The Evolving Identity and Competence of New Nursing Graduates in Practice:

A Community of Practice
Perspective

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EdD

Declaration

I, Mary Chen Xiaorong confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signature:

The thesis word length is 44,978

Abstract

Novices' transition is identified as a period of time at the beginning of their professional career, when they go through role changes from students to independent practitioners. The transitional literature indicates novices' incompetence and difficulties in transition in nursing and other professions. I argue that these findings were based on a fixed model of competent identity, while novices' transitional mechanism is not well understood.

Aiming to examine how transition happens, a focused ethnographic study underpinned by Wenger's Community of Practice theory was conducted to explore novice nurses' practice in a tertiary hospital in Singapore. Data was collected using observation over four months and focus group discussions.

I identified sociocultural elements indicating the local rules the nurses make reference to in their participation. These elements include the need to assess the situation, to recognise the different characteristics of people and to be able to work with them, to identify and prioritise tasks, and to express and understand one another's participation. The novices were found to be negotiating meaning and relational positions with different nurses in different situations at different levels, indicating the effect of sociocultural elements on their practice and the formation of community membership identities.

The study findings reveal how complex the novices' workplace and work really are and help us to better understand how competence and membership identity are negotiated among members. I argue that novices' transitional mechanism is their evolving learning of the workplace and work, and negotiation of membership identity, a necessary part of their professional development.

This study extends nursing and wider interdisciplinary literature on novices' transition to a broader notion of meaning making and identity negotiation among members in practice. The new concepts developed add clarity to Community of Practice theory in understanding members' negotiation of participation and membership. Implications for policy, education, practice and future research studies are discussed.

Impact Statement

This statement covers my study's contribution to new knowledge and its impact.

Contribution to new knowledge, theory and research

The study findings break down the complexity of the novices' workplace and work into sociocultural elements and identify the dynamic regularities of these elements in novices' interactions. These dynamic regularities help us to better understand the nature of the workplace, work and people, and how competence and membership identity are negotiated and renegotiated in the workplace among members. The novices' active participation in the negotiation of membership identity supports the theoretical claims of Wenger and Billett that individuals develop their identities through work and learning in practice. This study extends nursing and wider interdisciplinary literature on transition from a fixed model of competent identity to a broader notion of meaning making and identity negotiation among members in practice.

The new concepts developed in this study form a conceptual architecture for understanding members' participation in the community. These concepts include: Dimensions of Regime of Competence, Elasticity of Regime of Competence, Prized Tasks and Participating Space. The concepts of Dimensions and Elasticity of Regime of Competence capture the dynamic meaning negotiation processes that members undertake in their participation, while the concept of Prized Tasks provides an anchoring point for such analysis and understanding. The concept of Participating Space indicates members' relational position and their power in meaning negotiation. This concept gives a "shape" to members in the seemingly fluid practice, to signal "what membership looks like and feels like", to make the analysis of membership identity and how it is negotiated in practice much more intuitive.

This study demonstrated the process of my critical understanding of and engagement with Community of Practice theory and its concepts in an empirical study of nurses in a clinical setting. The reflexive iterative processes, including analysing theoretical concepts, deliberating research methods and navigating my roles and relationships with the nurses in the field, enabled me to be sensitive to the meanings and values of the nurses' daily participation. The new concepts developed in this study add clarity to Community of Practice theory in understanding comprehensively and dynamically the social mechanism of members' participation

Impact on policy and professional education

Policy makers should consider the effect of workplace sociocultural elements on practitioners' practice and learning at work. The concepts of Dimensions and Elasticity of Regime of Competence indicate the changeable and negotiable nature of competence. Therefore how competences are negotiated in practice settings needs to be deliberated among practitioners and reflected in policies.

The new concepts can be incorporated in case scenarios and guided reflections to develop practitioners' abilities in assessing the workplace, people, expressions of participation and suchlike aspects of situational awareness. In designing workplace placements, preceptorship and orientation programmes, novices' abilities in assessing sociocultural factors in practice should be considered as an important component of the programmes.

Impact on my professional practice

My engagement in EdD study has strengthened my academic abilities in social sciences, and more specifically in analysing professional practice from a social learning perspective. My social sciences stance, combined with my nursing background, gives me special perspectives in analysing nursing and other healthcare related professional practice, education,

research and policies. I gained insight, knowledge and experience of conducting ethnographic research in a healthcare setting. I plan to disseminate the research findings and my ethnographic research experiences through publications and conferences, and to engage in ongoing conversations with relevant parties on novices' transition, workplace learning and development issues.

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Reflective statement

I wrote many reflective accounts in the thesis report. Here my reflection is focused on my EdD journey as well as managing my emotions, family life, communication with supervisors and the impact on my own teaching practice.

My EdD Journey

My journey to EdD started with my being at a juncture in my professional life, from being a clinical nurse and nurse educator to an academic faculty teaching role at Singapore Institute of Technology (SIT). As I reflected in my first essay, which was based on my own transitional experience under the module titled Foundation of Professional Development (FoP), nursing faculties face complex roles and role confusion both in academic teaching and in guiding their nursing students in clinical practice settings (Chen, 2016, p8):

Faculty teachers' complex roles, role strain and role blurring in the clinical area cause challenges and tension. Their fragile positions in an unfamiliar environment require them to be always cautious, sensitive and to learn to adapt. Accompanied with the danger of losing competences and authority in clinical areas, faculty teachers have to analyse the situation, understand their position and their professional role changes and learn to adapt to the changes.

From my learning in FoP, I reflected on my confusion of roles and the uneasy feeling as a faculty teacher, facing deskilling of clinical skills and knowledge developed over many years, which I took pride in. By shifting my career into an academic setting, I realised that I need to engage in

gaining higher academic credit as a member of the university faculty when I was no longer young and energetic.

In writing that essay, I first encountered Wenger's Community of Practice theory and suggested nursing professionals should have the professional imagination (Power, 2008), to take a historical view of their profession, analyse and understand the issues they are facing and therefore project professional identities that complement one another. I suggested the way ahead was to adapt and adjust to the complex roles and challenges through mutual communication and understanding of the academic and clinical culture by developing practice communities. I also proposed policy reviews to give nursing faculty teachers access to clinical practice; using medical doctors' roles as clinicians and medical educators in established academic centres in Singapore as an example (MOH, 2012b). Upon my reflection, such border-crossing and sponsoring roles need further exploration and understanding.

That learning was an important milestone for me, to reconcile my new role and my engagement in academic learning and research, while keeping in mind that clinical practice should always be one of the most important foci for the nursing profession. It was indeed a process of negotiating the Regime of Competence in that workplace and my identity as a new nursing lecturer.

I went on a roller-coaster ride through Methods of Enquiry I and II (MOEI&MOEII) and Institutional Focused Study (IFS), as my progression was not linear as these modules are designed for, and as is expected. Upon reflection, I realised that my progress in my academic career and my learning during the EdD programme placed conflicting demands on my energy and time, and, meanwhile, had great synergy with my attainment of academic abilities: the demand for developing new modules for the new programme in the new university propelled me to

explore new knowledge and new territories; while my learning during the EdD benefitted me through broader exposure to research literature and theories, literature reviewing and writing skills, research methodology, and especially the skills to conduct interviews and analyse data.

I can now see my growth in both aspects. In MOE1 and MOE2, my research study was based on the background of SIT's pursuance of an applied learning pedagogy as a new university in the social context of Singapore being a meritocratic society. The historical meritocratic system influences people's value judgements, and people tend to associate achievement with higher academic results, while faculty come together with their diverse social and learning backgrounds and experience dilemmas over their beliefs and their teaching decisions under such applied learning pedagogy.

I focused on teaching beliefs in MOE2 with my attempt to understand what applied learning really means and how it is translated into my teaching at SIT. The concept of teaching beliefs is deemed very challenging as it involves many aspects and concepts. I managed to plough through the extensive literature on teaching beliefs and summarised it into theoretical dimensions to form a theoretical foundation for my research. The most meaningful learning for me from this research project was the opportunity to have dialogues with my colleagues at the new university, and the gaining of experience of doing semi-structured interviews and conducting intensive qualitative data analysis.

IFS was a test-bed for me to use a theoretical framework for my research. I realised the usefulness of having a theoretical framework, as it set the boundary of my research. Meanwhile, I also realised how demanding it is to thoroughly understand a theoretical framework, its limitation in empirical research, and the need for scholarly dialogues for

the theories to evolve. I combed through dense and messy qualitative literature and data and finalised the main themes.

The demands of my work at that time added more stress, as I was developing two new modules as well as the teaching and assessment and related administration work, and helping a colleague with the development, teaching and clinical placement for another new module. That was when I learnt to negotiate workloads in order to reserve some time and energy for studying. It has been difficult for me until now: I am enduring internal turmoil for not being able to do more at work.

All those taught modules and IFS were the preparation necessary for my thesis journey, although in my case the process was not linear. I started the EdD journey with my interest in nurses' clinical learning, and I explored teaching beliefs and teaching decision making because of my own career transition from practitioner to academic staff. I decided to research novices' transition, because it has been my professional concern throughout my years in nursing clinical practice and education, and spurred me to take up the EdD journey in the first place.

Managing emotion, family life, communication with supervisors and the impact on my own teaching practice

Engaging in this level of study while working can be a journey of finding solitude or feeling lonely. At a personal level, I differentiated the things I was going through each day into the "Must" and "the Rest". I focused on the Must and not letting the Rest become obstacles. For example, the Must included allocating devoted time for study at my best time of the day; to do my work properly as a faculty member; to still find time to fulfil family commitments, such as housework, which sometimes provided welcome relief from work and study and sometimes added more stress; to develop new routines so I would make progress in my studies and

keep myself healthy and mentally sound. Perhaps only those who have been on such a journey would understand how much a Doctoral student with a full-time job and family responsibilities has to go through. When we talked about the recent COVID19 lockdown, I even jokingly told my friends that I have self-imposed a five-year lockdown. So, the EdD journey changed me as well as my family: they journeyed along with me. Even now, I still do not know the social and psychological impact on my children because of our changed lifestyle during their growing up years. I hope there are more positive elements, as I shared my struggles with them, and they saw my perpetual engagement in study, so hopefully they learnt the spirit of perseverance and the importance of self-discipline.

I appreciate that my supervisors, Mark and Sophie, have always been supportive and given me helpful advice on my study. However, it was not without hiccups. Mark was very serious with me when he realised that I had too heavy a workload and firmly insisted that I should negotiate more time for my study. With his advice, I shared my difficulties with my colleagues and gained their understanding and support. I always feel inspired by Mark's intellectual feedback and his encouragement to pursue academic excellence. It was also a journey of developing mutual understanding and expectations between us.

"It is like a camel going through the eye of a needle" – this was my mother's comment, translated from Chinese, when I told her I had to delay visiting her because of the demands of my thesis writing. Doing the EdD is the most difficult journey I have engaged in so far, but it was worthwhile. I started to look at nursing education from a different perspective and realised that to nurture my students' ability to think and to analyse issues they face in their work is as important as helping them to master nursing skills. The social perspective I gained from my studies also broadened my view: I started to look at nurses' practice issues from a social perspective. In my teaching, I try to bring in clinical scenarios for my students to break down issues into elements and to analyse them from different perspectives. For example, they try to understand patients'

behaviours through understanding their sociocultural, economic and family backgrounds.

Being an observer in a hospital ward as a researcher, I reconnected to my own experience being a nurse at the clinical ground. The memories of surviving on busy days, missing meals, working on night shifts, over the weekends and holidays while leaving my young children at home came back vividly to me, and at times triggered strong emotions. I could foresee the sources of tension my students are going to face, so I use clinical scenarios to discuss with them in a participative manner, valuing their views and ideas and meanwhile, sharing with them my own experiences and setbacks. In this way, we have an exchange of ideas and views, the learners as the educators and the educator as the learner.

I plan sessions for the students to have conversations with clinical nurses and nursing leaders in a safe environment to let them have the cross-boundary experiences and dialogues. Some students have even identified issues from such conversations to develop into their research topics. Another platform I have created is to invite the faculty from other programmes, nurse educators, nurse leaders and nurses from all over Singapore to hear my students presenting their projects. Such events develop bonding between my students and the nurses from practice and extend my students' learning beyond their classroom and beyond school.

All these approaches were enriched by what I learnt from the EdD programme. My engagement with Wenger's Community of Practice theory and other learning theorists' work, such as Knud Illeris, Stephen Billett, and Michael Eraut, influenced my module design, while my reflexive research approach and my view of knowledge changed my views on students' learning and my relationship with them. As Wenger (1998, p277) mentioned:

A frail bridge across the abyss, a slight breach of the law, a small gift of undeserved trust – it is almost a theorem of love that we can open our practice and communities to others, invite them into our own identities of participation, let them be what they are not, and thus start what cannot be started.

Yes, I myself engaged in such a journey, with my supervisors and IOE community enduring and embracing my learning needs, to be what I am not. And then in turn, let my students be what they are not.

List of abbreviations

EBP Evidence-based Practice

FoP Foundation of Professional Development

HEIs Higher Education Institutes

KPIs Key Performance Indicators

LPN Licensed Practice Nurse

MOE I Method of Enquiry I

MOE II Method of Enquiry II

MOH Ministry of Health

NP Ngee Ann Polytechnic

NUS National University Singapore

NYP Nanyang Polytechnic

PC personal computer

RN Registered Nurse

SIT Singapore Institute of Technology

SNB Singapore Nursing Board

Glossary

Bed XX: number was replaced with XX to protect confidentiality

Changes or **doing changes** are terms commonly used by nurses, meaning to check, take notice of and carry out the orders of doctors.

Charge Nurse is usually a senior nurse who is assigned to oversee the shift, who acts as a mentor for junior nurses and deputises for the ward Nurse Manager or Nurse Clinician.

Chief Nurse is the head of the nursing profession in an organisation.

Clinical Instructor is usually a senior nurse whose work focuses on clinical teaching.

Methods of Enquiry I and II (MOEI&MOEII) and IFS are taught modules on the EdD programme.

Nurse Assistant is used in places of Enrolled Nurses or Patient Care Assistants to protect the staff's confidentiality. They work together with Registered Nurses and usually take an assistant role.

Nurse Educator is a nurse whose rank is at the same level as a Nurse Manager/Nurse Clinician and whose work focuses on overall nurse education.

Nurse-in-charge is a Registered Nurse who takes responsibility for a group of patients assigned under his/her care on a shift.

Novice is used in places of New Nursing Graduate

Off-going nurse is the nurse who is going to hand over and finish his/her shift work soon.

On-coming nurse is the nurse who is going to take over from the offgoing nurse and start his/her shift work soon.

Probation is a period stipulated by the hospital during which novices are guided by a preceptor. The official length of probation in the hospital where this study took place is 6 months.

Roll call is the team handover which happens every day between shift-to-shift handover, when all the nurses come together for information, usually from the senior nurses.

Senior Nurse is used in place of Nurse Manager, Nurse Clinician, Senior Registered Nurses or Charge Nurses to protect the nurses' confidentiality.

Serve Medicine means administration of medicines. This term is very commonly used by the nurses in practice in Singapore. I use this term in my writing to keep its use consistent.

Conventions

Conversations that happened in other languages are translated into English.

Ellipses are used to exclude some content from quoted text from the original field-notes or focus group discussions to make the thesis more concise, but the meanings are not affected.

Singlish and dialect are preserved in conversations to maintain the unique cultural flavour as far as possible, as long as the meaning is clear to readers.

Chapter One: Background and Overview of Thesis

Introduction

This thesis enquiry starts with my concern about New Nursing

Graduates' (called "novices" in this study) transitional difficulties, my

professional background which exposed me to novices' transitional

issues, and my keen interest in finding out what happens to novices

during their transition into professional practice.

In this chapter, firstly I will present an overview of nursing education in

Singapore and the challenges the novices and nurses face. Secondly,

my professional position in relation to novices' transition will be

presented to indicate the relevance of this research to my professional

practice. Thirdly, I will present the concept of novices' transition and

development models, the challenging clinical practice environment and

the persistent problems the novices encounter during transition. The

effect of educational interventions to help the novices with their transition

will also be discussed. With such background information, I define the

initial research question. Finally, I give an overview of this study.

Nursing education and practice context in Singapore

In Singapore, nursing education has evolved from bedside

apprenticeship to higher education over the years (O'Brien and Arthur,

2007). The initial government-sponsored diploma programmes started

in Nanyang Polytechnic in 1992, followed by Ngee Ann Polytechnic,

ending the long history of apprenticeship training of nurses by the School

of Nursing from 1956 to 1992 (MOH, 1997). From then on, nursing

education in Singapore entered a new era of higher education within

academic settings.

In 2006, with the ambition to match the standard of international nursing education, undergraduate degree education for nurses was introduced at the National University of Singapore (Kusolpalin, 2016; O'Brien and Arthur, 2007). Singapore Institute of Technology, the fifth autonomous university to be created in Singapore, was the next university to offer a full-time 2-year post-registration nursing undergraduate degree programme with honours (SIT, 2019). Though this programme at SIT admits post-registration nurses, the majority of the nurses do not experience transition in the workplace as they join this degree programme directly after their Diploma programme. Besides all the above-mentioned government sponsored full-time nursing programmes, Parkway College is the only private school in Singapore that offers a three-year pre-registration diploma nursing programme, and the novices from Parkway college mostly practise in the healthcare institutions privately run by Parkway Pantai (Parkway, 2018). Currently, the novices in government sponsored hospitals in Singapore may be from either a three-year diploma programme from Nanyang Polytechnic or Ngee Ann Polytechnic, a three- or four-year bachelor's degree programme¹ from the National University of Singapore, or a two-year post-registration degree programme for diploma graduates from Singapore Institute of Technology.

Singapore's nursing programmes have integrations of theoretical and clinical learning components comparable to nursing programmes in the United Kingdom, according to a matrix of curriculum structure and assessment presented by Loke (2014), indicating that its nursing education has achieved an international standard. The Singapore Nursing Board stipulates that all the pre-registration nursing programmes must have a mandatory clinical practice component (SNB, 2019). There are also guidelines to direct the collaboration between Higher Education Institutes (HEIs) and clinical organisations, which

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¹ The three-year programme awards an ordinary degree, while the four-year programme awards an honours degree.

include the designated roles of preceptors in guiding nursing students and novices in their clinical practice (SNB, 2017).

Throughout their pre-registration nursing programmes, nursing students undertake discipline-based clinical placements, which usually last two to three weeks for each placement, with the purpose of exposing them to various specialty areas. During such placements, the students mainly focus on nursing skill competencies rather than gaining an understanding of the clinical system, the clinical context or the overall responsibilities of nurses at work.

The only longer period of clinical placement which provides opportunities for the final-year nursing students to gain better understanding of the clinical context is the Pre-Registration Consolidating Programme. This programme is designed to prepare nursing students for clinical practice upon graduation (Chen, 2007). The 12-week clinical placement before graduation is significant, as the students are exposed to "in-charge" work, guided by a Registered Nurse (RN) assigned as the preceptor. This means that, at the end of this programme, the graduates are supposed to be able to manage a few patients in a general ward, which mimics the role of a nurse-in-charge.

Though this Pre-Registration Consolidating Programme is longer and more comprehensive than their usual clinical placements, in my experience, the students are still perceived by the ward nurses as "outsiders" who need to pass through the portal, while the students do not have a sense of belonging to the clinical ward where their Pre-Registration Consolidating Programme takes place either, as that place might not be their workplace after graduation. As a result, the novices pass through their clinical placements on a temporary basis during their pre-registration nursing programmes and only start to really feel the impact of fitting in during their transition as novices. Therefore, the transitional period is crucial for novices in their respective clinical settings.

Novices' transition is affected by their practice context. A stressful work environment has been identified as one of the major reasons novices may be traumatised and some of them experience burnout and eventually decide to leave the profession (Ang et al., 2019). One contributing factor is the shortage of nurses, which leads to higher workload and work stress. Another contributing factor is Singapore's rapidly aging population and long-term disease burden (MOH, 2017b; Singstat, 2017). In order to cope with the care demand of the elderly and people with complex conditions, the nursing profession is called upon to respond to many healthcare initiatives, including the extending of services, with their expanded roles, into the community, as outlined in the Singapore government's healthcare 2020 blueprint (MOH, 2012a).

Nursing manpower development and retention is one of the most urgent and persistent issues, drawing attention at national level to policy changes in order to attract young people into nursing careers and to make them stay in the profession (MOH, 2017a). According to the Singapore Nursing Board's annual report 2018, there was a slight increase in the numbers of new RNs registered in that year (SNB, 2018). However, this increase falls short of the demand, with more new hospitals, community hospitals and nursing homes being built in recent years. One example of this shortfall was reported when the 580-bed Khoo Teck Puat Hospital started operating in 2010: of about 7,400 nurses required, the hospital recruited 4,000 foreign nurses to make good the shortfall (Khalik, 2013). The nurse to population ratio in Singapore was at 7.5 to 1,000 in 2018, and this ratio is at the lower end of the spectrum among developed countries (WorldBank, 2019).

Lai (2014) reported that a shrinking workforce and high nurse attrition accelerated the severity of nurse shortages. AWARE (2016) claimed that the shortage of nurses disrupted the plan to expand the healthcare system and extend the nursing job scope. Fang (2015) reported that nursing vacancies were among the hardest to fill with Singaporeans, despite government incentives to attract locals to join nursing. The shortage of nurses contributes to increasing the workload in nurses'

already demanding working environment. Kowitlawkul *et al.* (2018) conducted a survey study of more than a thousand nurses in Singapore and found that the majority of them reported being overworked and spending more than 80% of their waking time at work.

