Senior Lecturer
School of Health in Social Science
University of Edinburgh

Independent Contact Details

If you prefer to discuss the study with someone who is independent of the study, please contact:

Dr. Sarah Rhymas
Teaching Fellow
School of Health in Social Science
University of Edinburgh

Complaints

If you wish to make a complaint about the study please contact the University of Edinburgh’s Research Governance team via email at resgov@accord.scot
CONSENT FORM
Leadership in Nursing Research Utilization: A Grounded Theory Study

1. I confirm that I have read and understand the information sheet (07 08 2017 v1.0) for the above study. I have had the opportunity to consider the information, ask questions and have had these questions answered satisfactorily.

2. I understand that relevant sections of data collected during the study may be looked at by individuals from the regulatory authorities and from the Sponsor (the University of Edinburgh) or from the other NHS Board(s) where it is relevant to my taking part in this research. I give permission for those individuals to have access to my records.

3. I understand that my participation is voluntary and that I am free to withdraw at any time during the study without giving any reason and without my employment being affected.

4. I understand that I may withdraw at any time but the extent to which my interview content has been analysed cannot be withdrawn.

5. I understand that the results of this study may be used for future research dissemination and/or leadership development and I will not benefit financially from this.

6. I agree for anonymised data to be available for ethically approved future research projects or deposited into a research data bank.

7. I agree to take part in the above study.

8. I want to be informed of the study’s findings (please state e-mail) ____________________________

Name of Participant ____________________________ Date ____________________________ Signature ____________________________

Person taking Consent ____________________________ Date ____________________________ Signature ____________________________

Original (x1) to be retained in site file. Copy (x1) to be retained by the participant.
Participant Information Sheet

Leadership in Nursing Research Utilization: A Grounded Theory Study

I would like to invite you to take part in a research study. Before you decide whether or not to take part, it is important for me to share information about the study to ensure you understand why the research is being done and what it will involve. Please take time to read the following information carefully. Talk to others about the study if you wish. Contact me 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.

What is the purpose of the study?

It has often been discussed that leadership is crucial in nurses’ research use, yet the aspects of leadership needed in this important aspect of nursing practice is unknown. Further, it has been emphasized that context matters in leadership but the exact organizational and larger context needed to advance leadership in research utilization has yet to be identified.

This study is conducted as part of a doctoral study and aims to gain a theoretical understanding of the role of leadership in nurses’ research utilization as well as the impact of contextual factors on leadership. I am a PhD researcher and will be conducting multiple, sequential, interviews with healthcare professionals within NHS [redacted].

Why have I been invited to take part?

You have been asked to take part as you are a healthcare professional employed by NHS [redacted] and are a member of a research support group or have experience in a leadership position or are in a nursing position where you may or may not have been involved in research.

Do I have to take part?

No, it is up to you to decide whether or not to take part. Taking part in the study is voluntary. If you do decide to take part you will be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. Deciding not to take part or withdrawing from the study will not affect your employment. You may choose not to take part or subsequently cease participation at any time.

Do take note that, due to the methodological nature of this study, should you choose to withdraw, your interview content will be excluded from further analysis but the part of your interview content that has already been analysed cannot be withdrawn. However, you will be excluded from further interviews and your interview content that has been analysed will not be used as publishable quotes in the future. It is for this reason that you are advised to contact me as soon as possible if you are unsure about continued participation in this study.
What will happen if I take part?

You have up to 1 week to decide to take part. I will provide an explanation of the consent process before taking your signature on the consent form. Subsequently, you will be asked some questions and a discussion will ensue in an interview regarding research and research use as well as leadership and organizational context. For your convenience, the interview time and place will be decided by you, provided the venue is a public space or your place of employment. An interview takes a maximum of 60 minutes of your time. If you are willing, I may approach you for a follow-up interview and informed consent will be taken each time. You have the right to refuse subsequent interviews and may withdraw at any time. Interview transcripts will be self-transcribed by me.