Furthermore, Singapore being a multi-racial and multi-lingual society, working in such a social setting the nurses face additional difficulties of cultural and language barriers. In a study by Tan, Lopez and Cleary (2016), the novices reported having difficulty communicating with and caring for the mostly elderly patients in the hospitals in Singapore. As the majority of the elderly patients only speak local dialects, most of the novices, having grown up in an English education environment, find it difficult to communicate with and understand the elderly patients, thus increasing their work stress.

The novices were reported as having difficulties with interpersonal relationships, workplace culture, and workload (Cleary *et al.*, 2013b). They felt they did not fully understand what they were letting themselves in for when they entered the nursing programme. With increasingly complex patient conditions, new medical technology, disease acuity and shorter hospital stays, the job of nursing has become more demanding, which challenges nurses' ability to cope, especially novices'.

With the novices' difficulties being recognised, policies and programmes were implemented to motivate young people to join nursing and to help the novices to cope. "Care-to-go-beyond" is one of the movements at a national level in Singapore to promote nursing, aiming to attract Singaporeans to join nursing with career development opportunities (Care-to-go-beyond, 2019).

Clinical organisations also offer specific orientation programmes and preceptorship programmes to help novices with their transition. These programmes range from a few days to a month to familiarise novices with the organisations' policies and procedures. In their respective clinical areas, the novices are assigned preceptors to guide them in the

initial six months and even up to one year. This period is called "probation" in most of the hospitals in Singapore. Under "probation", the novices are guided by their respective preceptors, and take charge of the same group of patients. In a Singapore-based study by Quek *et al.* (2019) exploring the perception of preceptorship amongst both preceptors and preceptees, preceptorship was perceived as helpful, but the preceptors were reported to be focused more on functional job tasks than meeting the needs of the preceptees' transitional adaptation to the workplace. This background information indicates the complex and challenging work environment and the difficulties the novices face, but what happens when they are at work needs to be explored.

My professional position and enquiry into novices' transition

My professional career exposed me to different aspects of novices' initial clinical practice. Reflecting on my experience in guiding novices many years ago as a Senior Nurse, I wanted to give novices more learning opportunities, but I was always under pressure to fulfil my clinical care tasks and responsibilities. Sometimes I felt helpless seeing novices being used as extra pairs of hands to help with the workload. As a result, they just followed instructions, and missed learning opportunities to develop the ability to practise independently. Such experiences left me feeling unsatisfied and conflicted over my dual roles as clinical nurse and clinical teacher.

I became a Clinical Instructor because of my passion for teaching and for career advancement. In the clinical ward where I was working there was constant tension from keeping a balance between helping the ward nurses with their workload and providing learning opportunities for the novices. I was sometimes caught in a difficult position when the novices and nurses came to me with different views on clinical procedures and care decisions. As the experienced nurses often imposed their ideas onto the nursing students and novices, the latter's voices were often disregarded. I recall one particular novice whose clinical performance I

identified as "weak" and I put a lot of effort into trying to help her, and supervised her more closely during her probation. But the feedback I received from her was: "The Clinical Instructor was too strict and followed me all the time. I felt too stressed out to learn." I can remember this feedback so clearly as it had such an impact on me, and made me reflect and realise my failure to give this novice the opportunity to explain her preferred way of learning and to recognise the factors affecting her learning.

I progressed to become a Nurse Educator and took charge of the orientation programme for novices in a hospital. It is one of the tertiary hospitals in Singapore with a few thousand nurses. The hospital recruited a few hundred novices each year at that time. The orientation programme lasts one month and aims to introduce the hospital's policies, guidelines and key clinical skills to the novices with the aim of easing their transitional stress. But with most of the content taught in classrooms to large cohorts of novices, this version of orientation was really like extended theoretical learning after their graduation from school. I often received feedback from the ward nurses that the novices were having problems adapting to clinical work, and the novices gave me feedback on their difficult encounters with the ward nurses. With the big cohort size and frequent intakes, this programme was running at a high frequency and rather mechanically. It was impossible for me and my team to pay individual attention to the novices' needs. Adjusting the programme reactively by adding more content into the programme was not effective as the novices continued to face various difficulties in practice. At that time, my team and I tried our best to help both the novices and the clinical nurses, but we did not know how to explore this problem further.

Currently, I am a lecturer at Singapore Institute of Technology, teaching on an undergraduate nursing programme. From my communication with clinical nurses, Nurse Educators and my graduated students working as novices, I learnt that there are continued tensions and conflicting views on novices' clinical transition. Some nurses told me that novices should

be better prepared by the schools for their knowledge, skills and abilities to adapt to practice; some attributed the novices' fragility to the so-called "strawberry generation" phenomenon and claimed they are unable to endure hardship; some senior nurses also felt threatened by the novices as they told me they were not sure how to answer some of their questions. Meanwhile the novices felt that the clinical nurses were too task-oriented and not interested in teaching them.

Through my Institutional Focused Study (IFS) (Chen, 2018b), a study completed as part of the EdD, faculty staff were found to be in a dilemma over deciding what and how much to teach in the university programme preparing nurses and other healthcare professionals for their clinical practice. There was a tendency to overload teaching content according to the requests and feedback of the clinical organisations, and often the feedback from the experienced practitioners was about novices' incompetence. In addition, nursing and other healthcare professions are governed by their respective licensing authorities, which emphasise certain competencies, and this impacts the schools' curricula.

Even with the programmes and various efforts in place to help the novices with their transition, the notion that this time is "problematic" remains a key theme of policy and practice and research discourse. This makes me wonder if these are the challenges novices face internationally.

International background of novices' work environment and programmes to help them

Novices' practice context is becoming increasingly complicated. Wolff, Pesut and Regan (2010) surveyed a group of 150 experienced nurses

strawberry generation", being perceived as easily bruised like strawberries, and stereotyped as unable to withstand social pressure or work hard like earlier generations. This generation is also negatively perceived to be selfish, spoiled, and lazy at work. Source: https://www.youth.sg/Our-Voice/Opinions/2016/1/Our-glorious-strawberry-generation.

Accessed on 02/02/2020.

² Millennials (born 1980s-2000s), also known as Generation Y, are often branded as "the

in Canada and reported that the practice environment was challenging for novices to adapt to. The main factors contributing to the challenging practice reality included increasing patient acuity, complicated roles of nurses and the healthcare system itself. Kramer *et al.* (2013) engaged more than 900 experienced nurses in a large-scale management project in the US to understand their professional practice context. It was reported that nurses were facing a series of complex and interrelated requirements from multiple systems in their professional practice context every day. The nurses reported that they had difficulties formulating a 'best practice' to deal with complicated clinical situations. They suggested that novices needed help to learn the principles developed from the complexity of practice. However, there is a lack of literature exploring the principles of this complex practice.

Workplace bullying was reported in studies, and novices made easy targets for bullying due to their junior status (D'Ambra and Andrews, 2014; Miner *et al.*, 2012). It was reported that many of the novices suffered silently and some adopted this culture and took their turns to bully the next generations of novices (Ali, 2012; Thobaben, 2011). Rush *et al.* (2014) reported that those who had been bullied often had less access to support when needed and had poorer transitional experiences. However, we need to be cautious about the claim of bullying without further exploring and understanding the nurses' interactions in practice.

Orientation programmes with continuing support throughout the first year of novices' practice in Australia were reported to be helpful by Phillips, Esterman and Kenny (2015), though the novices still encountered difficulties and negative experiences as part of the transition. Missen, McKenna and Beauchamp (2014) conducted a systematic review of studies investigating novices' job satisfaction and retention after their orientation programmes. The eleven selected studies were all from the US and the results showed that, irrespective of the structure and duration, the programmes were viewed as helpful. However, the novices

also reported increasing difficulty during the first 6-12 months of their practice when they started to practise independently.

A systematic review in UK on the experiences and perceptions of novices' preceptorship by Higgins, Spencer and Kane (2010) indicates that the novices experienced many dilemmas over the differences between what they had learnt in school and what the preceptors were expecting of them. The novices also encountered different preceptors' characteristics, teaching and work styles. Although the orientation programmes were found helpful, novices still reported difficulties during their transition. It appears these programmes did not cover all the problems the novices would encounter in their day-to-day practice. To think that having such programmes in place would solve all the transitional difficulties is obviously too naive and idealistic.

Hoffart, Waddell and Young (2011) reviewed research studies focusing on programmes designed to help the novices' transition across many countries. Those programmes were conducted either before or after their graduation, were of different lengths and consisted of different elements, and none of the programmes in the reviewed studies crossed the boundary between the HEI and practice organisation. There was also no boundary crossing among the HEIs or among the practice organisations either. In short, this indicates there was a lack of collaborative effort between the HEIs and the practice organisations, as well as a lack of cooperation between organisations in the design of the programme, casting doubt on how such programmes were developed and their function in novices' transitional journeys.

This international evidence suggests that the interventions are helpful, but they are mostly auxiliary in nature and are not necessarily integrated into novices' transitional journeys. In order for any intervention to be novice-centred, the first step should be to fully understand novices' transition.

Novices' transition and the development models

According to Allen and Van de Vliert (1984), transition involves meeting expectations in shifting from one social system to another, indicating the need for the novices to learn the new system and meet the expectations of the new system. Transition has also been described by Schumacher and Meleis (1994, p119) as a movement or change of status "which can produce profound alterations in the lives of individuals and their significant others and have important implications for well-being and health". These assertions imply that transition in professional life is a change in status characterised or accompanied by a change in their standing and expectations of performance, on the part of the novices themselves and those whom they work for and with. This moment of transition is regarded as significant in the shared repertoire of professional career narratives and in professional education and institutional policy and practice literatures.

In nursing, the difficulties novices encounter during their transition were highlighted more than forty years ago by Kramer (1974). In her seminal work, Kramer (1974) suggested that the novices were overwhelmed by the clinical reality with demanding workloads, complex patient conditions and conflicting ideas concerning patient care among the nurses. She described how the novices took two years to feel like members of the workplace and went through four phases of transition: honeymoon, shock, recovery and resolution. Kramer (1974) indicated the traumatic experiences the novices had during their transition, which resulted in many of them never working through the feelings of outrage, fatigue, depression, and rejection of the professional values they had learnt in school.

Cohen (1981) proposed a professional socialisation model based on her studies of nursing students. This model sets out to be a trajectory whereby all nursing students to go through four stages. The initial stage of being dependent is called "unilateral dependence". According to

Cohen (1981), at this stage the students do not have the knowledge to ask questions and they simply follow instructions. The students go through the second and third stages of gaining more cognitive rebellion and ability to make decisions as well as evaluating others' ideas. In the fourth stage, the students develop the capacity to make decisions in collaboration with others. Cohen asserted that "students must experience each stage in sequence to feel comfortable in their professional role" (p16).

Benner (1984) adopted Dreyfus' Model of Skill Acquisition to study novice nurses' development and came up with her five stages model: Novice, Advanced Beginner, Competent, Proficient and Expert. According to Benner (1984), novices have very little contextual knowledge and they follow rules. It takes them two to three years in the same or similar situations to progress from the Novice stage to the Competent stage. A nurse at the Competent stage can cope with and manage many clinical nursing situations, though still lacks the flexibility and speed of a nurse at the Proficient stage. Benner identified the need for even an expert nurse to familiarise him/herself in a new practice setting, and recognised that the mechanism of such transition needed exploration.

Duchscher investigated novices' transition and developed stages of transition theory (Duchscher, 2008). She asserts that the initial twelve months of novices' introduction to professional practice is the crucial transitional period, during which the novices make a significant adjustment to their changing personal and professional roles, and move to the status of a "professional self" through increasing levels of knowledge and broadening scopes of practice (Duchscher, 2007). Duchscher suggested that the novices experienced "transitional shock" and "transitional crisis" when going through the stages of Doing, Being and Knowing in their initial year of professional practice (Duchscher, 2008; Duchscher, 2009).

These models of nurses' professional progression have profoundly impacted nursing education and views on their professional development. Black (2014, p118) on the goal of nursing education shows the impact of these models:

The goal of your nursing education is not simply teaching you the tasks of nursing...the overriding goal of your education is to teach you to think like a nurse, to see the world of healthcare through the lens of nursing...

These models show progressive stages of novices' transition with the characteristics, sets of ideas, values and abilities described at each stage. Such progressive models give general ideas of the developmental trajectory of nurses, but are, however, less helpful in understanding novices' day-to-day encounters in practice and how their transitional changes happen through their meaning making in their interactions.

From this background information, it can be seen that this transitional moment is widely recognised, embodied in training/practice structures internationally and locally. The persistent problems in novices' transition seem to bear serious consequences, and this led me to question our current understanding of novices' transition. My research enquiry started with this question:

What happens in novices' transition?

Overview of thesis

This thesis consists of seven chapters. In Chapter One, the problem of novices' transition is set against the backdrop of the local context of nursing education and practice and my professional background, to provide the rationale for this study. A cursory look at novices' transitional challenges internationally and models of nursing transition is also included. This background information orientates the reader to the empirical field and the focus of this study.

In Chapter Two, the issues of novices' transition are explored through a literature review. I assert that there is a gap in the current literature in understanding how novices' transition happens, due to the current notion of a fixed model of competent identity.

In Chapter Three, I lay out the epistemology of relativism and constructionism as the philosophical underpinning of this study. I rationalise my adoption of a social learning lens and explore Wenger's Community of Practice theory and concepts as the theoretical framework for my study. I confirm my research aim, which is to explore the mechanism of novices' transition, and the two specific research questions are stated as:

- What are the characteristics of the community of practice?
- What are the trajectories of identification of novices?

In Chapter Four, the choice of a focused ethnographic approach is argued to be consistent with this study's theoretical underpinning of Wenger's Community of Practice theory. I also give a detailed account of the reflexivity I engaged in during my research study. Data collection methods and ethical issues are discussed.

In Chapter Five, I describe my experiences of gaining access and navigating relationships in the field, and engaging iteratively in the processes of literature review, data collection and data analysis.

In Chapter Six, I explain the new concepts developed from the research, which form a conceptual architecture. The relationship of the new concepts and their interrelation to Wenger's theory and concepts are discussed. The subsequent sections of the chapter are organised with research data to elaborate the meaning making and position taking in nurses' practice. With these elaborations, the main concepts adopted for this study, the new concepts developed in this study and their interrelations are made clear.

In Chapter Seven, I argue that novices' transitional mechanism is their evolving learning of the workplace and work, and negotiation of membership identity, a necessary part of their professional development. I consolidate the findings of this study by answering my research questions and addressing the gap in transition literature. The implications for policy, practice, education and future research are discussed.

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Chapter Two: Literature Review

Introduction

In this chapter, research studies focusing on issues of novices' transition

are reviewed. In the first part of the review, I synthesised the research

evidence into two discourses: novices' lack of competence, and novices'

difficult experiences.

In the second part of the review, I analysed a group of research studies

focusing on how transition happens, in order for the novices to become

members of the professional group. Though there is some sparse

evidence on how novices' transition happens, I argue that the findings

are still mainly focused on the discourses of novices' lack of competence

and difficult experiences.

I conclude that the current research approach adopts a fixed model of

competent identity which reflects how a competent practitioner should

be. I assert that there is a lack of understanding of how novices'

transition happens, which my research aims to explore.

Literature search

Key search words included: transition, experience, newly graduated and

new graduate* with Boolean operators. The data bases included

CINAHL, ERIC, PsycInfo and Science Database. The limiters applied

were peer reviewed, English and abstract available, and for the period

2010-2020, as shown in Table 1.

Table 1: Literature search history

Key	transition AND experience AND "newly graduated" OR "new			
words	graduate*" NOT student			
Limiters	Peer reviewed, English, and abstract available, 2010-2020			
Inclusion	Research studies focusing on newly graduated practitioners'			
criteria	transition			
Exclusion	Not original research			
criteria	Focus was not on newly graduated practitioners' transition			
Data	ERIC	PsycINFO	Science	CINAHL
Base	(EBSCO)		Database	
Hits	25	262	126	989

From the list of 1,402 articles, I selected 154 articles after reviewing the titles and abstract. After reading the full text of these articles, I finally selected 44 articles for review. The main reasons for exclusion included the articles not being original research, or the focus not being on newly graduated practitioners' transition. These articles included reports from quantitative, qualitative and mixed method research studies using surveys, interviews, participants' diaries, other documents, and observation as data collection methods. The majority of the research studies were of nursing, while a small number were of other healthcare professionals and education (refer to Appendix 1: List of reviewed articles).

The discourse of novices' lack of competence

The lack of competence discourse is synthesised according to two aspects: one aspect is novices' skills and professional roles and the other is their feeling of incompetence or being insufficiently prepared by professional education in schools. Studies reported novices' lack of competence based on the opinions of novices or of experienced practitioners.

Lack of competence in performing skills and professional roles

In a few studies, the novices themselves reported that they were not competent to perform various advanced techniques, handle emergency situations and fulfil their complex roles (Brakovich and Bonham, 2012; Craig, Moscato and Moyce, 2012; Lima *et al.*, 2014; Thanomlikhit and Kheawwan, 2017).

A survey study by Thanomlikhit and Kheawwan (2017) in a hospital in Thailand recruited 178 novices within one year of practice experience. A Thai version of the Casey-Fink graduate nurse experience survey tool was used to collect data. A study by Brakovich and Bonham (2012) in the US also used the same survey tool. This survey study recruited 157 novices. In both studies, the novices reported that they lacked competence in advanced nursing skills, critical thinking skills, time management skills and communication skills. They also reported their incompetence in performing nursing roles such as organising and prioritising patient care needs and making nursing care plans.

The skills listed by the novices in the study by Thanomlikhit and Kheawwan (2017) included emergency codes, ventilator care, EKG, and chest tube care. Feelings of incompetence and inability to deal with emergency clinical situations were also reported by novices in a survey study by Craig, Moscato and Moyce (2012). The researchers used a self-developed survey tool and the survey was conducted over four cohorts of newly graduated nurses in Portland, Oregon.

Similarly, the novices in a study by Lima *et al.* (2014) rated themselves with the lowest score in critical thinking at the end of their first year in practice. This study surveyed a group of 79 novices in a paediatric setting in Australia using the Nurse Competence Scale (NCS). Data was

collected at the start point, and after three months, six months and twelve months of their practice.

The survey tools used in these studies were validated questionnaires covering aspects of job performance, satisfaction, work environment, and peer support, and a list of skills. The advantages of using standardised questionnaires include participants getting the same sets of questions and not being under pressure to impress anyone (Bernard, 2018, p202-232). However, the questions are left to the participants' own interpretation and the use of tools might have limited the participants' opinions on the listed questions and aspects of skills.

In studies using interviews and focus group discussions, feelings of incompetence in advanced skills, complex roles and organisational skills were also expressed by novices, which resulted in their inability to keep up with the pace of their work or to handle their work independently (Feng and Tsai, 2012; Kumaran and Carney, 2014). Feng and Tsai's study (2012) was carried out in a hospital in Taipei, Taiwan, using semi-structured interviews to explore the transitional experience of seven novices with an average of five months' working experience. Kumaran and Carney (2014) interviewed ten novices in their first year working in an academic teaching hospital in Ireland.

Novices used a photo of the sea in the study by AbdulWahab *et al.* (2017), to describe their feelings of incompetence and struggle to survive. This study recruited nine novices within one year of working experience in one university-affiliated hospital in Singapore, and the participants were interviewed in groups by the researchers. Finding it difficult to identify their patients' conditions, feeling an overwhelming sense of responsibility, fear of making mistakes and inability to cope with the complex environment were expressed by novices in a study by ten Hoeve *et al.* (2018). This qualitative longitudinal study investigated 18 novices' weekly written diaries during their first two years working in a

hospital in Netherlands. In an Iranian study by Zamanzadeh *et al.* (2015) using semi-structure interviews with 12 novices from seven hospitals, the novices reported feelings of incompetence in skills, knowledge, communication and their ability to handle their own emotions.

The experienced nurses' views on novices' incompetence were similar to how the novices perceived themselves: incompetence in advanced clinical skills and coping with complex nursing roles (Ballem and MacIntosh, 2014; Brown and Crookes, 2016; Missen *et al.*, 2016). Brown and Crookes (2016) used the Delphi survey method with a sample size of about 500 experienced nurses, while Missen *et al.* (2016) conducted an online questionnaire survey and obtained responses from 201 experienced nurses. Both studies were Australia-based. A study by Ballem and MacIntosh (2014) interviewed eight nurses in Canada.

In studies using interviews and focus group discussion methods to collect data, the participants are given the opportunity to clarify questions and the interviewers can use various techniques to explore aspects of interest (Ritchie *et al.*, 2014, p178-242). However, the interviewer and interviewee power relationships, contextual factors and the emotional status might influence the data which is collected and analysed.

These studies revealed that novices' incompetence is perceived by the novices themselves and the experienced nurses across many countries. Novices' incompetence was reported in various advanced nursing skills, knowledge and performing complex nursing roles. This overwhelming sense of incompetence indicates novices' problematic transition but does not give a more comprehensive understanding of what those problems were and how they were manifested in their work.

In a few studies, it was reported that the novices blamed their schools for their incompetence at work. Though the blame was phrased differently, they indicate the novices' feelings of incompetence and their idea that the schools should prepare them for the reality of practice. Clark and Springer (2012) reported that the novices felt what they learnt could not be used in practice and they needed to learn everything anew. They even felt that attending nursing school had been a waste of time. This US-based study included 37 novices ranging from 8 days to 19 weeks' working experience in the same hospital.

Similarly, according to Ortiz (2016), novices reported that the learning in school did not prepare them for the "real thing" in practice. Using the nursing document on which they record their practice as an example, the novices felt its legal implication only became real in practice. This study interviewed 12 novices with less than one year's working experience to capture their lived experiences in a hospital in New York. However, what happened in the "real thing", i.e. in practice, which might help us to better understand the novices' participation was left unanswered.