What are the possible benefits of taking part?

There are no direct benefits to you taking part in this study, but the results from this study might help to improve leadership education for future healthcare leaders, advance nurses use of research in practice, develop a better working environment for healthcare professionals and, subsequently, further enrich the healthcare of patients in the future.

What are the possible risks/disadvantages of taking part?

This study involves interviews which may take up to 60 minutes of your time and, with your agreement, follow-up interviews may be needed. As this study will discuss practices relating to your clinical work, any disclosures of harm or threat of harm to patients may need to be reported.

What happens when the study is finished?

This study will be written up as a doctoral thesis. The findings of this study may be shared for research dissemination that may include journal publications, conferences, poster presentations, etc. You will not be identifiable in any published results.

The findings of this study may also be used for future leadership developments and you will not benefit financially from this. Upon completion of this study, anonymised data will be kept for further studies or deposited into a research data bank for a maximum of 5 years for future research use. For this purpose, all names will be changed to pseudonyms and only non-identifiable demographic data will be shared. No personal data will be stored for longer than 12 months after this study has ended.

You may choose to be informed of the study’s findings by stating your e-mail on the consent form and a newsletter will be sent to you when the study is complete, outlining key findings.

Will my taking part be kept confidential?

All the information I collect during the course of the research will be kept confidential and there are university policies in place which safeguard your privacy at every stage. However, if a disclosure is made (e.g. criminal, threat of harm to self or others or child protection issues), I am obliged to report this to your immediate supervisor and discuss it with my supervisors in the university.

With your permission, interviews will be digitally recorded using an encrypted device, transcribed by me, and analysed on a password-protected, university computer that only I have access to. All paper trails will be kept at the University of Edinburgh. Only the research team will have access to this data. Data will not be used for anything other than research purposes.
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Researchers Contact Details

If you have any further questions about the study please contact me:

Azwa Shamsuddin
PhD Researcher
Nursing Studies
School of Health in Social Science
University of Edinburgh
E-mail: s1581936@sms.ed.ac.uk

You can also contact my supervisors:

Dr. Elaine Haycock-Stuart
Senior Lecturer
School of Health in Social Science
University of Edinburgh
E-mail: E.A.Haycock-Stuart@ed.ac.uk

Dr. Sheila Rodgers
Senior Lecturer
School of Health in Social Science
University of Edinburgh
E-mail: s.rodgers@ed.ac.uk

Independent Contact Details

If you prefer to discuss the study with someone who is independent of the study, please contact:

Dr. Sarah Rhynas
Teaching Fellow
School of Health in Social Science
University of Edinburgh
E-mail: Sarah.Rhynas@ed.ac.uk

Complaints

If you wish to make a complaint about the study please contact the University of Edinburgh’s Research Governance team via e-mail at: resgov@accord.scot
Appendix F

Newsletter of research findings to study participants and participant responses

THE ROLE OF EMPOWERMENT TO RECONSTRUCT PROFESSIONAL IDENTITY FOR NURSES’ RESEARCH UTILIZATION:

A GROUNDED THEORY STUDY

Azwa Shamsuddin, Dr Elaine Haycock-Stuart, Dr Shaia Rodgers
Nursing Studies, University of Edinburgh

1. CONCLUSION

- Structural and psychological empowerment influence nurses’ understanding of research in relation to their professional identity.
- Nurses should be supported by organizational structures to generate and use research in practice.
- Findings on empowerment support the contention of a shift in the leadership paradigm for leaders to empower and develop other leaders, moving on from past notions that focused on leader traits and characteristics.
- Professional identity is multifaceted and research as part of nursing identity needs more evidence.

2. FINDINGS

Analysis gave rise to three main categories, elaborated below, that showed structural empowerment and psychological empowerment as key to embedding research in the nursing role. The data indicated that empowerment then influences the perception of research utilization as part of the professional role, as shown in the figure below.