The novices in the studies by Kumaran and Carney (2014), Regan *et al.* (2017), Hunter and Cook (2018) and Ankers, Barton and Parry (2018) felt incompetent to do what they desired to do due to the disconnection between what they had learnt in school and what they actually faced in their daily practice. As a result, they needed to detach themselves from what they had learnt. Hunter and Cook (2018) explored five novices' experience in four hospitals in New Zealand. The novices, who had been working for less than six months, participated in semi-structured group interviews. Regan *et al.* (2017) collected data through focus group discussions with 42 novices and 28 Nurse Managers from seven Canadian provinces. The study by Ankers, Barton and Parry (2018) was conducted in Australia among seven novices with four to eight months' experience.

One such example reported by novices was their deviation from the ideal model of person-centred care learnt in school. According to the novices, the ideal model encourages them to spend more time with the patients, but they had to detach from it in practice in order to deal with the workload (Walton *et al.*, 2018). This study was conducted in New Zealand using data from 54 reflective essays by 27 novices. The feelings of incompetence and not being able to give time and attention to their patients were echoed by the novices in a study by Tan, Lopez and Cleary (2016), in which individual interviews were conducted with 11 novices in Singapore.

Schools being blamed for novices' incompetence at work was also found among other professions. According to Lynn Glassburn (2020), in a study based in the US, a group of 27 novice Medical Social Workers claimed that the knowledge learnt in school was not specific enough for the problems they faced in their work. This made them feel incompetent and they always put in extra time and effort to learn on their own using online resources such as Google. Similarly, novices in dentistry reported the demands of learning on the job were high and what they had learnt at school was not enough (Ali et al., 2016). This study was conducted in the south-west region of England and the novice dentists reported that they had to use skills and knowledge so much in practice that "four years of dental school could fit into a week at [sic] practice" (Ali et al., 2016). Meanwhile the group of novice paediatricians in a study by Chan and van Manen (2018) in Canada reported that they were not well prepared to engage in difficult conversations with patients and their families, such as breaking bad news. The novice paediatricians said that they often had to learn things on the go to deal with immediate work needs (Chan and van Manen, 2018).

It is of interest to note the novices' perceptions of how much of what they had learnt in school could be directly applied in their real-world practice. The point here is not to argue whether these were right or wrong, but to highlight their perceptions of learning and their problems in transforming

what they had learnt, as well as the demanding nature of learning in the workplace.

Among these studies which reported the novices' feelings of inadequacy and the disconnection of what they had learnt in school and what they needed to do in practice, there were also indications of the novices' learning and adaptation in the workplace. Novices' feelings of not having learnt enough in school and the need to learn at work are always entangled; the blame was laid on school education reflecting little understanding of the nature of their work, what was required and how novices participated.

The discourse of difficult experiences

In the reviewed studies, novices' lack of competence was usually reported together with their difficult experiences, therefore, these two discourses were interconnected. I synthesised the difficult experience discourse into two aspects, although in these studies they are entangled, and each contributes to the other. One aspect is the novices' difficult encounters at work with heavy, fast-paced workloads and lack of support, and the other aspect is their relationships with the experienced practitioners.

Difficult experiences with workload and lack of support

Experiences of work exhaustion, lack of support, unreasonable expectations and workplace relationship problems were reported in studies by Laschinger *et al.* (2016), Parker *et al.* (2014) and Pennbrant *et al.* (2013). Laschinger *et al.* (2016) sent a survey questionnaire to 3,743 RNs in Canada with less than three years' working experience, and 1,020 RNs returned completed questionnaires. Parker *et al.* (2014) sent an online survey to 1,604 novices in Australia and received 224

responses, yielding a response rate of 24%, and 55 of those who responded to the survey also participated in seven focus group discussions after the survey. Pennbrant *et al.* (2013) mailed a survey questionnaire to 330 RNs with up to two years' working experience. These survey studies reached out to large populations of nurses. However, those who responded might have had much stronger emotions about their transitional experiences, which might have affected the survey results.

Long working hours, lack of support and interpersonal relationship problems were the main difficulties the novices reported in a study by Cleary *et al.* (2013a) and Hu *et al.* (2017). Cleary *et al.* (2013a) collected data from 147 novices with an average of 16 months' working experience. Out of this group of 147 novices, 17 of them also participated in one-to-one interviews (Cleary *et al.*, 2013b). Hu *et al.* (2017) collected data through observation of and interviews with 25 novices in a children's hospital in Shanghai, China. In a case study by Al Awaisi, Cooke and Pryjmachuk (2015) investigating Nurse Managers, novices and preceptors from a university hospital in Oman using interviews, observation and documentary analysis, it was found that the novices often faced competing priorities at work.

In a focused ethnographic study published in two articles by Charette, Goudreau and Bourbonnais (2019a) and (2019b), it was reported that novices were overwhelmed by their workload, particularly the considerable volume of documentation. This study was conducted in an acute care setting in Canada with 19 participants including novices, preceptors, clinical nurse specialists and nurse managers. The novices had graduated 6–24 months prior to data collection. Data was collected through individual interviews, focus group discussions, observation and document reviews. The nature of the documentation work and how it contributed to the novices' heavy workload need further exploration and understanding.

A few studies reported novices' incompetence in the earlier section had also reported their difficult experiences (Clark and Springer, 2012; Feng and Tsai, 2012; Kumaran and Carney, 2014; Regan *et al.*, 2017). In the study by Kumaran and Carney (2014, p608), the novices described their heavy workload as being like "a conveyor belt...from one job to the next". In another study, their work was described as "chaotic", and the novices had to report for work early to "get their head in the game" (Clark and Springer, 2012).

Novices from other professions reported various difficulties at work. Novice doctors found the multiple roles they needed to perform demanded that they have knowledge about community services and population diversity and good relationship with other specialists (Chan and van Manen, 2018). Eight novice Occupational Therapists in Sydney (Seah, Mackenzie and Gamble, 2011) were overwhelmed by administrative work such as writing up patient records or keeping up with email correspondence. Novice teachers experienced difficulties in performing the full scope of their work and always felt they did not have sufficient time and skills to teach effectively in class (Chen, 2018c). This research study investigated four Taiwanese novice high school English teachers in their first year of teaching.

Stoikov et al. (2020) explored the opinions of both novice and experienced Physiotherapists on the novice Physiotherapists' transition. The novices reported having difficulties handling patients with complex conditions, and heavy caseloads. Novice dentists (Ali et al., 2016) reported that they felt apprehensive due to increased patient load, tight time schedules and the need to deal with interpersonal relationships at work. Novice Medical Social Workers (Lynn Glassburn, 2020) reported that they experienced burnout from work stress and some were considering leaving the profession. Griffiths et al. (2019) conducted telephone interviews with eight novice midwives in Australia and they

reported their feeling that interactions with their patients were fragmented due to the shift work in the hospitals.

Some of them reported difficulties with patients or people they were working with. New novice Occupational Therapists encountered communication problems with their patients due to language barriers (van Stormbroek and Buchanan, 2019). Novice dentists reported that they were stressed by the high expectations of the patients as the patients were paying for the service and would not make allowances for them just because they were novices (Ali *et al.*, 2016). The new teachers reported the strain of maintaining relationship with students, different colleagues and supervisors(Chen, 2018c).

The findings from these studies shed light on the various difficulties and the insufficient support the novices encountered in practice. The workload and fast paced environment seem to affect both the novices and the experienced practitioners. The difficulties at work seem to be entangled with their feelings of incompetence and their interpersonal relationship problems.

<u>Difficult experiences</u> with the experienced practitioners.

The novices were found to have difficulties with their experienced colleagues at work. "Walking on eggshells" was a phrase used by the novices to describe their fragile relationship with the experienced nurses in a survey study by Walker *et al.* (2013) in Australia of novices and nurse managers. Similarly, the novices reported that their work was much influenced by "whom they are working with" in the study by Halpin, Terry and Curzio (2017). This study data was collected using the Nursing Stress Scale and interviews in UK, but what those experiences were, how they happened and what the impact would be were not sufficiently explored.

More specifically, novices reported having difficulty finding out who was willing to help them and how to work with different people. Regan *et al.* (2017) reported that the novices had to work out who the "go to" person was for asking questions. In another study conducted by Ankers, Barton and Parry (2018), the novices indicated the need to find a person at work with whom they could "off load" or "vent" confidentially. Meanwhile, in a study by ten Hoeve *et al.* (2018) and Pennbrant *et al.* (2013), the novices reported that being able to ask questions was one of the important supports they needed, but they always felt burdensome asking for help when the experienced nurses were also busy at work.

The novices reported having problems leading a small team including Licensed Practice Nurses (LPNs, similar role to the Enrolled Nurse in Singapore) to take care of a group of patients on the ward (Charette, Goudreau and Bourbonnais, 2019a). The novices were RNs despite their junior status, while the LPNs, who were more senior on the ward, were assigned to assist the novices. The LPNs' actions or omissions could render the novices responsible as they were in charge of the patients overall. The novices found it difficult to manage their relationship with the LPNs and to delegate tasks to them.

The difficulties could be created by a sense of rivalry due to the experienced nurses' feelings of inadequacy, jealousy or worry that their position was being threatened by the novices. Charette, Goudreau and Bourbonnais (2019a) reported that the experienced nurses felt jealous and at the same time threatened due to the new knowledge the novices presented. As a result, they rejected the novices' ideas and forced them to conform to their old ways of doing things in an attempt to retain their position and power (Charette, Goudreau and Bourbonnais, 2019a).

Similarly, the experienced nurses reported that they had not had the opportunities to learn about research, EBP and leadership in the past. Their lack of knowledge in these aspects made them feel jealous and

inadequate to guide novices (Walton *et al.*, 2018). The study by Ebrahimi *et al.* (2016, p187) reported that the experienced nurses "felt that their job positions were threatened" and worried about "their own lack clinical competence, knowledge and self-confidence, and the skills required for teaching and assessing the novices". This study collected data through semi-structured interviews with one clinical and two educational supervisors, two head nurses, and 13 nurses working within clinical settings in Iran.

These findings suggest that novices' and experienced nurses' positions in the ward change when the novices join the ward and bring with them the new knowledge. These changes were viewed by the experienced nurses as threats to their positions and they used their seniority to make the novices feel intimidated, and oblige them to conform to the existing norms and values. This perspective of meaning and position negotiation in practice might lead to an understanding of novices' transitional mechanism and need further research attention.

The difficulties experienced by novices from other professions were mixed. Some of the difficulties were due to the different levels of guidance and feedback the novices experienced. Seah, Mackenzie and Gamble (2011) found that a group of novice Occupational Therapists reported that they needed guidance and feedback at work but felt "the harder part is getting to...who's a good person to ask about that stuff?"(p107). Dissatisfaction with supervision was reported by novice Occupational Therapists who were allocated to rural areas in South Africa for their initial year of practice (van Stormbroek and Buchanan, 2019). In a study by Stoikov et al. (2020), novice Physiotherapists reported having minimal supervision and feedback and finding it difficult to adapt to their work. Meanwhile, in a study by Chen (2018c), novice teachers found the guidance less helpful when their teaching styles were different from the mentors' teaching styles, but the novices found it hard to challenge the differences and experienced difficulties in their practice and relationships.

These studies reviewed in this section were carried out in both Eastern and Western countries, including studies from Singapore. The findings indicate the prominent problems the novices encountered: incompetence, difficulties of the work and relationships. But there was a lack of information about their workplace, the nature of the work and how the novices and experienced practitioners negotiated their participation to help us understand how transition happens.

Review of studies focusing on how transition happens

In this section of the review, I included research studies focusing on how novices' transition happens. As I was trying to understand novices' transitional mechanism in my study, these research studies were of particular relevance to my research questions. In the first part of this section, I analyse the research methods used in these studies. In the second part of this section, I synthesise the research findings into two themes: enduring difficulties in order to be accepted and negotiating one's own position. I argue that our understanding of novices' transitional mechanism is still limited, based on current evidence from the reviewed studies.

Research approaches used in these studies

These studies used qualitative approaches and collected data over a period of time, aiming to find out how novices become members of the professional group in the workplace. The researchers in all five studies claimed that they did data collection and data analysis simultaneously. This approach allowed the researchers to develop an ongoing understanding of the novices' experiences, and to identify issues which could be explored in the subsequent data collection. All the novices who participated were within one year of practice, so their recollections were based on their recent experiences, which could minimise recall bias. These novices were within the duration of practice of the novices I

intended to recruit, so they resembled the research participants of my study as well.

Lee *et al.* (2013) conducted a phenomenological study to explore the "nature of the transition" of sixteen novices in a hospital in Taiwan. These novices participated in weekly focus group discussions for eight weeks, each of which lasted for two hours. Leong and Crossman (2015) recruited twenty-six novices and five preceptors from five different government-sponsored hospitals in Singapore to "explore how novices developed their professional identity". Data included novices' reflective diaries over the initial six months of their practice and focus group discussions.

In focus group discussions, participants' ideas can bounce back and forth, so they are stimulated by one another's contribution and encouraged to participate in the group. According to Carspecken (1996), however, there might also be disadvantages in terms of group thinking or people withholding sensitive information. In Lee et al.'s (2013) study, the participants were from the same hospital, so they might have been in a close working relationship and having concerns about potential competition and lack of confidentiality, so they might not have participated openly. In Leong and Crossman's (2015) study, the participants were from five different hospitals in Singapore. Though peer rivalry is less likely in this case, there might, however, still be concerns about confidentiality which prevented the participants from openly expressing their ideas and feelings, as Singapore is a small country and the nursing network is tight-knit. Furthermore, how the different focus groups were formed was not clear. There could possibly have been a single focus group in each hospital, with both the novices and their preceptors attending the same group, which would clearly inhibit free expression. Leong and Crossman (2015) also used participants' reflective diaries over six months, which provided intimate personal reflection on their practice over that period of time. The data quality of the diaries depended on the participants' ability to reflect and to write, but there was no indication as to how the novices wrote their reflective diaries, or the quality of the diaries.

Moorhead (2019) conducted three in-depth semi-structured interviews across the first 12 months after qualification with each of 17 newly qualified Medical Social Workers in Australia. The researcher declared a dual relationship with the participants, and associated power dynamics, as a researcher and lecturer in the university where they had studied. Though the researcher claimed that the power relationship was managed through voluntary participation, its influence on the participants could not be ruled out. The longitudinal nature of the research might have helped with the development of a relationship and trust between the researcher and the participants.

Two studies collected data using observation and interviews. Bisholt (Bisholt, 2012a; Bisholt, 2012b) reported using an ethnographic approach to explore how novices learn and transform into nursing professionals. The research setting was in four general wards at a county hospital in central Sweden. Eighteen novices with seven and a half months' working experience were recruited. Thrysoe *et al.* (2012) recruited nine novices in their first six months of clinical practice from the same unit in one hospital.

The researchers in both studies claimed to have spent considerable time undertaking their observations. Bisholt (Bisholt, 2012a; Bisholt, 2012b) reported 299 hours of observation on 116 occasions, while Thrysoe *et al.* (2012) reported observation of five to seven hours per day over a period of four to six days per participant. According to Pope and Mays (2006), the value of this approach is to explore the embedded behaviours, culture and norms which might not be uncovered with other methods.

However, in both studies there was a lack of description of how they observed and how the field-notes were written. The role and position of the researcher influence the data collection and analysis, and a reflexive account by the researcher can help to make these processes auditable. The role and position of the researcher were not clearly stated in Bisholt's (Bisholt, 2012a; Bisholt, 2012b) study, while in Thrysoe *et al.*'s (2012) study, she identified herself as a member of the nursing faculty with a clinical teaching role, so the power relationship with her participants and the nurses in the unit could have been deliberated. In both studies, there was a lack of reporting on the researchers' reflexive accounts as well. It was also not clear how the patients and other healthcare team members were informed of the studies, as unavoidably, they would also have been observed.

Thrysoe *et al.* (2012) adopted Wenger's Community of Practice theory for their study. They focused on the concept of novices' gaining of peripheral participation, and the details of their adoption of Community of Practice theory are analysed in the following section.

Novices endure difficulties in order to be accepted

Novices' transition was described as "struggling to be an insider" by Lee et al. (2013), "learning to fit in" by Leong and Crossman (2015), "being formed into the profession" by Bisholt (Bisholt, 2012a; Bisholt, 2012b), "becoming new members in the community of practice" by Thrysoe et al. (2012), and feeling as if they have been "thrown into the deep end" (p211) by Moorhead (2019).

Though the researchers used different phrases to describe the change in status, the novices' enduring and submissive behaviour to the existing practice culture were common findings among these studies. In the studies by Lee *et al.* (2013), the novices learnt to "mask" their emotions, and Leong and Crossman (2015) suggested that novices learnt "not to question". Meanwhile in Bisholt's study, the novices learnt passively

without understanding. These findings portrayed the novices' passivity in their respective practice settings.

Lee *et al.* (2013) reported that the novices endured seeing "being new as being weak", "masking myself", "internalising the unreasonable" and "transforming myself to get a position". The following description by Lee *et al.* (2013, p793) summarised the endurance process:

New nurses internalised the rules and values whether reasonable or not. Enculturation in the culture of the unit required a "new" presentation of self. New nurses adapted to survive. They had to find ways that allowed them to experience the unreasonable behaviours as necessary challenges that new nurses must accept to become insiders.

Similarly, Leong and Crossman (2015) asserted that "fitting in" involved novices conforming to the ways the nurses did things and not questioning. This included adopting "shortcuts" when performing procedures to cope with the fast-paced work. Novices who resisted such "shortcuts" were identified as "rigid" or "not flexible" and could often attract criticism from the senior nurses. In a similar way, Bisholt (2012a) reported the "master-apprentice relation", where the masters used control and criticism to make sure the novices behaved "completely in accordance with the model advocated by them", and the novices learnt by imitation in a manner "passed down from the master to the novice, including unacceptable or unsafe practices" (P290).

In these studies, novices were described as being submissive and being confirmed into the existing culture. According to Lee *et al.* (2013), "yield[ing], tolerance and self-oppression, following the power hierarchy and seeking harmony" was expected of the novices. Similarly, novices

were expected to be submissive to the existing culture in order to fit in, as reported by Leong and Crossman (2015, p1106):

new nurses were expected to demonstrate values such as honesty and humility, captured in the data as "not arguing", keeping a "low profile" and not "talking back" to senior nurses.

According to Bisholt, for the novices to attain member status at the clinical facility, they need to be "perceived as a nurse", able to manage "what a nurse should manage" and behave "how a nurse should behave" and show their compliance with the explicit and hidden norms, rules and principles which are socially anchored without understanding the rationale for doing things (Bisholt, 2012b). Meanwhile Moorhead (2019) reported that novice Medical Social Workers' identities progressively consolidated from "baby social worker" to "grown-up social worker". The novices encountered role confusion with other professions and gradually found their position in their social settings, and finally they developed their social worker mindset and wanted to be identified as Medical Social Workers.

However, in the course of their transition, even though they were found to be passive, how such understanding, doing and showing were achieved and what norms, rules and principles were negotiated among novices and practitioners were not comprehensively explored in these studies.

Novices' negotiation of position

The intentional negotiation of a position was not a theme which was distinctly identified in this group of studies. However, evidence that this was happening can be drawn from some of the quotes in these three

studies (Bisholt, 2012a; Bisholt, 2012b; Lee et al., 2013; Leong and Crossman, 2015).

The quotes below suggest that the novices assessed and adjusted their positions to work with the senior nurses in the ward. However, more information on the context and the senior nurses' perspective would be necessary for a better understanding of how the nurses negotiated the meaning and their position:

One has to speak cautiously and learn to modify her way of speech. Be slick and sly and mealy-mouthed. To think more; when doing something, do it more tactfully, more slick and sly" (Lee et al., 2013, p793).

Once, a lead nurse sat in the nurses' station... and paid no attention to the crying children. I had a lot of patients, but I had to feed her patients... I tell myself, "never have too many negative thoughts, otherwise they will make you unhappy".... So I will think positively, and I won't be too miserable (Lee et al., 2013, p793).

In the quotes reported by Lee *et al.* (2013) below, it could be argued that there was a change of relational position and the novices started to challenge the "norms" of the ward and become active in the negotiation of their practice meaning and their relationships:

Some senior nurses were reluctant to cooperate with the unit security check. I put their name on the list of "nurses who refuse to undergo security check" (p794).

When I am free, and capable of helping others, I will do it because I feel that you are asking me to do you a favour...I believe if you ask them politely, they would help you willingly (p794).

Evidence of novices' assessment of situation, people and position taking can also be derived from the researchers' descriptions and the quotes from the novices in the study by Leong and Crossman (2015). It was reported that the novices tried to balance their positions by asking or not asking questions, as they might be perceived by the experienced nurses as being too dependent if they asked too many questions or being unwilling to learn if they asked too few questions. The quote below suggests that the novices observed and appraised the strengths and weaknesses of their colleagues to get an idea of what a nurse should be like, and to negotiate their position:

[...] if you see a senior bumping around [making mistakes] you don't want to follow her right? But if you see a senior who is good at her work [...] then you must follow her (p1104).

From the analysis of these quotes from the studies by both Lee *et al.* (2013) and Leong and Crossman (2015), a conclusion could be drawn that the novices negotiated their position with regard to their understanding of the people and their situation. However, the evidence was scanty and more comprehensive data collection and analysis of such evidence are needed.

Novices gaining participation was described by Bisholt (2012b) and Thrysoe *et al.* (2012), and both studies used observation as their data collection method. Bisholt (2012b) described being accepted as follows:

they gained the staff's recognition, which contributed to [their feeling] participatory, significant and trusted. This indicates that they internalized the occupational culture of the ward (280).