INTEGRATING RESEARCH INTO THE NURSING ROLE

<table>
<thead>
<tr>
<th>Sub-categories</th>
<th>Illustrative quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separating</td>
<td>“I think there’s an element where nurses need to have research and evidence-based practice. I think they see that as a thing for NMC. But I also think they don’t see that that’s an essential part of like, nursing and research together? Because I think sometimes there’s an external group that may come in to do research so that makes a distinct, sort of separate entity almost, which is confusing. And actually it’s probably a lot of nurses in that department who’d really like to do a bit of research and so they’re embedded in the clinical area. They know what they want to look at, they just don’t have the tools to do it or tools to change.”</td>
</tr>
<tr>
<td>Changing research engagement</td>
<td>“The training that the staff get at university does not reflect real life. It does not reflect clinical research. And I think the work research conjures up the wrong ideas for nurses. Because they are not used to doing it in their training, you have the research modules to do and it’s not really a clinical project. And I think they need to be doing a clinical project or they need to be doing an audit. Where they actually see what happens and what they can change.”</td>
</tr>
<tr>
<td>Clinical staff investment</td>
<td>“So that we start changing this concept whereby you have research who’s doing research, clinical doing clinical. It should be that all clinical staffs are engaged in research activity and therefore they see the process, they see the results. And they’re the ones who actually have asked the initial questions, therefore it’s in their investment. In their best that they actually implement change.”</td>
</tr>
</tbody>
</table>
**Background**

Research utilization in nursing practice has shown to improve quality of care and healthcare costs. However, the extent to which nurses use research in practice remains questionable (Bowers et al. 2011). It is known that knowledge is crucial in nurses’ research utilization (Carmody et al. 2010). However, the domain of leadership in nurses’ research utilization is largely unexplored.

**Aim**

To gain a theoretical understanding of the role of leadership in nurses’ research utilization.

**Research Questions**

- Are there dimensions of leadership that are related to nurses’ research utilization?
- What does contextual factors influence leadership in nurses’ research utilization?

**Methods**

This study used Fawcett's (2005) descriptive grounded theory and Clarke's (2005) situational analysis as an analytical tool, beginning with purposeful sampling and latter progressing to theoretical sampling. To semi-structured interviews of healthcare professionals within the health board in Scotland was done from September 2017 to August 2018.

**References**


**Shifting Culture**

<table>
<thead>
<tr>
<th>Sub-categories</th>
<th>Illustrative quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forming the workplace culture</td>
<td>“It’s still quite hierarchical isn’t it and it’s very much determined by the leadership style of the senior nurses on the ward and who they work with and if that doesn’t nurture autonomy and promote development but just ask people to do their tasks in a tick box way then that will be what’s encouraged in a ward and people will develop into that style.”</td>
</tr>
<tr>
<td>Restricting professional autonomy</td>
<td>“If I think we have quite a lot of top down stuff! It’s becoming a lot more micromanaged, I think asking questions is out of fashion, I think what is in fashion is you fill in a tick chart, you fill in a form, you phone a friend, Senior person. You don’t make independent thoughts on judgements. You escalate up to somebody else. There’s all kinds of rules and regulations that are top down to stand in the way and make practice safe. It’s not about thinking out of the box.”</td>
</tr>
<tr>
<td>Navigating professional boundaries</td>
<td>“But I think, also, if that nurse had come in and then there were senior nurses that said, ‘No you’re not happy with this’, then it would have got shut. So it may be that you speak to consultants and they’re very happy with the intervention. This is one thing, it’s not going to be impacting on medical workload, it’s not going to impact on how they look after patients. But if it’s going to get in the way of all the other nurses working, you may find more nursing resistance.”</td>
</tr>
</tbody>
</table>