According to Thrysoe et al. (2012), novices gaining increased participation is indicated as having discussions with the experienced

nurses, being able to contribute ideas during discussions and having "inward trajectory from a peripheral position to more or less full participation" (p553). Thrysoe *et al.* (2012) claimed that being able to participate in social dialogues in a relaxed manner increased the familiarity between novices and existing members, and such familiarity made the nurses more willing to help the novices. However, in another unit the novices experienced being marginalised through a "lack of dialogue", being ignored, having lack of confirmation and feeling uncertainty. The researchers indicated there was a risk that novices might find themselves on an "outward-going track away from full participation and leave the Community of Practice" (p554). Their claims regarding inward and outward trajectories give the impression that gaining membership is a linear and polarised movement, but there is a lack of data in the report to support these claims.

The adoption of Wenger's Community of Practice theory and conceptualisation of a clinical unit as a Community of Practice by Thrysoe *et al.* (2012) were novel ideas which gave me the initial concept for my research design. However, their adoption of the theory seemed to be at the level of using and interpreting the theory rather than being critical and developing the theory in a constructive manner. The idea of the novices being at the periphery and the existing members being at the centre indicates the researchers' adoption of a fixed model for viewing membership.

Furthermore, it was reported that in some units the novices had good experiences and increased participation, while in other units the novices had bad experiences and were marginalised (Thrysoe *et al.*, 2012). In this case, it would be crucial to analyse the characteristics of the workplaces and how the differences between these two units influenced novices' participation in the community. There was little information on the characteristics of the units and the nurse to nurse interactions in the study report.

In summary, the evidence from these few studies sheds some light on the "how" question about novices' transition, but is still mainly focused on the novices' difficult experiences with similar processes of enduring and conforming with the local practice. The evidence on the nature of the workplace, work and novices' participation and negotiation of participation, which might help us to understand how transition happened, was scant.

The gap in the reviewed studies and the potential of using a social learning lens

The reviewed studies on novices' transition were focused on two main discourses: the perceived incompetence of the novices, and the difficulties they encountered with their work and with the experienced members. Though there was scant evidence showing how novices negotiated their position, I argue that despite the vocabulary being used by researchers suggesting a "process" and/or social construction of "becoming" a good enough nurse/practitioner able to perform as expected in their practice settings, they all shared an underlying conception of a fixed model of a competent identity as the property of the individual practitioners. The novices were found to have persistent transitional woes, despite policies and interventions being in place to help them.

I assert that there is a gap in understanding novices' transition: their workplace, their work, their participation and negotiation of membership at work. Such understanding could be the key to helping novices in transition. Given the need for such research attention, I confirm the aim of my study as:

What is the novices' transitional mechanism?

Chapter Three: Theoretical Concept Development

<u>Introduction</u>

In this chapter, firstly I assert my position in social constructionism, adopting a social learning lens to explore novices' practice and learning in their clinical practice settings. Secondly, I rationalise my adoption of Community of Practice theory (Wenger, 1998) as the theoretical underpinning of my research and give an explanation of the concepts of Regime of Competence and Modes of Identification which form the theoretical framework of my study along with the refined research Thirdly, the concepts of Landscape of Practice, questions. Knowledgeability and Modulation of Identification in the latest development of Community of Practice theory, their interrelations and relevance to my study are explained. Fourthly, criticisms of Community of Practice are discussed. Lastly, nursing research studies which adopted Community of Practice theory with a focus on learning and identity development are reviewed to gain a sense of the positioning of Community of Practice theory and its concepts for my study.

Relativism and social constructionism

In this study, the novices' and the nurses' practice and interpretations are respected in their multiple perspectives, and each one's world view is deemed as important and valid as the others'. Hence, an ontological perspective of relativism, which respects the verifiable reality experienced by all, informs this study (Patton, 2002).

The perspective of relativism informed the epistemological view of social constructionism, that, according to Patton (2002), there are multiple ways of knowing, and that meaning comes from our social interactions with the world. According to Crotty (1998, p64), "'the way things are' is

really just 'the sense we make of them'". I maintain that nurses' practice, in this case, consists of situated learning shaped by the socio-cultural environment and the relationships with others in that workplace. Crotty's (1998) summary of constructionism is adopted in this study:

"the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world and developed and transmitted within an essentially social context." (p. 42).

Adopting these perspectives influenced my research approach and therefore the potential outcomes of this study. Firstly, I take the view that novices' transitional process is a socio-cultural one with an overarching epistemological concept of social constructionism. Secondly, this study is focused on real-world practice, trying to understand the interactions, negotiation, meaning making, power positions and conflicts among the nurses working in one clinical setting. Therefore, an ethnographic approach was adopted, and through this endeavour I tried to understand the nurses through immersing myself in their socio-cultural world. Thirdly, based on the concept of social constructionism, it was not the intention of this research to define a common trajectory of transition; rather, the aim was to understand the multiple and diverse meanings and experiences the novices and their community co-created. Therefore, the views of the novices and the nurses of the community were not seen as false or invalid or opposed to one another but were seen from their own legitimate perspectives within their practice context.

Research theoretical perspective

Understanding how novices' transition happens in practice in essence requires a close examination of workplace learning, where novices and other nurses work and learn together when the novices enter the workplace (refer to Chapter Two). The mechanism lies in their interactions, communications, ways of negotiation, creating meaning and solving conflicts and issues at work among themselves. Therefore, how novices and nurses construct meaning through their practice could best be studied by taking a social constructivist approach. This form of learning is described by social learning theorists as a part of working life with the influence of the workplace environment and the people around (Billett, 2004; Eraut, 2011; Illeris, 2011; Lave and Wenger, 1991).

Sfard (2009) categorised learning according to two metaphors: the 'acquisition metaphor' and 'participation metaphor'. According to Sfard (2009), both learning metaphors are mutually interdependent and offer different analytical perspectives. In Chapter Two, I argued the limitation of focusing on competencies, which results in fragmented understanding of novices' transition, indicating the inadequacy of adopting an 'acquisition metaphor' approach. In this regard, this study is concerned with novices' transitional mechanism, to understand how they learn and develop the capacity to function in a system as members. Therefore, a participatory approach is suggested to be more helpful to bring sociocultural factors to the fore.

I compared a list of such social learning theories and decided to adopt Wenger's Community of Practice theory for my study. For example, Illeris's (2011) three dimensions of learning highlighted the interactive nature of individual learners' relationships with their work environment. He argued that the social dimension of learning consists of the collective experiences of many individuals with different experiences and motives. Personal factors such as role and position, autonomy of decision making, qualifications and past learning experiences differ from person to person. This assertion highlights the relationship between the social dimension and individuals, where learning as well as conflicts arise from individual differences.

Billett emphasised that the workplace is a learning place with its affordances and obstacles (Billett, 2001; Billett, 2002b). He indicated that the workplace by its nature has continuity, structures and objectives which offer learning opportunities (Billett, 2002a; Billett, 2004). Billett also highlighted that learners learn and develop identity at the same time and they need to be self-directed and learn to manage experiences, and know their right to refuse when they cannot do certain things (Billett, 2010; Billett and Somerville, 2004). These assertions indicate that individuals' subjectivities are demonstrated through work and they need to take an active role at work in order to learn from their experiences there. Similarly, Eraut (2011) asserted that learning requires individuals' attention and intention to reflect on their experiences, as learning happens within and around work activities.

These social learning theorists point to the interrelationships between the social environment and the individuals in that environment, and assert that learning happens in the workplace as a trajectory of transforming social practices and the individual's evolving development through work (Billett, 2008). These are relevant concepts to my study, with analytical emphasis on practitioners' participation in their social context. In addition, from the literature reviewed earlier (refer to Chapter Two), there is a need to explore the novices' and nurses' interactions in order to reveal their meaning making and negotiation of membership identity in their practice context. Both Wenger's Community of Practice theory and Engeström's Activity Theory seem to bear a similarity in the aspect of boundary crossing, when practitioners work together to achieve particular outcomes.

Wenger's (1998) Community of Practice theory focuses on learning and becoming and how individuals engage with and learn from one another in their gaining and negotiating of membership. In this process, members negotiate the meaning of their practice, including conflicts across boundaries. Activity Theory by Engeström analyses the tensions and

contradictions within and across systems, and how such tensions and contradictions as boundary objects contribute to the division of labour, the expansion of practices and individual's learning (Engeström, 2001; Engeström, 2008). According to Morris (2012), who adopted Activity Theory for her exploration of medical students' learning across wideranging pedagogic practices in medical schools, this theory focused more on organisational change processes, dynamics of power and control. In this process, learning happens as practitioners are affected by their social context and, meanwhile, they themselves are the forces of change.

However, Activity Theory is much more focused on the transformation of practice by the conflicts of labour, community and workplace rules across boundaries; it links local practices with wider organisational frameworks, but pays relatively little attention to individual practitioners (Arnseth, 2008). Meanwhile Community of Practice focuses more on practitioners' seeking meaning and belonging in the community (Wenger, 1998), and these aspects are particularly relevant to my study's aim.

Community of Practice theory is evolving along with its criticism. The concepts of Regime of Competence and Modes of Identification in particular provide a more dynamic description of meaning negotiation within the community as well as beyond the local community to the Landscape of Practice (Wenger-Trayner and Wenger-Trayner, 2015; Wenger, 1998). The meaning of these concepts, research studies adopting these concepts and criticisms of Community of Practice theory are discussed in detail and their suitability in my pursuit of understanding novices' transitional mechanism in a clinical setting is argued in the following section.

Community of Practice theory, and a clinical ward as a Community of Practice

Lave and Wenger (1991) used five accounts of workplace apprenticeship to develop situated learning theory, which illustrated how newcomers gain peripheral participation and gradually gain membership, and how their gaining full membership was blocked by old timers in a case study of a group of butchers. From there, Community of Practice theory was originated, and traditional apprenticeship learning was analysed as a valuable social learning approach. Community of Practice has been defined by Lave and Wenger (1991, p98) as:

a set of relations among persons, activities, and the world, over time and in relation with other tangential and overlapping communities of practice.

This definition is arguably very broad and fluid, and risks being taken too liberally in application, as if any social group is a Community of Practice. Wenger (1998) refined the concept of Community of Practice with three integral characteristics: mutual engagement, shared repertoire and joint enterprise. Wenger (1998) asserts that mutual engagement means members of the Community of Practice participate in activities and are able to clarify, define and exchange practice. Diversity, overlapping forms of competence, and giving and receiving help among members make engagement in practice possible. Engagement creates relationships among members: not only harmony, but also conflicts and tension. In my opinion, engagement is an integral part of the nurses' practice in the ward.

According to Wenger (1998), a joint enterprise means that members negotiate a common purpose and produce a practice reflecting their understanding of that practice entity. In the clinical ward, the nurses take responsibility and ensure the continuity of care and the safety of the

patients through their engagement. Negotiating a joint enterprise gives rise to relations of mutual accountability among members and produces a practice to deal with what they understand to be their enterprise. In Wenger's terms (p82),

Being able to make distinctions between reified standards and competent engagement in practice is an important aspect of becoming an experienced member... an enterprise is part of practice in the same way that rhythm is part of music.

Shared repertoire, according to Wenger (1998), is the resources for negotiating meaning, such as routines, words, tools, ways of doing things, stories, gestures, and symbols which a community produces and which become part of its practice. For example, the nurses in a clinical ward use sets of common terms, documents and resources and understand their meaning and function in their work.

I assert that a clinical ward in a hospital is kept running by a group of nurses with the characteristics described by Wenger (1998) as a Community of Practice. My assertion is also supported by Seibert (2015), as she defined the meaning of a Community of Practice in healthcare practice as:

a group of healthcare workers sharing a common domain of interest who collaborate to enhance the practice, further professional expertise, and augment institutional knowledge. (p70)

The key concepts of Wenger's Community of Practice theory used in my study

According to Wenger, McDermott and Snyder (2002), to adopt Community of Practice theory is to view learning as much more a living process than a static matter of information transmission and assimilation. It is an overarching social learning theory with many concepts, which might be the reason why the meaning of its concepts is poorly identified, and the use of the language is unclear in some research studies. Jørgensen and Keller (2008, p526) warned against applying it indiscriminately, and although they were referring to human resource development (HRD), their warning should be heeded by all researchers considering using Community of Practice theory:

...Community of Practice is a general learning theory offering many points of entry for researchers, academics, and practitioners. It follows that we need to choose the point of entry if we are to conduct an in-depth discussion of the contribution of Community of Practice to HRD. Potentially, Community of Practice has a lot of different things to say about the communities in which we live our lives and how they relate to learning and HRD. Carrying through the discussion on all basic components would imply that the discussion of Community of Practice would become too broad and imprecise and we would probably get lost in Community of Practice.

Through analysing Community of Practice theory and its many concepts, as well as research studies using Community of Practice theory, I concur with this assertion about the importance of concept selection. In the following section, I discuss the concepts of Regime of Competence and Mode of Identification. I explain an analytical framework by combining these two concepts in my study to explore novices' transition mechanism. Other concepts including Landscape of Practice,

Knowledgeability and Modulation of identification are also discussed to establish the theoretical position I am taking in the system of concepts under Community of Practice theory.

• Regime of Competence

According to Wenger (2010), the Regime of Competence is a set of rules, regulations and practices that differentiate one community from another, comprising competences which are indicators of membership. Wenger (1998; 2010) asserted that Regime of Competence and personal experiences can go both ways, challenging and transforming each other in a dynamic interplay. Members engage in their practice to make meaning and identify what is important to them. In their engagement, they might challenge or ignore the Regime of Practice of the Community.

In this sense, members' abilities in meaning making within the community indicate their competence and identity. The Regime of Competence of a community can be ingrained in practice, which makes it less visible to newcomers while the experienced members practice effortlessly. It is through active engagement that members show their abilities and responsibilities in the ownership of meaning and achieve their identity and position in the Community of Practice. An understanding of Regime of Competence is therefore necessary in this study to appreciate the nurses' practice and meaning making at work, and novices' and members' trajectories of establishing their identities as members.

Regime of Competence seems to be an important concept in distinguishing membership and indicating the underlying principles of where members put their energy in practice. However, there is a lack of research studies exploring its meaning and its application. In the

reviewed studies which adopted the concept of Regime of Competence, its significance in understanding membership negotiation is indicated, but the characteristics of the Regime of Competence need further understanding.

Kaoru Matsunaga studied herself as a Japanese woman gaining acceptance in a university class in an English-speaking country (Matsunaga *et al.*, 2018). She explored how she negotiated and interacted with the norms and conventions of the class created by the local students. Matsunaga *et al.* (2018) used Regime of Competence as a membership indicator for such norms and conventions. She asserted that international students were not just confirmed into the Regime of Competence created by the local students, but took active roles to negotiate the meaning of the Regime of Competence by engaging their past experiences.

In another study exploring an English teacher's learning experience in China (Yueting, 2017), a case study was conducted on a teacher, Janna. Janna experienced strongly her own aspired identity and teaching practice being different from the Regime of Competence of the Community of Practice. She experienced difficulties in negotiating the meaning of her practice because of the hierarchical power relations in the Community.

Both studies by Matsunaga *et al.* (2018) and Yueting (2017) used Regime of Competence as membership indicators. As new members tried to identify with or dis-identify with the Regime of Competence in their participation, both studies indicated new members' active roles in their membership negotiation. However, there was a lack of description of what the Regime of Competence was and how members' participation contributed to its meaning. I identify Regime of Competence as a concept indicating membership. Therefore, exploring and understanding

Regime of Competence in terms of the characteristics of the Community is one of my study's main objectives.

Modes of Identification

The concept of Modes of Identification has three integrated ideas: engagement, imagination and alignment. It evolved from Wenger's initial concept of "modes of belonging" (Wenger-Trayner and Wenger-Trayner, 2015, p28, footnote 6). As Wenger mentioned, "Modes of Identification" are a way to "find oneself in a landscape", and "we can only participate actively in a few practices in a landscape" (Wenger-Trayner and Wenger-Trayner, 2015, p20). The refining of the concept happened when the Community of Practice theory evolved with further deliberation and the emerging of new concepts. The core concepts of the Modes of Identification – engagement, imagination and alignment – are interpreted from Wenger's works (Wenger-Trayner and Wenger-Trayner, 2015; Wenger, 1998).

Engagement means members' direct experience with others through doing things together. It is an integral part of the members' daily participation and mutual processes of negotiation of meaning. According to Wenger (1998, p192), engagement in practice is our investment in ourselves in terms of what we do and gaining a sense of who we are, and our investment in our relationships with other people.

Imagination means the image members construct about self, others and the social context, which helps members to locate their position in the Community of Practice. It also gives members the liberty to try things and explore new possibilities, and a way to experience identity beyond immediate engagement. Imagination can give us the connection we can envision across the landscape. Imagination can also involve stereotypes and over-generalisation. In a Community of Practice, members can make assumptions about one another, connect to the past and anticipate

the future. For example, by telling people I am a nurse, people might start to imagine what kind of person I am and associate me with the images they have of nurses, and such identification can connect us or distance us.

Alignment is a central element of a Regime of Competence, wherein members negotiate meaning and coordinate their engagement. Wenger-Trayner and Wenger-Trayner (2015) also highlighted that alignment is not merely compliance or passive acquiescence. It can be a process of coordinating enterprises, perspectives, interpretations and contexts; it can also be a process of proscription that removes the members' power to act on their own understanding and negotiate positions. Members can align through willing allegiance or submission; through alignment, we place ourselves in a larger context. Therefore, alignment involves the shifting of power among members even through submission.

According to Wenger-Trayner and Wenger-Trayner (2015, p21), the combination of these different modes produces identification at multiple levels of scale all at once. Members can identify or dis-identify themselves with their Community of Practice and across the Landscape of Practice. Kubiak (2012), in his study of support workers' participation and identity development in health and social care settings, argued that "identification" indicates the temporal status of identities and the ongoing formation of an individual's identity. In this sense, my aim to explore how identity is negotiated among the nurses in practice can be better captured by using "trajectories of identification" in my study.

• The entry framework for my study

Wenger highlighted that the understanding of an individual person in the Community of Practice is not to be separated from the Community and its Regime of Competence (Wenger, 1998, p146),

It is therefore a mistaken dichotomy to wonder whether the unity of analysis of identity should be the community or the person. The focus must be on the process of their mutual constitution.

Wenger emphasised the reciprocal nature of personal experience and the Regime of Competence of the community. This means the Regime of Competence is not static, and members' understanding of any changes in the Regime of Competence and their adjustment or contribution to such changes is a demonstration of their negotiation of competence and identity, and can be viewed as their trajectories of identification.

As depicted in Figure 1, members' practice in the community are ongoing trajectories of identification, where engagement, imagination and alignment feature in their daily interactions. The three Modes are in different combinations when the negotiation of meaning and participation between individual members and the Community of Practice happen, and there is always tension within the process which could potentially enhance or impair learning (Wenger, 1998, p193).

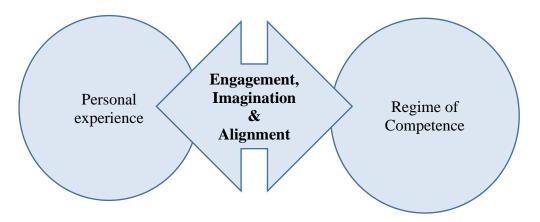


Figure 1: The trajectories of identification in the community

As the Modes of Identification can extend an individual's sense of position in the Landscape of Practice, members' interactions within the Community of Practice can be better understood by referring to the concepts of Landscape of Practice, Knowledgeability, and Modulation of Identification.

<u>Landscape of Practice, Knowledgeability, and Modulation</u> of Identification

According to Wenger-Trayner and Wenger-Trayner (2015), the "Landscape of Practice consists of a complex system of Communities of Practice and the boundaries between them" (p13). They further assert that "all practices in the landscape have a fundamental 'locality'" and a landscape consists of competing voices and claims of knowledge (p16). As members bring with them their past experiences and knowledge from multiple Communities of Practice into their current Community of Practice, a research study aiming to explore members' practice cannot ignore the fact that any Community of Practice is part of the Landscape of Practice.

The concept of Knowledgeability is closely related to the concept of Landscape of Practice. I discuss and clarify these concepts from both Wenger's discussion and recent research studies using Knowledgeability and explain my decisions about the use of these concepts in my study.

Wenger-Trayner and Wenger-Trayner (2015, p23) use the term "Knowledgeability" to refer to "the complex relationships people establish with respect to a Landscape of Practice, which make them recognisable as reliable sources of information or legitimate providers of services." They claim that their use of the concept of Knowledgeability in relation to Landscape of Practice is to draw a contrast with the concept of Regime of Competence in relation to Community of Practice. As they

assert, "Knowledgeability is not defined with respect to the Regime of Competence of any single community, but within a broader landscape that includes a set of practices beyond a person's ability to claim competence in all" (p23).

The case studies presented by Kubiak et al. (2015) showed how different individuals reconcile their identities and the meaning of their practice with their diverse knowledge from the Landscape of Practice. One of the case studies was about a research interest group consisting of people from various backgrounds. They encountered issues around the sharing of information on social media when one of them posted on Twitter her views about certain matters this interest group was discussing, and her action was made known to the group. A heated debate was triggered about the group's regulations and how group members should behave. The discussion raised by Kubiak et al. (2015) was that with the increasing tendency for people from diverse backgrounds to work together, tensions could occur as people identified with and were accountable to different Communities of Practice. When their diverse Knowledgeability comes into conflict with a particular Community of Practice's Regimes of Competence, they make meaning of their Engagement according to the identity of the Community as they imagine it and decide to identify or disidentify with it. In this case study, the main points of the argument are the contrast between an individual's relationships with the Knowledgeability of the Landscape of Practice and with the Regime of Competence of the local Community of Practice, how individual members negotiate the meaning of their participation, and how such negotiations can create new meaning and conflicts.

I reviewed two studies which adopted the concept of Knowledgeability, which helped me to better understand its use in research and to determine more precisely its meaning in my own study. Brown and Peck (2018) investigated the effect of using Community of Practice as a learning approach to promote blended learning among academics in a HEI. The researchers claimed that the concept of Knowledgeability helped to make sense of the academics' identities in their engagement

with technology and other alternative pedagogies to enhance teaching which were not the academics' discipline competence.

Jentoft (2020) investigated the learning and development of Knowledgeability in six final-year students from medicine, occupational therapy and physiotherapy through boundary-crossing. These students visited elderly clients living at home, and then produced a jointly written health record from their interprofessional evaluations. The researcher concluded that interprofessional participation was achieved among the students by learning about and reconciling Knowledgeability from other disciplines, though the students experienced discomfort having to expose their practice to other disciplines and to accept parts of practices where they could not claim competence.

In both the above reviewed studies, the researchers contrasted the participants' accountability to the Regime of Competence of their own Communities of Practice and the influence of Knowledgeability from wider practice. With reference to Wenger's description of the concept Knowledgeability and its use in research studies, the purpose of its use is to recognise that a Community of Practice is not a closed system, and members bring their knowledge and past experiences from the Landscape of Practice into their local practice. In my discussion, this aspect of members' knowledge and its effect on the negotiation of meaning and position in the Community of Practice will be recognised.

I developed my understanding of the Modulation of Identification concept through analysing Wenger's work. Wenger asserts that different combinations of Modes of Identification, engagement, imagination and alignment allow members to produce identities at multiple levels of scale as they locate themselves in the Landscape. According to Wenger-Trayner and Wenger-Trayner (2015, p22):

these modes of identification...it is in combination that they are the most effective. Engagement without imagination or alignment is at risk of local blindness...alignment without engagement or imagination often leads to unthinking compliance...imagination is needed to reflect, see oneself in a broader context, or envision a different future. But imagination by itself can be floating and therefore gains from being anchored in engagement and translated into alignment.

To my understanding, this assertion suggests that these different Modes are always in their Modulated combinations, which explains the concept of Modulations of Identification. Individuals can choose to be identified with or dis-identified with a practice at various levels through multiple combinations of Modes which give them the ownership of meaning in their practice. According to Wenger, this ownership of meaning creates power relations among members in the Community of Practice (Wenger, 1998), when members decide how to engage, what image to create and how to align their participation to that imagination (refer to the section titled "Modes of Identification" for the meaning of engagement, imagination and alignment).

In a local context, individuals' identities are invested in the Community of Practice and individuals are accountable to the Community's Regime of Competence. My study focuses on a locality with its own local Regime of Competence. Meanwhile, as individuals negotiate the Regime of Competence in the Community, their existing knowledge from the Landscape of Practice needs to be recognised. According to Wenger-Trayner and Wenger-Trayner (2015, p11), "Knowledgeability entails translating this complex experience of the landscape, both its practices and their boundaries, into a meaningful moment of service." The concepts of Landscape of Practice, Modulation of Identification and Knowledgeability discussed here helped me to position my analysis of

nurses' participation, with the view that the clinical unit is a Community of Practice in the Landscape of Practice.

In summary, when individuals participate in their Community of Practice where they are held accountable to its Regime of Competence, they participate with different combinations of the Modes of Identification: engagement, imagination and alignment. It is through engagement, imagination and alignment that individuals negotiate meaning and membership identity, and they bring their diverse knowledge from the Landscape of Practice into the negotiation of their local practice.

Criticisms of Community of Practice theory

Community of Practice theory was developed over the past three decades and it has gained popularity in research studies. However, Wenger (2010, p11) cautioned,

...the concept is good in theory, but difficult in practice...I do not know whether the growing popularity of the concept will lead to its demise. Perhaps uninformed application will generate too many failures...maybe the fragmented adoption and redefinition of the concept will discourage academics from using it.

Community of Practice is a comprehensive theory with many evolving concepts, but it has been suggested that unclear or partial adoption of this theory and its concepts in research studies might have contributed to more confusion over their meaning (Farnsworth, Kleanthous and Wenger-Trayner, 2016). In a seminar paper, Wenger-Trayner (2013) discussed the criticisms of Community of Practice theory and highlighted that it shines light from a particular perspective, so its use must be based on a clear understanding of its purpose, its stance, and its language.

Here I discuss a few critical views which are relevant to my engagement with Community of Practice theory and its concepts.

Firstly, according to Hodkinson and Hodkinson (2004) and Fuller (2013), there is ambiguity around the socio-spatial delineation of the Community of Practice concept. The scope of the Community of Practice could be narrower or wider, and such ambiguity could result in confusion about its scale and applicability. Hodkinson and Hodkinson (2004) pointed out the openness of Lave and Wenger's (1991) definition of Community of Practice which might lead to the interpretation that any social group can be a Community of Practice. Wenger's more refined definition (Wenger, 1998) with the three characteristics of Community of Practice, and the defined space of the Community of Practice, is indeed more useful. In this study, the more refined concept is adopted.

Wenger's work in recent years has indicated that a Community of Practice consists of members with different experiences and competences from other Communities of Practice. When introducing the concept of Landscape of Practice, Wenger-Trayner and Wenger-Trayner (2015) asserted that in the study of any professional occupation, the social body of knowledge which that profession engages with from a complex of multiple Communities of Practice should be respected. Fuller (2013) concurred with the concept of viewing Community of Practice members as having knowledge from multiple Communities of Practice. In this study, although the setting is a clinical ward, it is recognised that the nurses and novices have experiences and diverse knowledge from multiple Communities of Practice which influence their negotiation of meaning and participation.

Secondly, on the concept of newcomers' peripheral legitimate participation, Hodkinson and Hodkinson (2004) cautioned that many researchers misunderstood peripheral participation, as if there is a

margin at the edge of a Community of Practice. Furthermore, Hodkinson and Hodkinson (2004) pointed out that the examples Wenger used in theorising Community of Practice were mostly of newcomers from nonprofessional groups in the traditional sense. In Wenger's (2015) book titled *Learning in Landscapes of Practice: boundaries, identity, and knowledgeability in practice-based learning*, the concepts of learning and identity in the Landscape of Practice were theorised using case studies of workers with various professional backgrounds and working experiences. However, there is a lack of empirical research adopting Wenger's concepts of Regime of Competence and Mode of Identification in a comprehensive manner to explore members' interactions in their practice settings. The dearth of such examples from empirical professional practice settings involving multiple members is arguably one of the limitations in the development of Community of Practice theory.

Thirdly, there are critics who claim that Wenger's Community of Practice theory avoids the issue of power (Fuller and Unwin, 2004). Wenger argued that Community of Practice as a learning theory does not deny structural power relations, and even learning itself reproduces this structure (Farnsworth, Kleanthous and Wenger-Trayner, 2016). Furthermore, Community of Practice theory is focused on learning, and such learning results in a Regime of Competence, which gives increased power to those who have the legitimacy to enforce it. In a further development of Community of Practice theory, the concept Modulation of Identification implies individuals' exercise of relational power in negotiating meaning within the Community of Practice.

Fourthly, Billett criticised Wenger's Community of Practice theory for having underplayed individual subjectivity and denied the role played by how power relations between the personal and social are experienced and enacted (Billett, 2010). According to Billett (2010), subjectivity is individuals' way of engaging and making sense of their experiences,

constrained by situational factors, social practice and cultural norms. Identity is also aligned with how individuals identify with and wish to be associated with the social world. Therefore, individuals' identities emerge through their subjectivity under certain social conditions.

Though Billett criticised Wenger's ignoring the agency of the individual, the Community of Practice theory described by Wenger and the Coparticipation at Work model described by Billett (Billett, 2001; Billett, 2002b) bear similarities in their ideas about meaning negotiation and identity development between the individual and the community. Wenger claimed that Community of Practice theory also concerns subjectivity, considers individuals to have agency in social experience (Wenger, 1998, p15), and recognises the dual relation of practice and identity (Wenger, 1998, p17). It involves the whole person through doing, talking, thinking, feeling and belonging in practice; it involves the work of identity (Wenger, 1998, p54-56).

In this study, I rationalise that members' power in the Community of Practice is demonstrated in the ownership and negotiation of meaning. Understanding the Regime of Competence and how members negotiate practice is the approach I take to understanding members' negotiation and development of membership identity in the Community of Practice.

Studies which adopted Community of Practice theory to explore nurses' learning

Community of Practice theory has been adopted in business management and other fields over the past thirty years, yet its adoption in healthcare only started in recent years. Besides the study by Thrysoe (2012) which was included in my literature review in Chapter Two, there are a few studies that use Community of Practice as the theoretical framework for exploring nursing students' clinical learning (Connor,

2019; Hägg-Martinell *et al.*, 2016; Molesworth, 2017), and nurses' developing meaning and role in an Acute Medical Unit (Griffiths, 2007). Though the research participants in these studies were not novices, the theoretical approach, research focus and research settings are similar to my study. Therefore, I reviewed these studies for a better understanding of how the theory could be applied in my study.

Connor (2019) questioned whether the clinical Community of Practice prepared student nurses at a university in the UK for their clinical nursing practice. The researchers reported that the students tried to familiarise themselves with the clinical setting by observing the ward's routines. They also developed relationships and trust with the Health Assistants first to gain access to navigate their RN roles. The students highlighted the importance of envisioning their role as RNs and gearing their learning towards that role. It could be concluded that the students learnt the members' relational positions in the community and negotiated their access.

Connor (2019) used Community of Practice theory as an analytical framework and collected the views of students to understand their navigation of roles and positions in the Community of Practice. This study collected data through semi-structured interviews with eight second-year student nurses. The characteristics of the Community of Practice were analysed from the students' responses. However, the envisioning of the RN role and the students' alignment of their learning towards that role were not analysed. The researchers highlighted that the culture of the Community of Practice was task driven, but there was no further exploration. Analysing how members negotiated tasks in that task-driven culture might help us to understand their meaning making and relational positions.

Hägg-Martinell *et al.* (2016) conducted an ethnographic study using Commuity of Practice as the theoretical framework in an acute medical ward in a teaching hospital in Sweden. The researchers reported about 100 hours of "marginal participation" in which the researcher played only a minimal role in the ward. The data was analysed in parallel with the fieldwork. Medical and nursing students' interactions were observed and informal questioning was also used to explore how the students adapted and interacted in the community of practice.

The ward was described as a complex and stressful environment with frequent nurse turnover and patient turnover, heavy workloads and stressful situational changes. It was reported that the hierarchical structure and roles of the community members were not apparent to the students, which meant the students lacked the awareness and ability to assess the situation and the people in that situation.

Hägg-Martinell *et al.* (2016) reported how the medical and nursing students participated differently after they had spent some time in the ward. The medical students realised they could learn more by following their supervisors to different clinical areas; therefore they adopted marginal participation in the ward. The nursing students stayed in the ward for four to eight weeks and they learnt to engage in the ward activities by staying in the patients' rooms to observe and interact with and take care of the patients.

According to Hägg-Martinell *et al.* (2016), the students learnt to adapt and manage their learning in the ward with emphasis on the culture of knowing and doing. However, there was a lack of focus on member-to-member interactions and their negotiation of meaning. For example, the researchers reported: "a handful of staff members with longer experience of the ward had key roles as culture and experience carriers. They helped to maintain calm in complex and stressful situations for both

students and staff. They also introduced and supported more novice colleagues to work routines and duties." (Hägg-Martinell *et al.*, 2016, p795). It would be of significance to learn how these experienced staff members interacted and negotiated the meaning of their practice among themselves and with novice colleagues, including the students.

Molesworth (2017) conducted a study of seventeen first-year nursing students from one Scottish university after their 4-week introductory placement. Data was collected through five individual interviews and two focus groups. The analysis was focused on the students' perception of gaining a peripheral position in the Community of Practice and the risk of marginalisation. The meaning of participation and non-participation seems rather arbitrarily categorised due to a lack of description of the nursing students' participation.

In these three reviewed studies, the students' clinical placements were of short duration. The adoption of the Community of Practice theory in these studies was with a clear focus on the students' gaining peripheral participation, and with the assumption that the student nurses were at the periphery and the experienced nurses were at the centre of the Community of Practice, as two separate groups. There was a lack of focus on the interactions and negotiation of meaning between the students and the nurses in practice.

Griffiths (2007) conducted a research study in an Acute Medical Admission Unit in the UK, adopting Community of Practice theory as the theoretical framework to explore nurses' roles. This ethnographic study lasted over three years, with 200 hours of observation and semi-structured interviews with nurses, doctors, paramedics and patients. Griffiths described the nature of the clinical work and the meaning of the nurses' practice. Themes such as "making beds", "knowing your staff" and "loving the buzz" were identified as the locally negotiated meaning

of their practice. The nurses' meaning making in their daily work and their struggle with the organisational goals and their undefined roles were confronted in the formation of their identities in the Community of Practice.

Griffiths' (2007) study findings made a significant contribution to the understanding of the nature of the work in the Acute Medical Admission Unit and the nurses' evolving identity and practice competence. The adoption of Community of Practice theory and an ethnographic research design sets a pragmatic example for my study.

In Griffiths' (2007) study, the nurses were experienced, and they came from different clinical specialties to the newly formed Acute Medical Admission Unit, where they negotiated and developed their practice culture and their roles. Patient turnover there was fast. Unlike that study, my research is interested in novices working with experienced nurses in a hospital ward, where the patients stay longer. Furthermore, Singapore is situated in Southeast Asia which has its own unique culture and nursing practice. The concepts of Regime of Competence and Modes of Identification evolved with the emerging concepts of Landscape of Practice, Knowledgeability and Modulation of Identification in the development of Community of Practice theory after Griffiths' (2007) study.

In view of this, my study to explore the novices' and the nurses' daily interactions in an acute care setting with Wenger's Community of Practice theory and the concepts of Regime of Competence and Mode of Identification is a novel approach. In this study, I take the stance that the novices and the nurses in the clinical ward form a Community of Practice and they work together, and I do not view them as opposing groups. With my understanding of Community of Practice theory and its

concepts, I identified two specific research questions in my aim to understand novices' transitional mechanism, which are:

- What are the characteristics of the community of practice?
- What are the trajectories of identification of novices?

In this chapter, I took the position that novices' transition is a social learning process. I proposed a conceptual framework developed from the concepts of Regime of Competence and Mode of Identification to explore novices' learning and negotiating of identity in a Community of Practice. The concepts of Landscape of Practice, Knowledgeability and Modulation of Identification were also discussed to position my theoretical angle in the system of concepts under Community of Practice theory.

Chapter Four: Research Approach, Reflexivity, Data Collection and Ethical Considerations

Introduction

In this chapter, I rationalise the use of a focused ethnographic approach as the research method and social learning as the theoretical underpinning of this research study. I explain the reflexivity I engaged in throughout my research process as I took up the position of both insider and outsider in terms of the research context. Data collection methods and ethical considerations are also discussed.

Rationale for adopting a focused ethnographic approach

Aiming to understand the novices' transitional mechanism and having adopted social learning theory, I required a research approach which would allow me to explore the multiple and diverse meanings and experiences of practice the novices and their community co-created. Among a few possibilities, focused ethnography was considered.

According to Hammersley and Atkinson (2007), an ethnographic approach requires the researcher's immersion in the context of the study to describe, analyse and interpret the behaviours, beliefs, values, assumptions and language that a culture-sharing group develops over time. This approach is a detailed way of witnessing human events in the natural context in which they occur which is not accessible to other research methods. The intention of this study is to understand the culture of a clinical community, the principles of practice, interactions, experiences, feelings and beliefs of the nurses, so the ethnographic approach is deemed the best choice.

A traditional ethnographic study is usually conducted by researchers who are not part of the cultural group. As it is described, the researchers enter the field without specific research questions and let what happens in the field lead their way; they immerse themselves in the field for a long period of time in order to understand the culture of the group under study (Knoblauch, 2005; Roper and Shapira, 2000). Adhering to these typical features of traditional ethnography makes this approach difficult to adopt for researchers who have limited time and who are interested in studying a subcultural group which they are familiar with.

In recent years, there has been an increasing trend for researchers to adopt a modified ethnographic approach called focused ethnography. Wall (2015) explained that focused ethnographic research is usually conducted by researchers with background knowledge of the cultural group, with specific research questions, and the researchers usually spend a shorter time in the field. According to Wall (2015, Art.1), focused ethnography is an evolved method of ethnographic approach in modern times, which offers a pragmatic and efficient way to explore a specific cultural group. As she argued:

I propose that focused ethnography is a legitimate and necessary option in our overall ethnographic toolkit because of its flexibility in exploring culture in emerging settings of interest. Rather than being a threat to the ethnographic endeavour, focused ethnography preserves the essential nature of ethnography and allows researchers to explore cultural contexts that cannot be studied using conventional ethnographic methods.

With my nursing background and work commitment, focused ethnography offered a pragmatic option for me to conduct this research. In this study, using this approach provided me with access to the novices' and nurses' practice world, and gave me the opportunity to explore their daily experiences, relationships, meaning making and

negotiation of practices, and the potential to understand the novices' transitional mechanism.

Though I used a focused ethnographic approach, the general principles of ethnographic methods were adhered to. According to Murphy, Griffiths and Merrell (2014), this approach requires the researcher to focus holistically on a particular area in order to understand what is going on. Okely (2002) suggests that the totality of the researcher's experience should, as far as possible, be integrated into the whole process, and this is important for the open and reflexive nature of ethnographic research. So the perspective I adopted was not just simply to "see through the eyes" of the participants, but to see and understand the community through building relationships between myself as a researcher and the nurses as the participants in the research process, to reflect my preconceived opinions and my position vis-à-vis the nurses and their practice, then to understand them through learning from them (Vidich and Lyman, 2000).

In terms of the position of the theory, Blommaert and Jie (2010) suggested that the theoretical framework should be considered as a general direction in the design of the ethnographic research approach, rather than a mould to fit into. I adopted Wenger's Community of Practice theory as a theoretical perspective from which to study novices' and nurses' practice, which set the boundary of the things I might study and the concepts I might use to study them. However, it did not dictate the specific design and objectives of this study.

My engagement in the research processes reflects my interactive and increasing understanding of the theory, its concepts and the research data. For example, I engaged in a novel approach by using Wenger's concepts of Regime of Competence and Mode of Identification to investigate novices' and nurses' meaning negotiation in practice, which

is a challenging, interactive and creative process. Through back and forth engagement in the theory, my field experiences and interpretation of data, I arrived at a gradual understanding of the relationship of the data to the meaning of the nurses' interactions, to the theory and to the development of new concepts.

A focused ethnographic approach requires more of the researcher's ability to sufficiently understand the cultural group. This was possible for me in this study partly due to the rigorous processes I engaged in, which will be described later; and partly due to my nursing background and cultural familiarity, which enabled me to grasp the intricate and tacit meanings of the nurses' practice and communication more easily than a researcher who was not familiar with nursing practice, the language and the unique Singapore culture. However, having a shorter period in the field prevented me from collecting data which might have brought different insights into this cultural group. For example, had I collected data for a longer period of time, I might have been able to see more of the novices' practice after they were allowed to practise independently, or gain more access to the aspects of the nurses' practice which needed a longer time to study.

Reflexivity of my position as a cultural insider and outsider

In this section, I discuss how I took a reflexive approach to accommodate my multiple roles as an insider and an outsider in terms of the study field. According to Carspecken (1996) and Goodwin *et al.* (2003), using an ethnographic approach requires researchers to be aware of their own social-historical location, values and interests, and to be sensitive to their own effect on the people and processes studied. Considering my experience in clinical nursing and nursing education and now taking a social science researcher position, I am both an insider and an outsider in terms of the research context.

• As a cultural insider and outsider

Views on the pros and cons of being an insider are mixed. Delanty (2005) and Weber (2003) cautioned that familiarity with a cultural group could bias the researcher's perception and approach and compromise the research findings. Atkinson and Pugsley (2005) suggested the difficulties insiders might encounter in studying their own culture, and the great effort needed to suspend their tacit cultural assumptions. However, Atkinson (1997), in his study on medical students' clinical learning, asserted that the "expertise and ignorance" stance of a researcher has both advantages and disadvantages and a researcher has to manage this.

Bonner and Tolhurst (2002) asserted that this "insider" familiarity can promote an intuitive understanding of the participants' experiences, which enhances the trustworthiness and authenticity of the research. Furthermore, Patton (2002, p50) questioned the obsession with objectivity and argued:

The ideals of absolute objectivity and value-free science are impossible to attain in practice and are of questionable desirability in the first place since they ignore the intrinsically social nature and human purposes of research.

In accordance with Patton's assertion, I am part of the research findings because of my own background and position taking in the research. Being an insider in the nursing profession, I understand the overall nursing culture, guidelines and practices, and the language the nurses use in Singapore. This prior knowledge helped me to grasp the subtle meaning in the nurses' communication and practice and recognise the things which are of importance to them.

For example, I understood my participants' unspoken expectations of my being a nurse and being accountable "at work", when the nurses asked questions such as "When will you be here tomorrow?" or "What are your working hours?". I was careful with my attire to blend into the dress code of the nursing team and appeared neat and tidy as a nurse is expected to look from the moment they step into the ward, even if it is outside of their working hours. This is based on my insider understanding of the local nursing culture and their expectations of each other's social behaviours. This shows the advantage of being an insider who understands the nursing culture of being self-disciplined and peer monitored, and ignorance of this culture might have led me to make different assumptions in my responses to the nurses' questions and expectations and affected my relationship with them.

The cultural insider role allowed me to realise the nurses' inexperience with my research approach and that I needed to reassure them and manage their anxiety, expectations and my position. "Why do you have to spend so much time here?" one nurse wondered. "What are you trying to find out?" many asked. The nurses initially assumed that my research was evaluative in nature, though I tried to explain to them that I was there to learn their practice. They reacted to my questions with seriousness at the beginning, as if I was trying to find fault with them. It was only after some time that they started to trust that I meant what I said, and I was genuinely interested in their work, rather than picking on their faults. This trust was developed through them observing me and getting to know me.