**Building Relationships**

<table>
<thead>
<tr>
<th>Sub-categories</th>
<th>Illustrative quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building relationships</td>
<td>“I’m a... I’m a guest (emphasis) in their world, I can’t come and say, ‘Now we have to do A, B, C, you know? Because if somebody did that on my ward, I would... tell people to buzz off. You can’t do that. You can’t do that. You can’t do that.”</td>
</tr>
<tr>
<td>Sharing leadership</td>
<td>“It’s about engaging staff from the ground floor to ask what are their views. I might say, “This is where we’re at, at the minute, been thinking about how we can improve this. There’s a need, a need, to. What are your thoughts?” And I would actually try to get them to think about, ‘whether or not this (emphasis) practice...’ given that I’ve got some evidence about their practice, whether or not this is working or not and whether we can do it better.”</td>
</tr>
<tr>
<td>Demonstrating commitment</td>
<td>“There’s a lot of interest, there’s a lot of enthusiasm about nurses doing research or bringing their research into practice. It’s all very well saying you’re interested but we need to see the investment in that and I’m afraid that is going on another level and people are trying but... it’s not there, then as far as I’m concerned the investment isn’t there.”</td>
</tr>
<tr>
<td>Communicating openly</td>
<td>“Most vital thing about communication, I think is about willing to stand back and listen and acknowledge that there’s different voices and they have different concerns which might be very different to mine. And I used to... while back and listen. I think that’s an important thing about change, unless you can’t impose things on them cause they’re already (emphasis) an unoverpowered, understimulated workforce. So imposing change on them is not gonna work. You’ve got to appreciate where they’re at and then bring them in.”</td>
</tr>
</tbody>
</table>
Re: Leadership for nurses' research utilization: study findings

@doctors.org.uk>
Thu 03/10/2019 13:04
To: BINTI MOHD SHAMSUDDIN Khairatul azwa <azwa.shamsuddin@ed.ac.uk>
Dear Azwa,

I’m really pleased it’s all gone well. It must be very time consuming.

Best wishes

From: BINTI MOHD SHAMSUDDIN Khairatul azwa
Sent: Thursday, 3 October 2019 12:48
Subject: Leadership for nurses’ research utilization: study findings

Dear all

Firstly, I would like to extend my gratitude to each and every one of you for participating in my study and contributed to further understanding of nurses’ research utilization. I am now in the final stages of my PhD, hoping to submit by Christmas.

I attach here a newsletter summarizing the findings of my study in which your participation was key. I would be glad to include any feedback or comments on the findings in my thesis and let me know if you have further questions.

Thanks again and wishing everyone the very best!
Azwa

My pronouns are she/her

Azwa Shamsuddin
PhD Researcher
Postgraduate nursing tutor
Research assistant of PTAS project at School of History, Classics, and Archaeology
Health and well-being officer at Estates Department
University of Edinburgh

Department of Nursing Studies
School of Health in Social Science
University of Edinburgh
Room 2.4
24 Buccleuch Place
Edinburgh
EH8 9LH

https://www.ed.ac.uk/profile/khairatul-azwa-bint-mohd-shamsuddin
The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.
https://outlook.office365.com/me/keerdhVd/AAGzAaGfj/YXQ6NjUzWE5GZTk5MDYwMTMxYzMiLTQzYjIiMTAgZT1QQAAAMCXwxJ38QdFgWW... 1/1
RE: Leadership for nurses’ research utilization: study findings

Fri 04/10/2019 09:07
To: BINTI MOHD SHAMSUDDIN Khairatul azwa <azwa.shamsuddin@ed.ac.uk>
Thanks for this Azwa

What a really great way to present research findings – well done!