However, I struggled to suspend the nursing values and beliefs I hold as an insider. During the initial stage of my observation, I tended to check and judge whether the nurses adhered to the practice guidelines. I tended to look at the nurses' interactions with the patients and the patients' family members, and the ways the preceptors guided the novices from my own point of view as a Nurse Educator. I experienced feelings of frustration and the urge to interfere when I observed practices

which were different from mine. Reflexivity allowed me to realise the role tension caused by my insider position. I learnt to manage this tension by taking a step back and critically reviewing my own assumptions and actions. In this way, I gave myself room to appreciate the reality for what it was, and what role I was playing at that moment. This constant reflection helped me to manage my relationship with the nurses.

Meanwhile I was also an outsider to this specific ward as I was not familiar with this particular group of nurses and their specialist field. This specialty has its own sets of diagnoses, procedures, locally developed rules and regulations, which I needed to observe and learn from the nurses. I let go of my Nurse Educator ego and showed the nurses my ignorance in their field of practice. For example, I asked questions about simple terms, nursing procedures and treatment regimens they used daily, and learnt new things from the novices as well as the experienced nurses. My going along with their care activities, chats, roll calls and meal breaks and my humble learning attitude helped me to blend in with them, rather than being viewed as a lecturer or a researcher keeping my distance from them.

Balancing my blended position and cognitive alertness

With my blended position, they expected to see me in the ward and showed their concern for me when I was absent for a few days. The reciprocal relationship was shown in simple things like inviting me to go on breaks with them and offering to buy food for me as they did for one another, while I picked up the clue to the expected reciprocal response from me, i.e. to offer my help as well, for example, to buy food for the nurses when they were busy or to give them a hand with their care activities if they needed help. Such interactions helped me to maintain relationships and build rapport with the nurses. Atkinson (1997, p45)

reported how his spontaneous participation helped his relationship with the participants, and this was true for me:

A lack of reciprocity can create strain and difficulty in one's field relations and these feelings may be rectified by the occasional participation in activities.

Blommaert and Jie (2010) and Pope and Mays (2006) warned that immersion in the clinical setting brought familiarity, which can also desensitise the researcher to other issues. Along with the immersion and my rapport with the nurses, it was challenging for me to balance "involvement and detachment" as Gobo and Molle (2017, p8) put it, to be involved in the social life of the people I was investigating and meanwhile to keep sufficient cognitive distance as a researcher.

As I developed friendship with the nurses, the familiarity brought about warmth, closeness and emotional attachment, which gave me opportunities to gain understanding of them as people and their interactions. For example, they shared intimate information about themselves, their colleagues and their opinions of the patients with me. Meanwhile the closeness made it more challenging for me to remain alert and not to be "carried away"; as Hammersley and Atkinson (2007) warned, "going native" can lead to the loss of research perspective. For example, I witnessed the nurses' struggle with multiple demands at work, working overtime, missing meals and leaving their newborn babies who were sick at home while they came to work to care for the patients. I sympathised with their situation and was overpowered by my emotion at times instead of being reflexive and aware of my position and not fundamentally departing from my role as a social science researcher.

Nevertheless, my presence in their practice might also have affected their performance. They might have felt a certain hierarchical relationship between us and worried that I was judging them. For example, some of them initially tried to explain their ways of doing things to me when they knew they were using locally developed ways which had been modified from the "norms". As they grew familiar with me, the nurses did not hide their jokes and comments about their colleagues and allowed me to join their casual chats and behind the scenes care activities. Being given such access showed their acceptance of me as one of them. The gradually developed relationships and familiarity and having time in the field assured me that what I observed was their usual practice. This is also supported by Atkinson and Pugsley (2005), as it is impossible for the participants to transform their daily practice into a performance and sustain it over a long period of observation. In this study, I was in the ward for over four months, so even those nurses who were initially more cautious in my presence got used to having me around.

Another challenge I faced was keeping emotional distance from the patients. When I had more time in the ward and was not occupied with tasks, I spent more time with the patients and developed close relationships with them. I had to be careful not to lose my focus as a researcher when I empathised with the patients, as they shared stories about their past, their illness journey, their attitudes towards death and dying, their family issues, their emotional burdens and their observations and expectations of the nurses and doctors.

Data collection methods

The methods of data collection should reflect the multiple perspectives of the novices and the community's day-to-day practice, to be consistent with the theoretical perspective of Community of Practice and the methodology of ethnographic research. In order to gain different viewpoints, I used observation and focus group discussion. A range of methods used in data collection is indicated in the table below.

Table 2: Data collection methods, source, and activities leading to data

Collection	Data source	Type of activities
methods		
Observations	All the nurses	Handover
		Care activities
		Social interactions and
		chats
		Roll calls
Focus Group	13 nurses, including	Used topic guide to facilitate
Discussions	novices, Senior	group discussion
	Nurses, RNs and	All sessions were facilitated
	Nurse Assistants	by the researcher
Field-notes,	Observation	Throughout the data
Reflective diaries	Researcher reflection	collection and data analysis
Memos	Presentation and	
	discussion	

Observation

Data collection was conducted in the same ward for a period of four months in 2019 and accumulated more than one hundred hours of observation. The observation sessions were conducted on different days of the week and covered both the AM and PM shifts. Night shift was excluded for two reasons: one was that the theoretical focus of the study was to understand the community and the members' interactions, so the day shifts provided sufficient observational opportunities; another reason was that the night shift was not feasible for me as I had a full-time job.

I used observation as the main method of data collection. I followed the nurses and had access to all care activities and their casual chats. According to Pope and Mays (2006), the value of this approach is to explore the embedded behaviours, culture and norms which might not

be uncovered with other methods. It is a far more valid way to discover what the nurses do than to interview them and ask questions. Field (1991) suggested this approach is considered to involve more of a reciprocal relationship between the researcher and the participants, with each influencing the other. Using observation gave me the opportunity to understand the nurses' interactions and relationships in their practice context, and meanwhile gave the nurses the opportunity to assess and accept me in the field. I concur with Gerrish's (1997) assertion that relationships require day-to-day consideration during fieldwork, as I experienced that when I gradually gained the trust of the nurses. It was a process of mutual exchange of information and learning between us through conversations and social interactions.

Nevertheless, some nurses were still rather cautious and tried to avoid mentioning names when they chatted about their colleagues in my presence. My understanding of whom they were referring to in such chats was made possible through my background understanding of the team and the context – for example, the different labels and special terms created by the nurses to make communication cues in their conversations. My observations and chats with different nurses on multiple occasions provided information from different angles as well as opportunities to validate my iterative analysis.

Deciding what to observe was challenging even with my background knowledge of the clinical nursing workflow. Although I had an observation plan (refer to Appendix 3), it was not cast in stone. The moment I entered the ward, I was overwhelmed by all kinds of activities, many people going in and out of the place and conversations happening everywhere. I decided to start my observation with an open approach first. The initial observation was based on Spradley's "broad observation" (1998), which gave me an idea of the setting. In the first two weeks, I followed the nurses during their entire AM and PM shifts including their pre-duty preparation, tea or meal breaks and post-duty

relaxation, to understand the workflow and routines, and to develop a sense of who was who in the ward, and where things were kept. I tried to capture whatever I observed and not to prematurely decide on what was relevant or important. As Bonner and Tolhurst (2002) advised, it is important to first obtain general information about the setting, including layout, people, routines, impressions of the scope of duty of each individual, teamwork and collegiality. I put effort into remembering names, different people's work patterns, common terms used and the types of patients in the ward. I also drew the ward layout based on my memory to orient myself to the setting faster. This stage is particularly important: not to rush to close observation too fast, but to take gradual steps each day and to observe the nurses' reactions and acceptance.

I observed the full range of activities and the people of all kinds who came into the clinical space. The "funnel approach" suggested by Agar (1980) enabled me to identify that nursing handovers and morning shifts were occasions where intensified nurse to nurse interactions took place. After making a more focused observation, I entered into the phase of "thick description" as described by Gobo and Molle (2017, p10), as I spent hours and repeated rounds to observe the selected activities. The more focused observation also helped me to deepen my relationships with the nurses. I learnt the nurses' preferred nick names, their practice routines and their relationships.

These intensified observations offered me the best opportunities to explore nurse-to-nurse relationships and their decision-making under stress, and the underlying principles of the nurses' decisions as they explained to me their rationale for doing things. Besides the focused observation, the peripheral observations included the staff's casual chats in the tearoom or along the corridor, which were important sources of information for me to work out the intriguing differences and conflicts between the nurses. For example, their ideas about other people and

their rationales for handling difficult situations were usually expressed only in their casual chats.

At the end of each day, I spent hours writing field-notes, memos and reflective diaries. I recorded my field-notes in a timely manner and identified the areas where I needed to focus my observation the next time. As I gained familiarity with the context, my initial "innocence" was lost. This feeling of losing innocence is similar to the description by Atkinson (1997, p49):

...by the end of a month of daily participation and observation, many of the features of life in the unit which had appeared distinctive were tending to become familiar, and...the freshness of my perceptions of the unit was starting to wear off.

It was demanding physically, mentally and emotionally to remain focused and alert in my observation, and meanwhile to be careful with my actions and interactions with people to nurture relationships and maintain trust. As Atkinson (1997) suggested, it is a constant balancing of what should be sacrificed, as the clinical ward contains endless things to observe. The problem of selectivity was resolved to some extent through my constant reference to the theoretical underpinning of the study and the emerging themes in the course of collecting, recording and analysing the field data.

In the middle of my observation period I took a two-week break from my fieldwork. During the break, I spent more time reading the field-notes, diaries, memos and research literature. As mentioned by Bernard (2018, p304), by doing so I was "putting things into perspective" through further reflective notes and memos. I realised that part of me, as a nurse, influenced my data collection, in terms of what I noticed and what I missed. For example, I observed the novices and their preceptors more

closely according to my framework of teaching and learning in practice. This experience is similar to what Hugh (2002) described about her data collection experience in a study on stepfamilies, where the setting was within the structure which replicated her personal views and experiences, and therefore her observation was influenced by those views and experiences.

This was a valuable period of reflection and gave me the opportunity to re-focus for the subsequent observation. This period and the repeated observations and casual conversations would allow the space for ethnographic validity (Cohen, Manion and Morrison, 2013). Gobo and Molle (2017) called this stage the "theoretical stage", when I was more aware of what I had missed previously, what my focus should be according to the theoretical framework I was using, and my development of new concepts from the data and the specific socio-cultural context of the participants. As I discussed in my reflective account earlier in this chapter, I put deliberate effort into suspending judgement as a cultural insider and intentionally slowed down my pace. I started to notice the main focus of the nurses' daily business and their efforts to achieve it. I concur with Bernard's statement (2018, p293) that "there are many things that people can't or won't tell you in answers to questions." Rather, this emerged through my evolving understanding of their practice reality.

Conducting observation therefore required constant awareness of my multiple roles, which were all reflected in my field behaviours and decisions, such as when I should reach out to help the nurses and when I needed to keep a distance; or when I could ask a question during the interactions and not be seen as intrusive; or how much I should pay attention to the patients' requests for help when as a nurse I am obliged to, without being viewed as a challenge to the nurses' practice. Learning to manage my role tension and balance my roles evolved with my understanding of the nurses' practice, the nurses and myself.

Writing field-notes, reflective diaries and memos

I recorded what I observed as field-notes. But the challenge I encountered was how to keep track of my observations and keep writing when my time and energy were constrained. It is suggested that meaningful description of the people involved, their talk and their behaviour relies on researchers' skills, memory and systematic recording, and field-notes should be taken as soon as possible to ensure accuracy (Hammersley and Atkinson, 2007; Pope and Mays, 2006).

I always carried a notebook and a pen in a small sling bag with me with the intention of writing timely field-notes. However, I observed that some nurses, judging by their reaction to seeing me take out my notebook to write, were not comfortable with my notetaking. They might have considered this action intrusive and threatening. Blommaert and Jie (2010) reported a similar kind of participant reaction to note taking. Furthermore, from my understanding of nursing culture, my observation and notetaking actions may have given the nurses the feeling of being watched and audited. As the patients' rooms had no space for me to hide in a corner to take notes unnoticed, I adjusted my method of notetaking by making mental notes of key persons and key events.

My familiarity with the flow of procedures, ward activities, people in the ward and their different job designations aided my memory. I also made brief notes by frequently going out to a place of privacy to jot down key words. Such mental notes and key words helped my memory when I wrote the field-notes at the end of the day. Okely (2002) described her experience of writing field-notes when certain memories came to mind later when new encounters made her recall her earlier observations, and I had the same experience. I even jumped out of bed in the middle of the night when I suddenly recalled some important element of my observations which had I omitted to write down. Although my field-notes

were amended when events were recalled like this, they were nevertheless a complete account of my whole experience in the field.

The issue of what to write and what not to write surfaced and had to be carefully considered. With long hours of observation in the ward, it was impossible to write everything. My attempt was to have a timeline, with the main activities and the main characters recorded, as well as the location of what happened, and I then wrote descriptions of the observations, the ideas and insights that emerged along the way. This approach proved valuable later on in my analysis and helped me to relate to the context of the events and interactions which seemed routine, and might otherwise have been lost. More focused observation and field-notes were gradually developed when I decided to focus more on the morning busy-hour activities and handover activities, after I gained an initial overall understanding of the nurses' participation in the ward.

Reflective diaries and memos were written, recording my thoughts on my observations, my encounters with the nurses in the ward, my reading and the connections I made to my data, my discussions with my supervisors, my interpretation of the observations, and my plans. Some of these reflective thoughts happened in a flash, so my reflective diaries and memos were written in the most convenient way at that time. They were written in digital form, or handwritten on notebooks, on pieces of paper, on the pages of the books and the printed materials I was reading, whenever they occurred. Some of my reflection happened in the middle of my field-note writing as well.

This style of diary and memo writing was also due to the part-time nature of my study: I had to try to use small pockets of time to do my analysis, reading and writing. Some are in long paragraphs of writing, and more often, in short notes. Such reflective notes and memos captured my

thoughts and reflections yet seemed messy and, in some cases, when I read them later, I had to make an effort to recall what I meant at that time. I found it more helpful to always have a small notebook to record such thoughts with the date and time, and what I was doing at that moment indicated. If the notes were written on a page of a book or an article, an entry should be made in the notebook to keep track of such written notes, which might otherwise be buried among those other papers.

Focus group discussions

According to Kitzinger (2006), a focus group discussion provides an opportunity to explore and clarify participants' views which are less accessible in observation and one-to-one interviews. Carspecken (1996) suggested the advantage of focus groups is that participants with similar experiences can provide mutual support and more information than a single participant, through bouncing ideas back and forth in focus group discussions.

I invited all the nurses in the ward to participate in focus group discussions, making sure to inform them that their participation was totally voluntary. A topic guide was developed from the provisional analysis of the observational data and literature review. I discussed my initial sample questions with my supervisor, and the questions were edited to be more open and less leading. The topic guide was reviewed after each focus group discussion to make sure new aspects were explored in the subsequent sessions (see Focus group discussion Topic Guide in Appendix 4).

It was initially not easy for the participants to open up. This might be partly due to their initial assumption that they were there to provide answers to my questions. I spent some time briefing them on the

purpose of the discussion and started with some general questions such as "How was your day?". The nurses started to feel more relaxed and started to talk more when they realised that they were not there to answer my questions. The relationship I developed with them during my fieldwork might have also helped, as they viewed me more like a nurse who was learning from them than a lecturer from nursing school who had the authority of knowledge, which might make them worried about giving "correct" answers. The presence of other participants in the focus group discussion might have inhibited the sharing of personal opinions, especially where nurses were working in the same ward. I emphasised the importance of mutual respect and the obligation upon everyone to keep all they discussed confidential. With my facilitation, the participants opened up gradually. This was evidenced by the nurses expressing contradictory opinions, and everyone in the group speaking up.

The topic guide was used as a reference and I adjusted my questions based on the participants' responses. For example, my question asking the nurses to describe a "typical day" did not go well and they felt it was too broad a question. I had to make it a more specific question, such as "I want to understand from you: what are the important things for you during a shift?" instead.

I also had to be careful to observe the group dynamics. For those who were less forthcoming, I tried to give them opportunities to speak, whilst avoiding giving the impression that I was targeting them. For example, the Nurse Assistant was very quiet in one of the focus group discussions; I took the opportunity to ask her about her work after one RN shared a story of working with that Nurse Assistant. It was also important to tolerate silence and allow the participants time to think and to take their own initiatives to continue the conversation, rather than jump in too fast to take the leading role.

There were also some more vocal participants who tended to dominate the discussion and I found it challenging to divert the group's attention to the others. By changing topics and asking the others' opinions, I managed to divert attention and balance the group members' contributions. The focus group discussions at some points achieved energetic development of the discussion, especially about how they tried to manage their medicine rounds, the difficulties they found adhering to certain rules and how they needed to be flexible in their practice. Finch, Lewis and Turley (2014) term this the "performing phase" of the focus group discussion, which allows concentrated and enjoyable expression of agreement and disagreement when the participants are less guarded. I used techniques such as encouraging, paraphrasing and active listening, as suggested by Carspecken (1996), to facilitate the discussion. I conducted three rounds of focus group discussions. The profile of the nurses who participated is presented in table 3.

The focus group discussion sessions were audio recorded with the participants' permission. It was challenging for me to take field-notes at the same time as actively listening and facilitating the discussion. As I was the only facilitator of the sessions and was sitting in a circle with the participants, the participants were naturally looking at me for my response, and therefore taking too long to write might have given them the impression that I was not interested in the conversation and caused them to lose their momentum, even though I had informed them at the beginning that I might take notes occasionally. I decided to focus on active listening, and paid attention to participants' reactions, gestures and eye contact which implied important meanings. My familiarity with their language and professional knowledge helped me to understand their discussions without the need to stop and ask clarifying questions about common issues. However, I was consciously aware that this familiarity might lead to issues being overlooked. I attempted to retain my critical distance by letting the participants express their ideas, using their language to phrase my questions and taking their perspectives for what they were.

Table 3: Focus group discussion participants and duration

Focus group	Participants	Duration of focus group
1	2 Senior Nurses	75 minutes
	1 Novice	
2	1 Senior Nurse	99 minutes
	1 RN	
	1 Nurse Assistant	
	2 Novices	
3	2 Senior Nurses	92 minutes
	2 RN	
	1 Novice	

I listened to the audio recording immediately after each focus group discussion and made notes of my observations along the timeline of the audio recording while my memory of the session was still fresh. These notes were later included in the transcripts. The recordings were catalogued with the date, time, and place and transcribed verbatim by me.

Data storage

All the field-notes, reflective diaries, memos, the focus group discussion audio recordings and transcripts were labelled and kept in a password-protected computer which only I have access to. All written documents, such as written consents and focus group registration sheets, handwritten diaries and memos, were also labelled and kept in a locked drawer, which only I have a key to. The data will be kept for six years after dissemination of the research results.

Ethical considerations

The research proposal was approved by the ethics committee of the clinical organisation and the ethics committee of the university where I work in Singapore. Ethical approval was also obtained from University College London Institute of Education and registered with the Research Data Protection office (reference No Z6364106/2019/01/23). The research process followed all the institutions' ethics guidelines and UCL's Data Protection Policy (UCL, 2018).

By the nature of the research, my intensive engagement in participants' work made me increasingly aware of the importance of ethical deliberations, with a situational approach to specific incidents. I adopted the ethical imperative of non-maleficence as the fundamental principle underpinning all ethical decisions in the field. Some aspects of ethical considerations have been discussed in earlier sections where appropriate. In this section, I focus on my ethical consideration of autonomy, privacy and confidentiality as well as my ongoing deliberation of ethical issues during my fieldwork.

The project was explained to the nurses in detail and their questions and concerns were addressed along the way. I respected the participants' autonomy in their practice and asked for their permission to observe them. Verbal permission was obtained from patients, doctors and other healthcare team members whenever appropriate. In Singapore, the doctors and nurses are considered to be authorative figures in the clinical setting and my association with the nurses might have been taken by the patients as an indicator of my role, so they did not question my presence in the ward. I was careful to make sure patients knew my role. This was usually done when I followed the nurses on their team rounds and they introduced me to the patients, or I took the initiative and introduced myself to the patients. Whenever there was intimate observation, I also made sure to obtain patients' permission to observe

the nurses caring for them and that it was made clear to them that the study would not collect any data relating directly to them.

I was wearing a name tag indicating my identity as a researcher. My familiarity with nursing practice and my role as a nurse placed me in a postion where I was able to and obliged to help the nurses and care for the patients when necessary. Soon the nurses felt there was no need to explain to the patients about my role and the patients accepted me as part of the nursing team, even though I was not in uniform. Only occasionally did I encounter questions from the patients, not expressed as a challenge to my presence in the ward, but due to their curiosity. One patient asked if I was there to check on the nurses as he had the impression that I was a much more senior member of staff. Another patient asked me if I was teaching the nurses, as teachers from the nursing schools were sometimes present in the ward. When I encountered such enquiries, I informed the patients honestly about my role as a researcher.

However, my position was sometimes not a clear one to explain, as Atkinson (1997, p53) described: his dilemma over whether to explain his role to the patients or not was because he did not want to appear as though he was not respecting the doctors' authority by taking the lead to explain, unless he was specifically asked. I had the same dilemma and I decided to leave the authority for explaining my role to the nurses when I was with them. I explained my researcher role when a situation made it necessary for me to explain.

As mentioned earlier when I reflected on my insider and outsider roles, my involvement in the clinical field always brought ethical dilemmas and decisions to make, similar to Griffiths (2007), who reflected in her ethnographic study her encounters with contextual ethical dilemmas and the need to make contextualised decisions which seemed tempered with the medico-ethical deontological principles of autonomy, non-

maleficence, beneficience and justice (Beauchamp and Childress, 2009). I encountered comparable situations when I had to decide whether to go along with the nurses when they continued with tasks at hand or to stay with an elderly patient who was critically ill, alone and longing for company. My company brought the patient comfort and assurance, but to burden a patient who was too ill with the information about my research would have been irrational. Furthermore, I did not recruit patients as participants, their information was only used as background information in my analysis of the nurses' interactions.

Such contextualised ethical decisions that I made might be justifed by Ives' concept of empirical bioethics (Ives, 2008, p1):

Empirical bioethics is arguably evolving as a field in response to the social science critique of bioethics which charges traditional bioethics as being too abstract, too general, and insensitive to social realities and context...empirical bioethics seeks to meet that challenge by developing ways of contextualising philosophical moral theorising...

The research information was made available in the ward with my contact details and the ethics committee's contact details, so the staff and other people coming in and out of the ward could read about the project and contact me or the ethics committee for clarification (Appendix 2). People in the ward got to know me through having conversations with me and also through asking the nurses. Very soon everyone on the ward knew who I was: the Registrars, the Medical Officers and House Officers of the ward, as well as the Physiotherapists, Occupational Therapists, Phlebotomists, Clerk and the housekeeping staff. They greeted me like a regular member of the ward staff every day.

According to Polit and Beck (2014), participants might encounter potential recalling of unpleasant events triggered by the research and the questions asked by the researcher, and the participants might experience negative emotions. This potential risk was explicitly indicated in the research information sheet. The participants were informed that they had the right to refuse observation or to answer my questions. They were also informed where to seek help if such a need should arise. Participants were reassured that their participation was voluntary, and they might withdraw at any time without giving a reason. As Speziale and Carpenter (2011) mentioned, voluntary participation is important, so participants do not feel coerced.

The potential participants were given time to consider their options and consents were taken with privacy ensured. I did not have a power relationship with the potential participants, as I was working in an educational institute not affiliated to the hospital. The collaborator from the hospital and the ward Nurse Manager and Nurse Clinician facilitated my initial access to the ward, but they were not involved in recruitment, data collection or data handling.

As far as possible, anonymity was ensured by using pseudonyms in the field-notes, transcripts and my thesis report. Any information that might lead to the identification of the participants and the clinical organisation has been carefully obscured in this thesis. Nurses' private conversations and tearoom chats were part of the data used for analysis. Their privacy is respected as the use of such data was carefully managed to retain the meaning, but the original language, names and content which might potentially lead to the identification of the nurses, patients and doctors were removed. In future publications of this research, the research report will be made in a manner as to ensure the participants and the organisation remain anonymous as far as possible unless permission is given by the organisation and participants to be indicated and acknowledged.

In this chapter I argued that a focused ethnographic research method was suitable for the aim and the theoretical underpinning of my study. With the advantages and challenges of my position as an insider and outsider of the research setting, I detailed how my reflexive approach helped me to negotiate my roles and position in the research field, to manage my own emotions and to maintain the quality of my fieldwork. Ethical considerations of autonomy, privacy, confidentiality and incidental ethical considerations in the field were also discussed.

Chapter Five: Access to the Field and Data Analysis

<u>Introduction</u>

In this chapter I give a detailed account of gaining access to the research

field, the nurses' practice and the recruitment processes. I also provide

an overview of the clinical ward, the nurses' work arrangements and

handover activities. Finally, I explain the reflexive and nonlinear

processes of data analysis.

Gaining access and recruitment

Gaining access

The site of the study was a government-sponsored tertiary general

hospital in Singapore. There are a few such hospitals contributing to 80%

of tertiary care in Singapore (Lai, 2017). The wards in the hospital with

novices were identified and their managers approached. I recruited a

general medical and surgical ward. The patient rooms were mostly six-

bedded apart from a few single-bedded rooms for isolation purpose. This

type of ward setting represents 80% of the wards in the government

general hospitals in Singapore, where the patients are subsidised by the

government (Khalik, 2015).

According to Hammersley and Atkinson (2007), gaining access to the

research site is a practical issue and getting support through

"gatekeepers" is an important strategy. This is even more the case for

my research site, it being a hospital ward where entry is not freely

allowed to the general public. Access was initially granted by the

hospital's Chief Nurse, who is the head of the nursing department. A

Nurse Manager who acted as the research collaborator was appointed

by the nursing department of the hospital. The collaborator helped to

identify a few wards with novices and introduced me to the Nurse Managers of the wards via email. I approached a general ward with medical and surgical disciplines, introduced the research project to the Nurse Manager and the Nurse Clinician face-to-face and answered their queries. After two rounds of meeting, they agreed to their ward being recruited and participating in this study.

There were no specific instructions to deal with the research setting I was in. I carefully navigated my way and adjusted my role during my fieldwork. My appearance in the ward initially aroused curiosity in some nurses, doctors, other healthcare professionals, patients and their relatives. I explained my research and my role to them whenever required. As I described in Chapter Four, I gradually became familiar to others in the ward and blended into the setting.

Gobo and Molle (2017) warned that access cannot be taken for granted, and ongoing access requires a great deal of conscious effort, time and energy on the part of the researcher to gain trust and develop relationships with the members of the community. In my case, this warning was real as I could have been allowed in the ward, but the ward staff could have refused to be observed. Even as I gradually gained their trust, I remained cautious of the political power among the groups in the field, and sensitive to their relationships and my relationship with them. Maintaining this position gave me access to observe the daily activities of the ward involving novices, nurses, other healthcare professionals and whoever came into the ward and talked to different people, and allowed me to gain "polyphonic" accounts of information, to use Gobo and Molle's (2017, p133) term, which helped to validate my findings.

I discussed my gaining permission to observe practice by constantly obtaining verbal consent on each occasion from the nurses, patients, their relatives and other healthcare professionals in Chapter Four. A few

times I was asked about my role by medical doctors the first time they saw me in the ward. After I introduced myself, or was introduced by the ward nurses, the doctors treated me as one of the nursing staff in the ward; they did not ask me subsequently and carried on with their rounds and talked in my presence.

Fieldwork is messy and opportunistic. I could not always foresee what was going to happen on any given day, so to keep to the initial fieldwork plan was next to impossible and I had to be flexible. My approach was to continually review the data and plan the next step of observation, and adapt to the changes accordingly. For example, the last-minute roster changes disturbed my plan to observe a particular group of nurses on certain days, but since I was already there in the ward, I got permission from other nurses to follow them instead on that day. I was also asked by the nurses about the length of my observation, and I informed them that I was not certain and might be there for a few months. So being honest and keeping my options open by not fixing the duration, observation schedule or specific room in the ward gave me the flexibility to navigate my fieldwork. I am thankful that the nurses trusted me and opened their practice up to me.

I only felt ready for the focus group discussions when I had spent some time in the ward and developed an understanding of the nurses' practice through observation. With the trust and bonding developed, the nurses were more willing to participate in the focus group discussions as they felt comfortable talking to me. The focus group discussions helped me to find out more about the nurses' perceptions of their practice and also to clarify some of my understanding of their work from my observation. For example, the nurses explained the scheduled rota of nurses serving medicine in the team, and this information helped me to interpret the observation data. On the planned days of the focus group discussions, last-minute situational changes in the ward made some of the nurses

unavailable and one of the sessions had to be postponed. So, doing research in the clinical field requires the researcher to be flexible.

Recruitment

According to Gobo and Molle (2017), the participants and their setting are considered as one organic interactive social unit for in-depth understanding of the subjects. Therefore, for this study, my sampling method was derived from ethnographic interest and Community of Practice theory for understanding the novices in their clinical practice context with other nurses. This sampling method was suggested by Lincoln and Denzin (2000) and termed "theoretical sampling".

After initially introducing the research project to the ward nurses and gaining some familiarity with them and with the ward setting, I learnt that there were four novices with less than one year's working experience who were eligible to participate. I approached the novices individually, explained the project to them in detail, and obtained their written consent (see Appendix 2).

Under the hospital policy, novices are guided by their respective preceptors for six months; this period is called "probation", as I mentioned in Chapter One, which means the novices are shadowed by their preceptors. Such shadowing gives the novices the opportunity to be guided by their respective preceptors whilst taking the care responsibility for the same group of patients. Once the novices successfully pass their probation, they practise independently, like the other nurses in the ward, and take charge of a few assigned patients. They are judged to have "passed the probation" based on their completion of a competence checklist issued by the hospital, as well as on the feedback on their performance from their preceptors and the ward nurses. The official duration of six months might not be a true indicator

of the time novices need to learn and be able to practice independently. Therefore, some novices might have their probation extended. The novices' profiles are summarised in the table below.

Table 4: Novices' profiles

Name	Biographic data	At the start of observation
David	Male, Chinese, mid 20s	6 months, under probation
Eva	Female, Chinese, mid 20s	4 months, under probation
Aidan	Male, Malay, early 30s	7 months, post-probation
Sarah	Female, Chinese, mid 20s	7 months, post-probation

Recruiting nurses who are working on busy shifts to participate in focus group discussions was challenging. In order to make the focus group discussions possible, the sessions were conducted at the end of the morning shift, so the nurses were willing to stay for a while longer, rather than having to make a trip especially for a focus group discussion. I gave the nurses the details of the focus group discussion, and after that, I approached them individually to follow up on their willingness to join in the focus group discussion. Once I had obtained consent from a list of nurses, I scheduled the focus group discussions according to their availability.

There were 13 nurses recruited for the focus group discussions. Three focus group discussions, with a group size of five each, were planned, but the first focus group discussion had only three nurses due to last-minute changes which made two of them unavailable. Before the focus group discussion, I obtained their personal particulars as shown in the table below.

Table 5: Focus group discussion participants' profiles

Numbers	Designation	Years of experience
4	Senior Nurse	>10 years
1	Senior Nurse	> 5 years
3	RN	< 4 years
4	Novice	<1 year
1	Nurse Assistant	>1 year

The research setting and the routines of the ward

There are more than sixty nurses and nurse assistants in the ward. They are Nurse Manager, Nurse Clinician, Senior Nurses, RNs, Enrolled Nurses and Patient Care Assistants. They are from Singapore, Malaysia, Philippines, China, India and Myanmar with different racial, religious, cultural and language backgrounds.

Similar to all the other wards in the hospitals in Singapore, the Nurse Manager and the Nurse Clinician are responsible for the operation of the ward, and the nurses call them Sisters. A Charge Nurse role is assigned to a Senior Nurse to supervise the day-to-day operation of the ward and act as a bridge between the Sisters and the nurses. The group of Senior Nurses in the ward switch roles on a daily basis. On certain days they are the Charge Nurse, and on other days they work alongside other RNs as Nurses-in-Charge. In this thesis, I have used the term "Senior Nurse" in place of Nurse Manager, Nurse Clinician, Charge Nurse and Senior Registered Nurse; the term "Nurse Assistant" for all the Enrolled Nurses and Patient Care Assistants; and the term "nurse" for all nursing staff, for the purposes of maintaining their anonymity.

There is a workstation equipped with one personal computer (PC) in each patient room in the ward. The nurses do most of their changes (the orders issued by doctors) on the PC, from checking doctors' notes and orders, laboratory investigations, medications, and nursing records to online communications with doctors and other healthcare personnel. Besides this PC, there is a computer-on-wheels for each team, which gives the same access to the patients' records as the other PCs do. The computers-on-wheels are particularly favoured during the morning medicine round and doctors' round, as they are portable and linked to a scanner. The nurses use the scanner to scan the patient's ID and the bar code on the medicine package for record purposes.

The nurses are assigned in three teams. There is usually a Nurse Assistant in each team to help the nurse-in-charge with basic care activities which are generally called "junior work", such as patients' hygiene needs, nutrition needs, parameter monitoring and other daily care activities. On days when there is no Nurse Assistant assigned, the nurse-in-charge needs to cover all this "junior work" on top of their incharge work. On the AM shift (7am-3pm) and PM shift (1-9pm), there are three to four nurses in each team, with each nurse-in-charge taking care of four to seven patients. On the night shift, there is one nurse-in-charge and one Nurse Assistant in each team.

The nature of clinical nursing work is to carry out care responsibilities around the clock. This is made possible with written records and face-to-face handover between the shifts for the off-going nurses to communicate the patients' information to the on-coming nurses. Nursing handover consists of a series of activities including record writing, pre-reading, roll call, nursing team rounds and face-to-face handover. The organisation stipulates that the on-coming nurse-in-charge has thirty minutes at the start of the shift to read the patients' records. This is for them to gain an understanding of the patients' conditions before taking over from the off-going nurse-in-charge.

Roll call is conducted in between shifts by the Senior Nurses, who reinforce certain issues to the nurses on a daily basis. The things

included in the roll call are the important care issues for the patients in the ward, key performance indicators (KPIs) of the organisation and policy updates.

Nursing team rounds are carried out by the nurses within the team. The purpose is to enable the nurses in the same team to cross-cover one another. The off-going nurses-in-charge take turns to let the team know about their patients' conditions and main care issues, and meanwhile introduce the on-coming nurses-in-charge to the patients. During the team rounds, the nurses also do a general visual assessment (known as "eyeballing") of the patients to check their condition and the devices attached to them.

According to the nurses, because they are given time to read the records at the beginning of the shift, they have limited time for their face-to-face handover. The main purpose of the face-to-face handover is for the oncoming nurse-in-charge to clarify any questions that arise from reading the written record with the off-going nurse-in-charge.

Data analysis

Ethnographic research analysis is described by Hammersley and Atkinson (2007) as active, iterative and not formula-based interwoven processes of collecting, reflecting, understanding and analysing data and referring to theories and literature. I personally felt these processes were challenging, requiring me to be totally immersed in my experiences, while my work commitment made it impossible for me to have long uninterrupted periods of time. I persevered by frequently recording my thoughts while juggling my work in between analysis of the data, and by picking up from where I left off the last time. The prolonged processes also served to validate the analysis, as I often need to re-read the data and my earlier analysis. There were no distinctive phases of analysis,

though the whole process could be roughly categorised analytically in phases of open, focused and selective research analysis as described by Gobo and Molle (2017).

The first phase consisted of general observation and broad-brush analysis of the routines and patterns of behaviour in the community. For example, I identified a series of nurses' handover activities within each shift and across shifts from my analysis of the nurses' routine activities. Table 6 below shows a sample of my analysis during this phase.

Table 6: An example of routine activities and simple descriptions

Routine activities	Main items in field-notes
Tearoom chat	Chat about family issues, pregnancy, baby care,
	holiday
	Chat about "difficult" patients and relatives, the main
	issues of concern of that day, share tips
	Gossip about colleagues, attire, ways of doing things
	Some regular small groups chat more often
Roll Calls	Senior Nurses highlight important care issues of the
	day and update on policies and guidelines
	Mostly the Senior Nurses talk, and other nurses listen,
	not always dialogue
Pre-reading	All PCs were occupied by RNs before their shift starts
	Some need extensive reading to complement their
	understanding of the current record
	Write down tasks and anticipate what to do for the shift
	on a printed patient list
	Prepare questions to ask
	Novices pre-reading alone; took more time to read
Record writing	Need to write draft early because on-coming RN will
	be in early to read it

Routine activities	Main items in field-notes
	Where to write on the online form and what to write
	varies
	Write whatever they have done as soon as possible in
	order not to forget, write brief notes on the printed
	patient list
	Check Dr's orders and write record during the shift
Team round	Team rounds to check patients and room
	Nurses-in-charge talk to patients
	Try to move fast; observe and follow team movement
Face-to-face hand	Ask questions and handle questions
over	Make reference to the online written record
	Refer to questions prepared during pre-reading
	Identify important tasks and negotiate tasks
	Control and pace during handover vary among nurses
Complete record	The off-going nurse follows up unfinished tasks
	Complete record writing
	Clear with the on-coming nurse before going off

My analysis indicates that the series of handover activities are interconnected and form a cyclic process (see Fig. 2). This process starts even before their shift as nurses come to work much earlier than their scheduled shift start time to chat in the tearoom and to read records. The nurses also keep up with the record writing throughout their shift, and exchange their understanding of the patients' conditions and negotiate tasks during face-to-face handover. The off-going nurse would follow up uncompleted tasks after face-to-face handover and amend and complete the record before going off duty.

Apart from face-to-face handover, the handover activities were integrated with the nurses' work during the shift and less visible. This phase of analysis can be best captured by the description given by Okely (2002), that such patterns and priorities impose themselves on the researcher through immersion in the field, in my case being there with the nurses to see and to feel the rhythm of their work.

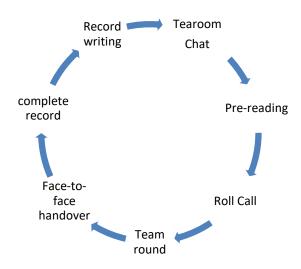


Figure 2: Nursing handover process

In the second phase of focused analysis, ideas and insights emerged through my repeated reading of the field-notes, the reflective diaries and memos, referencing the literature and reflecting further on my field experiences. I also explored further the patterns I analysed and the variations identified in the first phase.

For example, I paid attention to nurses' position taking in face-to-face handover, the links between their pre-reading and preparedness in taking over, their record writing activities throughout the shift and their preparedness in handing over. I noticed the ability to ask questions during face-to-face handover required not only a good understanding of the patients' conditions, but also the confidence to take a position and to question according to who their counterpart was. I noticed the nurses' record writing activities were adjusted to the on-coming nurses' characteristics, work pattern and expected abilities. Their abilities in record writing and reading could then further impact the face-to-face handover.



Figure 3: Analysis of face-to-face handover task

I used diagrams and mind mapping (refer to Figure 3 for an example of face-to-face handover tasks; also to Appendix 5 for an example of a record reading task) to help with my analysis, and the ideas and links become clear after such iterative processes. I noticed certain tasks were always at the centre of their planning and exchange of ideas. For example, their near-obsession with serving medicine and trying to complete it before the ward got busy became obvious to me. In order to do so, the nurses needed to have the ability to observe and assess the ward situation and focus on this task. This required not only their competence in serving medicine, but also other abilities which I will discuss in detail in Chapter Six. Table 7 below shows the various strategies the nurses used in serving medicine, extracted from the observation data.

Table 7: An example of strategies and data source in serving medicine

Strategies	Data examples from fieldwork
Find out next	Eva and Joan were chatting and checking who would be
day assignment:	on AM tomorrow; some they called Super, and some they
work with whom	said Chemical (labels modified to protect privacy)Eva

Strategies	Data examples from fieldwork
and assigned	then went to ask about the patients whom she will be in-
patients	charge of tomorrow(field-note 18)
Come in early to	Navin:I will come early, because we have back to back
serve medicine	shiftsbefore I go home, I will see who is in my team,
before the first	sometimes lah, then if I know
assigned nurse	Eva: take the first train or the third train
	N: correctif I know tomorrow my patients are very acute,
	a lot of antibiotics in the morning, a lot of procedures
	comingI come to serve medication early and then have
	more time to handle other stuff, to compensate lah, I mean
	like, at work, if you can't change something, then no
	choice: you have to change yourself. hahaha also like
	the speed of work right, some people will take a longer
	time, then if you know this person is assigned to serve
	morning medicine (first) he will take maybe an hour, but
	you come half an hour earlier, hahaha(FGD2)
Find chance to	Joan was complaining to Tina that Ketty had told her off
serve alongside	when she was trying to serve her patients' medicine along
the assigned	with the first assigned RNEva also joined and showed
nurse and watch	unhappy face that they were asked to wait to serve
who is around	medicine one by one by Ketty. They seemed to have no
	choice but to wait, because Ketty is a Senior Nurse and
	firm and said they should take turns to serveJoan and
	Eva were just not used to itAfter the first nurse finished
	her medicine, Joan was the next one to serve. Eva could
	not wait further, she started to serve her patients by taking
	the medicine drawer out from the trolley when Ketty had
	left (field-note 22)
Focus on	Patient in bed XX started to call, "I need my pre-meal
medicine	gastric medicine, I must take that before I take my meal"
serving, delay	(in Chinese). Patricia answered, "Wait for a while, we are
patient's request	serving one by one." A while later, the same patient asked
	again, "I want a wet towel to wipe my face." Patricia: "A
	while, ok? We are serving medicine, if we give wrong
	medicine, how? (in Chinese) (field-note 19)

In the third phase, I found similar principles governing the patterns of interactions among the nurses, after spending a long time analysing the details of their interactions. The initial ideation of the Dimensions of Regime of Competence emerged when I recognised the fundamental rules the nurses referred to and negotiated with in their interactions: the need to assess and reassess the ward situation and nurse to nurse relations; the need to prioritise tasks and focus on the prioritised tasks; and the need to express, exchange and negotiate participation (see Fig. 4 and refer to Chapter Six for a detailed explanation of Dimensions of Regime of Competence). The focus group discussions helped me to clarify some of my analysis, such as the nurses' concepts of their work and the principles governing their participation.

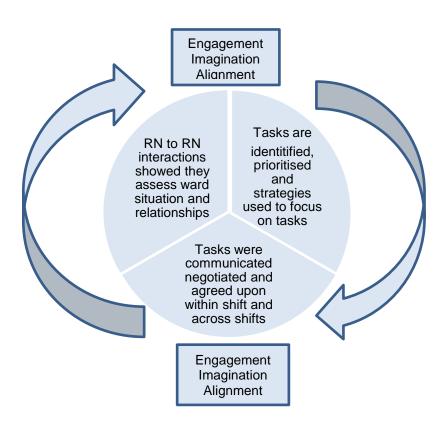


Figure 4: Fundamental rules across interactions

This phase of analysis required sophisticated thinking in order to achieve cognitive elevation from the data to the theoretical concepts, and relate the theoretical concepts back to the data. The novel approach using Regime of Competence and Mode of Identification concepts as the

theoretical framework meant that I needed to work out a way to analyse the data. In this phase, I struggled with my long-established value system of nursing and gradually came to understand nurses' interactions from the social learning perspective.