Best wishes


From: BINTI MOHD SHAMSUDDIN Khairatul azwa <azwa.shamsuddin@ed.ac.uk>
Sent: 03 October 2019 12:48
Subject: Leadership for nurses’ research utilization: study findings

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https://outlook.office365.com/mail/#/aAaUzAQiC4j2tY0Q9NQz7e.YiMG7U9NDYwM5T/hNbr5LTQzY1jNMTgT6iZOGAQAMUCXwJGiQgWW... 1/2
RE: Leadership for nurses' research utilization: study findings

scot.nhs.uk>

Wed 30/10/2019 09:58
To: BINTI MOHD SHAMSUDDIN Khairatul azwa <azwa.shamsuddin@ed.ac.uk>
Hi Azwa,

Well done for this I know how much work it is. All the best with this and your chosen career,

From: BINTI MOHD SHAMSUDDIN Khairatul azwa [mailto:azwa.shamsuddin@ed.ac.uk]
Sent: 03 October 2019 12:48
Subject: Leadership for nurses' research utilization: study findings

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Azwa

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Postgraduate nursing tutor
Research assistant of PTAS project at School of History, Classics, and Archaeology
Health and well-being officer at Estates Department
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EH8 9LN

https://www.ed.ac.uk/profile/khairatul-azwa-binti-mohd-shamsuddin
The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.
NHS IT Security Warning: This message has an attachment which may contain malicious content. Please be careful when considering opening the attachment and if the email is unexpected or the
RE: Leadership for nurses' research utilization: study findings

Thu 03/10/2019 15:39
To: BINTI MOHD SHAMSUDDIN Khairatul azwa <azwa.shamsuddin@ed.ac.uk>
Thanks, really interesting!

From: BINTI MOHD SHAMSUDDIN Khairatul azwa
Sent: 03 October 2019 12:48
Subject: Leadership for nurses' research utilization: study findings

Dear all

Firstly, I would like to extend my gratitude to each and every one of you for participating in my study and contributed to further understanding of nurses’ research utilization. I am now in the final stages of my PhD, hoping to submit by Christmas.

I attach here a newsletter summarizing the findings of my study in which your participation was key. I would be glad to include any feedback or comments on the findings in my thesis and let me know if you have further questions.

Thanks again and wishing everyone the very best!
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EH8 9LN

https://www.ed.ac.uk/profile/khairatul-azwa-binti-mohd-shamsuddin
Appendix G

Abstract submitted and accepted for oral presentation at RCN International Research Conference, September 2019

The role of empowerment in reconstructing nurses' professional identity to achieve research utilization: A grounded theory study

Research utilization in nursing practice has shown to improve quality of care and healthcare costs, however, the extent to which nurses use research in practice remains questionable (Squires et al 2011). It is known that leadership is crucial in nurses’ research utilization (Cummings et al 2018) whilst empowerment is argued to be an important factor that affects leadership (MacPhee et al 2011). Yet the effects of empowerment on nurses’ use of research in practice is largely unknown. This grounded theory study aimed to gain a theoretical understanding of the role of empowerment in nurses’ research utilization, including the impact of related contextual factors. Beginning with purposive sampling and later progressing to theoretical sampling, 20 semi-structured interviews of nurses in various roles within one health board in Scotland was done from September 2017 to August 2018. The findings of this study illuminate the links between empowerment and nurses’ professional identity to achieve sustained research utilization. Preliminary results show a theoretical model that illustrates five main categories that empower nurses structurally as well as psychologically in affecting their understanding of their own professional identity: integrating research into the nursing role; keeping researchers in practice; building relationships; shifting culture; and impactful opinion leaders. Other issues explored within this study using positional maps are participants’ various stances and perceptions of the medical-nursing power struggle, encapsulated as autonomy vs authoritative working cultures and the impact of the nurse manager’s perception of research on research utilization. This study provides valuable guidance for nursing leaders at all levels of healthcare delivery in understanding the role of professional identity in research utilization and the use of empowerment in affecting change.

Word count: 272

References


The role of empowerment in reconstructing nurses’ professional identity to achieve research utilization: A grounded theory

Azwa Shamsuddin
RN (Malaysia), BSc (Hons), MSc Clinical Nursing, APN

Dr Elaine Haycock-Stuart
RN, MSc, PhD, AN, APN

Dr Sheila Rodg
RN, BEd (Hons), MSc by Research

RCN Presentation at Sheffield Hallam University,

3 September 2019
U21 Health Sciences Group Doctoral Forum, winner of best poster presentation, 9 September 2019
Appendix H
Research diary entries on developing core category

31 August 2018
Decided no name core category – altering identity. This is to reflect the main aim of the processes highlighted by the theoretical categories which is to integrate research into the nursing role and to eventually change the perception that research is not for nurses. Decided not to name it as a specific type of leadership as the great leadership theories debate has been unhelpful – why debate which theory is better when, clearly, both transactional and transformational leadership is needed and people tend to use both styles according to the situation anyway? And while my findings are interesting, it is not all-encompassing to other leadership situations, it is specific to nursing (though participants included medics – to gain their perspective) and specific to applying research findings in practice. Maintaining motivation in the workplace and aligning personal with organizational goals is not relevant to my findings, in fact participants have said again and again that motivation has to come from within and not others.

Bass 1999 talks about selflessness and the leader’s role in realizing this for the followers – how realistic is this? Like, really, in a workforce that is already “understaffed and overworked”, how realistic is this theory’s expectation of leaders and followers?

If I had to choose amongst the theories, I would say changing practice needs transformational, participative, and democratic leadership. But this doesn’t entail my findings because transactional is needed as well and the motivating part of transformational leadership is not relevant.

6 September 2018
I am considering “integrating research into the nursing role” as my core category but the question is, why that category? “Prioritizing relationships” is related to all other categories as well so why choose one over another?

11 Sep. 18
I’ve determined that the core category, the abstract category with the most explanatory power, is “legitimizing a new professional role” which partly arises from the “integrating research into the nursing role” category but also takes into account extant literature on this matter. A few interdisciplinary work from North America is proving to be helpful and relevant. Going to discuss this with Sheila tomorrow, for which my specific concerns are:

1. Is it okay that my findings is not a leadership theory in general but more of a basic social process of forming a new professional identity?

Stopping to think – can I present my findings as a process in relation to Reay et al’s (2006) work but how it is specifically relevant to nursing research-based practice?

12 December 2018
The core category I proposed was “restructuring professional identity” but this more and more seems to be just my preconceptions and personal motivation coming through the research. Yes some participants mentioned of a cultural shift and changing the occupational culture but my raising this as the core category was my preconceptions going unchecked as this was not supported by the data.
Conversely, in relation to the research question and focus of the study, it was the category “prioritizing relationships” that is most significant as it entails leadership and acts as a mediator for all other categories to result in research utilization. Once I accepted and became aware of my preconceptions, the category “integrating research into the nursing role” remained an important part of the process but not the main category, yet still bringing up discussions on professional identity as I think it is still relevant, just not as significant in this particular study.

Taking a step back from the data and doing other things outside of my research I think really helped me to rethink my findings and develop a better conceptual model. It helped me think of my study from different angles – need to find references for this!
Appendix I
Developing social worlds/arenas map (drafts)

Insert key discursive interactions

Research utilization arena

NMC
Clinical nursing
Research nurses
Academic nursing
Nursing management

GMC
Quality improvement group

Research councils

Technology

NHS

Patients

Nursing students
Appendix J

Developing theoretical model (drafts)

Individuals
- High nursing research profile
- Linking people
- Enabling interests
- Culture of learning

Collaboration
- Clinical investment in research
- Benefit for patients
- Group over individual

Negotiating time

MDT relationship
- Negotiating use of outcomes
- Valuing patient experience

Individuals
- Resourcing
- Identifying collaborators
Nursing leadership for research-based practice
Prioritizing relationships

- Keeping researchers in practice
- Selling the practice change
- Engaging politics
- Shifting culture
- Understanding society and media
- Recognizing clinical leaders

Restructuring professional identity
Integrating research into the nursing role