It was a meticulous phase comprising processes of analysing, referring to theories, literature and writing, presenting in seminars and discussing with supervisors, and then tearing apart the findings and write-ups and repeating the whole process. It was through such iterative processes that I finally found clarity in the analysis and developed an intuitive understanding as well as cognitive imagination of the theory and its concepts, and the meaning of the research data: the new concepts emerged; the meaning of the new concepts became clear; the interrelation of the new concepts and their interconnection to the Community of Practice theory and its concepts emerged. The analysis processes were intellectual, reflexive, social, evolving and emotional, but not formula-like. Such an experience was exactly described by Okely (2002p, 20-32):

...the open-ended approach allows space for the previously unimagined... the interpretation of anthropological material, like fieldwork, a continuing and creative experience... interpretation moves from evidence to ideas and theory, then back again...

One such example is the development of the Participating Space concept and its interconnection with other concepts (see detailed explanation in Chapter Six). For example, serving medicine is just one Prized Task of the multiple tasks in which the nurses simultaneously engaged. In order to keep their focus on the task, the nurses used various strategies. When, and to whom, using what strategy are the aspects the nurses negotiated amid the tension of the multiple demands of tasks, changing ward situations and relationships. Through such negotiations, it seemed each nurse had a space which gave them the

power to negotiate their meaning and position in relation to others in their participation. This space allowed him/her the flexiblity (more or less) to carry out his/her work. I termed this space "Participating Space". Their Participating Spaces are formed in relation to those of other nurses and are constantly negotiated within and across the shifts.

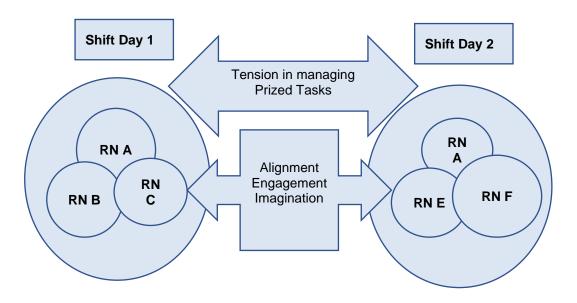


Figure 5: Prized Tasks and Participating Space conceptualised through nurses' negotiation of participation in practice

As shown in Figure 5, an example of my analysis of the nurses' engagement, imagination and alignment and their flexibility in participating were reflected in their Participating Spaces. Nurse A on Shift Day 1 has a bigger Participating Space in relation to Nurse B and Nurse C, and this changes across situations under the tension from the tasks and time and relationships among the nurses. On Shift Day 2, in relation to Nurse E and Nurse F, Nurse A has a relatively less flexible Participating Space. The interconnection of the concepts, such as the tasks, the principles and the the relationships the nurses negotiated to manage them, were identified when I came out of the detail of the data and took an overview of the themes, concepts and examples.

The analysis continued throughout my thesis write-up when I returned to the data and used the established concepts and framework to explain my observations and verify the meanings of the concepts. The data sorting was managed using Nvivo, which made referring to the data easier, but I do not think that any system can replace the immersion of the researcher in the field and the iterative processes of analytical work. It was a journey with many ups and downs, with some routes proving impassable, eventually forcing me to turn back, and some routes left with potential for future analysis. It requires the researcher to be able to think at the meta level to see the meaningful themes across the routine activities and vast array of experiences, as well as to be able to notice the details in order to identify the data that best illustrate the meaning of the themes.

All these are parts of the journey that eventually led to the development of a novel conceptual architecture from my study findings (refer to Chapter Six). I cannot agree more with Griffiths (2007, p110), who conducted an ethnographic research study in the UK to explore the nurses' roles in a medical admission unit (discussed in Chapter Three). She described her experience of data analysis in this kind of ethnographic study in the clinical field, which echoes mine:

Analysis of the data was a process that is difficult to report as the development of themes and analytical understanding progressed in a spiral manner, and yet often in intuitive leaps. Countless hours were spent reading transcripts, reviewing and collapsing coding, and thinking and drawing mind maps to try and achieve conceptual ways to organise the data.

The trustworthiness of the ethnographic research was assured through my diligence in timely writing of field-notes, reflective diaries and research memos. I have illustrated my reflexive engagement in all the stages, the data from multiple sources, the iterative data analysis and the evolving undestanding of theoretical concepts from the fieldwork and data and I believe the detailed description has left an audit trail.

In this chapter I discussed the details of gaining access to the research site and the nurses' practice, research sampling and recruitment, which required careful planning, clear communication and sensitivity to the people in that environment, and allowing space and time for potential participants to make decisions. I described the ward layout, the nurses' work schedule and routines. I also illustrated the iterative and reflexive nature of data collection and data analysis. Although it is impossible to break data analysis into clear stages, as it was not separate from my immersion in the field, I used some examples to show my analysis in pattern identification, concepts and framework development.

Chapter Six: Research Findings

<u>Introduction</u>

In this chapter, I discuss the findings in four sections. In section one, I

discuss the new ideas developed in this study in relation to Community

of Practice theory and concepts. In section two, I discuss the meaning

of the overarching conceptual architecture and the new concepts

developed. In sections three and four, negotiating participation in the

Dimensions of Regime of Competence through the nurses' participation

of tasks and handover activities is analysed.

The new concepts developed in this study in relation to Wenger's

Community of Practice theory

In this section, I relate the concepts (discussed in the following section)

developed in this study to Community of Practice theory and concepts.

These concepts are:

Prized Tasks

Dimensions of Regime of Competence

Elasticity of Regime of Competence

Participating Space

Wenger (1998) stated that Community of Practice has the characteristics

of mutual engagement, joint enterprise and shared repertoire. According

to Wenger (1998), members negotiate a common purpose and produce

a practice reflecting their understanding of an enterprise as a joint

enterprise.

This common purpose was translated into the nurses' daily tasks in my study, among which the Prized Tasks received particular attention from the nurses in their participation. I argue that the concept of Prized Tasks provides a key insight into the understanding of the Regime of Competence. Achieving Prized Tasks requires not only members' ability to perform the tasks as indicated in the competences of that specific organisation, but also their ability to negotiate other aspects of the specific situation, such as performing tasks which are not included in the competences. I will describe what these aspects are and how nurses negotiated them using the concept "Dimensions of Regime of Competence".

Wenger (1998) asserted that Regime of Competence is a set of rules, regulations and practices that differentiate one Community of Practice from another; therefore, he argued that the Regime of Competence of the Community of Practice gives members certain kinds of characteristics which indicate membership. Identifying, exploring and understanding the Regime of Competence are therefore key elements in my study in trying to understand and explore novices' development of membership in the clinical ward. Currently, few research studies have adopted Regime of Competence as an analytical concept, and there is insufficient understanding of this concept and its use in research (refer to discussion in Chapter Three). In this study, I developed the concepts of Dimensions of Regime of Competence and Elasticity of Regime of Competence, which add meaning and clarity to Wenger's concept of Regime of Competence.

In members' day-to-day practice, the meaning and the ownership of the meaning of their practice and members' identities are negotiated. Wenger (2010) uses the concept "Mode of Identification" to explain how members negotiate practice and identity through these three interrelated Modes: engagement, imagination and alignment (Refer to Chapter 3). Wenger-Trayner and Wenger-Trayner (2015) asserted that members

engage these three modes in different combinations and on different scales. The concept Modulation of Identification is used to describe such different combinations and scales of these Modes (refer to Chapter Three).

In this empirical study, I analysed how the nurses negotiate the Regime of Competence in a hospital ward through these Modes of Identification. For example, each of the Dimensions of Regime of Competence provides a dynamic perspective on what members engaged with and how (engagement), how members made sense of their own and others' participation (imagination), and how they negotiated their participation (alignment).

The Elasticity of Regime of Competence reflects the changeable nature of Dimensions when members negotiate their participation, while members' Participating Spaces are their negotiated ownership of meaning and relational position in practice. When members negotiate their participation, they bring their diverse knowledge from their past experiences which could pose a challenge to the Regime of Competence, indicating that a Community of Practice is an open system in the Landscape of Practice.

The conceptual architecture and its key concepts

In this section, I explain the concepts I am adding to Wenger's Community of Practice theory. Firstly, I define the key concepts of the architecture developed from my interactive analysis of data and Wenger's Community of Practice theory. Secondly, I use a scenario from the field-notes made during my observation to explain the function and interrelation of these concepts.

Prized Tasks

Prized Tasks are defined as sets of tasks on which members of the Community of Practice focus their attention, and which they want to complete first. For the nurses in this clinical Community of Practice, there are a huge number of tasks and interactions of different scales and durations, many of which are routine, repetitive, unremarkable, not particularly distinct (as practices) and/or not apparently the subject of scrutiny by the nurses.

My research suggests that there is a subset of tasks that receive particular attention from the nurses in any given situation. Some of these tasks are obvious, normative types of practice tasks driven by the KPIs of the organisation. For example, when serving medicine, the nurses need to follow all the procedures required by the hospital to prevent medicine errors. Some of them, however, are not so obvious, such as writing records: the nurses negotiate when and how to write in order to achieve mutual understanding among themselves. I argue that it is these Prized Tasks that provide key insights into the understanding of the performance of the nurses in the Community of Practice.

Dimensions of Regime of Competence

When performing these Prized Tasks, there are sets of performance criteria that the members are required by the ward to meet, which are indicated as competences. For example, in order to serve medicine as one of the Prized Tasks, members must have achieved competence in serving medicine; their competence is checked by a senior member of the ward based on the competence checklist. But there are other situational factors which might interfere with their ability to perform the Prized Tasks.

These situational factors might explain the differences that some nurses in this Community of Practice are able to serve medicine in a way that meets the Regime of Competence around medicine serving whilst others are not. The competence which qualified nurses have achieved in serving medicines requires being able to give medicine as prescribed (for example, on time and at the correct dosage) does not give consideration to whatever other conditions or demands there may be on the nurses in any given situation. Members seem to negotiate their participation with such situational factors, and I have identified them as the Dimensions of Regime of Competence in this study setting.

On the basis of my research I argue that the Regime of Competence in the observed Community of Practice comprises distinct but interrelated Dimensions. My analysis focused on three Dimensions that appeared to be key to understanding the participation of members. These three dimensions are: Operating sense of weather and positioning, Manoeuvring tasks and time, and Expressing participation and acceptance. The key elements of each dimension are presented in Figure 6 and an explanation follows.

Operating sense of weather and positioning:

- Predict ward situation and emotional temperature in "changing weather conditions"
- Take relational position according to weather conditions

Manoeuvring tasks and time:

- Know the Prized Tasks and set priorities
- Keep on track of priorities

Expressing participation and acceptance:

- Express and understand participation
- Exchange and accept participation

Figure 6: Dimensions of Regime of Competence and Elements

The Operating sense of weather and positioning dimension means that during their participation members assess the ward situation and adjust their position according to their assessment. This dimension has two elements. The first is the members' abilities to predict the factors affecting the ward situation: here I borrow a weather metaphor which is frequently used by the nurses in their conversations to describe the changeable nature of the state of the ward. Factors affecting the weather conditions of the ward include patients' conditions, policies and individual members' characteristics. The second element is the members' abilities to take positions in their participation in relation to other members, which are calibrated according to the weather conditions they assessed. From my observation, the nurses assess the weather conditions before their shift, at the start of their shift, during their shift and until they complete their shift handover. Their assessment before and at the start of their shift gives them the weather forecast and they get themselves prepared for the weather conditions of that shift. They also make continual assessments during their shift; as the ward situation changes and people's emotional temperature changes, so does the nurses' position-taking in relation to such changes.

The Manoeuvring tasks and time dimension is members' abilities to know what Prized Tasks are important for them on a particular shift, and to achieve their expected performance standard in relation to these Prized Tasks. There are a number of Prized Tasks such as serving medicine, following doctors' rounds, writing records, performing, arranging and following up procedures, and monitoring patients, and the nurses need to decide when and how to do them. The expected performance standard could be by what time the Prized Tasks must be done and that they must be done in a manner which is acceptable to other members in this Community of Practice. The cycles of identifying, prioritising and getting Prized Tasks done or carrying them forward are ongoing in the ward. When coming on duty, the nurses anticipate, clarify and negotiate which Prized Tasks are still to be achieved, which ones are to be prioritised and to be managed by them personally or through the help of other members, and new Prized Tasks continue to emerge during their shift. There might be conflicts over whose prioritised Prized Tasks are to be respected and which Prized Tasks should be prioritised over others. Therefore, members need to have the ability to negotiate and manage potentially competing Prized Tasks.

The Expressing participation and acceptance dimension includes several elements: members' ability to express their participation, to understand such expression, to exchange understanding, and to negotiate and reach acceptance of one another's participation. Acceptance of participation is not simply agreement or compliance but includes the acceptance of one another's variations in participation, within a tolerance, in order to carry on their work. For example, when participating in nursing handover activities, the nurses express their participation through written records. The on-coming nurses interpret such expressions through reading the written records to assess the weather conditions of the ward and to make decisions about their own participation. There might be understanding gaps between their expression and interpretation and such gaps are hopefully minimised by their face-to-face handover. The face-to-face handover is therefore a platform for exchanges of expression and interpretation, and the negotiation and acceptance of tasks and positions.

I have explained above the Dimensions of Regime of Competence concept and the elements of each Dimension identified in this study. These Dimensions are sociocultural elements which are inter-related like fibres in a rope: they are there together, interwoven with one another, to form the characteristics of the rope. They are distinctive Dimensions analysed from my research data which are, however, not well identified in the current novices' transitional literature. These Dimensions of Regime of Competence are the locally negotiated norms of participation in the Community of Practice. Therefore, to explore the novices' learning and gaining membership in practice settings, I took the approach of first understanding the Regime of Competence in their practice, and then understanding nurses' participation. The interrelated Dimensions of Regime of Competence exhibit shifting thresholds of competence in the nurses' participation, and I use the term 'Elasticity' to describe this characteristic of the Regime of Competence.

Elasticity of Regime of Competence

Elasticity of Regime of Competence describes the shifting threshold of competence in each Dimension, as well as across the Dimensions, that is expected of an individual Community of Practice member in the course of specific practice interactions. As the Dimensions are interrelated, a change in the threshold of competence in one Dimension leads to a change in the threshold of competence in other Dimensions. For example, members' changing abilities in the Operating sense of weather and positioning dimension affect their abilities in the Manoeuvring tasks and time and Expressing participation and acceptance dimensions. The threshold of competence is an indication of performance which is acceptable to and/or negotiable by members with one another in any given situation, so it is socially constructed, when each member tries to negotiate his/her meaning and relational position in their participation.

Participating Space

The Dimensions of Regime of Competence and Elasticity of Regime of Competence show the dynamics and complexity of the "participation work", which give the Community members their "participating norms". When members negotiate their meaning and relational position under a Regime of Competence, they negotiate their membership identity in their Community of Practice. I use "Participating Space" to indicate this negotiable membership identity.

In their effort to manage tasks and time (Manoeuvring tasks and time), members do not function in a vacuum. They need to constantly navigate member-to-member interactions and relational positions under the changing ward conditions in the course of their task performance (Operating sense of weather and positioning). This means their assessment of the ward situation and adjustment of their positions with regard to other members are happening at the same time as they manage the tasks. Meanwhile, writing records and keeping track of new changes in their effort to manage tasks and express their participation (Expressing participation and acceptance) are interwoven with their performance of many tasks (Manoeuvring tasks and time) and their efforts to manage their relational positions (Operating sense of weather and positioning). This illustrates how members' relational positions and the meanings of their participation are negotiated as their Participating Space in the Community of Practice.

Therefore, members' Participating Spaces are indicative of members' abilities in meaning making and position taking in their participation. Each interaction is a temporal reflection of their Participating Space at a specific situation. Over time, these multiple interactions and reflections indicate member's overall abilities and position in relation to other community members. Participating Space as a whole represents who a member is in their Community of Practice. In this research, the

Participating Space concept brings the negotiation of membership identity to the core of members' day-to-day participation in the Community of Practice, which applies to novices as well as all other members.

The interrelated concepts form a conceptual architecture

The interrelations of Prized Tasks, Dimensions of Regime of Competence, Elasticity of Regime of Competence and Participating Space are illustrated through an example from the field-note below.

Table 8: A field-note of RNs' activities

Novice Sarah³ and RN Navin were in the same room; each of them was incharge of a few patients. Navin was serving medicine first and asked Sarah to update the charts (intake and output and parameters). Sarah followed his instructions, though they were individually in charge of different patients. It was unlike the other day, when Sarah and Alan were on duty together: they served medicine at the same time, when the more senior nurse was assigned to serve first. They did so by rushing in and out of their rooms, to take the patients' medicine drawer from the computer-on-wheels which was used by the senior nurse.

Shortly after Navin finished serving his patients' medicine, the team doctors came to review the patients. Sarah was serving medicine at that time and she had to stop her medicine round in order to follow the doctors' round. Sarah followed, standing slightly out of the inner circle formed by the doctors and the Senior Nurses; RN Navin joined the inner circle as well. At times when the doctors expected the nurse to provide some information about the patients, Sarah was helped by Navin to explain to the doctors concisely and clearly. After the round, Sarah also got help from Navin to quickly understand the doctors' orders about her patients by clarifying with him.

During the shift, Navin was in control of his pace of doing things, and occasionally asked Sarah to help him to attend to patients' requests, like lifting a patient or giving a urinal bottle to a patient. Sarah tried to make her changes (make notes of doctors' orders and update record) on the computer-on-wheels at the same time as taking a patient for a shower, by keeping the bathroom door ajar while she was working on the computer-on-wheels.

By the time Sarah handed over to the PM shift nurse, she was questioned about the order for a blood investigation, which was sent to the lab (and by

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³ All names are pseudonyms in this report.

the time of the handover, the result was out), but Sarah did not indicate in her record if she had taken notice of the lab result and informed the doctor or if the doctor had given any new order for the titration of treatment on the patient. Navin told the PM shift nurse to help to follow up with some explanation. Sarah thanked Navin for helping her out when they were in the tearoom having a late lunch, as, if Navin had not been there to help her, the PM shift nurse might have asked her to follow up after the handover, or she might not have been in a position to negotiate. Sarah experienced this on other days, when she had some difficulties negotiating and needed to stay back to complete those tasks which otherwise could have been taken over by the next shift nurse. Navin told her that she just needed to give reasons to the PM nurse, so the PM nurse would get the full picture and be willing to take over.

Interrelated Dimensions of Regime of Competence and Elasticity

In the above scenario, novice Sarah was ordered by Navin to help him, so he could focus on his prioritised Prized Tasks. Sarah complied without question and adjusted her relational position to Navin, indicating her assessment of the situation (Operating sense of weather and positioning). By helping Navin, Sarah adjusted the priority of her Prized Tasks as well (Manoeuvring tasks and time) and she tried to achieve her Prized Tasks by multi-tasking. Subsequently, Navin helped Sarah to present her patients' conditions to the doctors and helped Sarah to understand the doctors' orders, which, in return, enhanced Sarah's ability to do those Prized Tasks. Navin also helped Sarah in her face-to-face handover, by expressing her participation and the patient's information clearly to the PM nurse and enabling Sarah to negotiate tasks (Expressing participation and acceptance).

How many Prized Tasks Sarah completed at the end of her shift depended on her ability to manage her time and tasks (Manoeuvring tasks and time) and her relational position to other nurses (Operating sense of weather and positioning). Sarah's participation was expressed in records and her face-to-face verbal report to the PM nurse, in a manner acceptable or not acceptable to the PM nurse depending on that

nurse's interpretations and expectations (Expressing participation and acceptance) and the relational positions the nurses took at that time (Operating sense of weather and positioning).

This scenario as a whole explains the interrelatedness of the Dimensions of Regime of Competence, and the shifting threshold of competence in each Dimension. The changes across all the Dimensions resulted in the threshold of Regime of Competence constantly shifting in the Community of Practice. This shifting of the threshold gives meaning to the concept of Elasticity of Regime of Competence, which reflects the constant challenge to the practices in a local Community.

Negotiate Participation and Participating Space through Modes of Identification

With reference to theoretical framework (refer to Chapter 3), my findings indicate that each Dimension of Regime of Competence is negotiated by members through the Modes of Identification: engagement, imagination and alignment.

In the case scenario above, the ongoing assessment of the ward situation is made possible through engagement. The engagement took the form of doing tasks in parallel or jointly performing tasks. When Navin was serving medicine, Sarah was updating the charts, or it could be that everyone served medicine and juggled with other tasks. These different forms of engagement were negotiated through the nurses' adjustment to their prioritised tasks and their position, as their alignment and disalignment with their expected performance in that situation changed. The mode of imagination is their expected performance with which the nurses tried to align their engagement.

Members bring varied knowledge from their past experiences into local practice and this impacts the Regime of Competence. In the case scenario above, the knowledge Navin used to negotiate his participation included – but was not limited to – his knowledge of the different teams of healthcare professionals; his knowledge of how the lab system functions; his knowledge of how lab results relate to treatment adjustment, and his knowledge of the PM shift nurse. This shows that Individual members use their relevant knowledge in their negotiation of participation, which challenges the Dimensions of Regime of Competence: some members gain more flexibility and some members lose flexibility.

In the scenario above, Navin's participation and position were respected by Sarah and the PM nurse. In those moments of interactions with doctors, and handover to the next shift, Navin negotiated his participation more freely. Sarah's participation was somehow monitored and guided by Navin, and therefore the flexibility in her participation seemed more limited. The participation between Navin and Sarah was reciprocal and constantly negotiated, with one moment Sarah being asked to help Navin and the next moment Navin offering help to Sarah.

In the above case scenario, both Sarah's and Navin's abilities to assess the overall situation and know what to prioritise and how to position themselves (Operating sense of weather and positioning & Manoeuvring tasks and time), how to express ideas clearly to each other, to the doctors and to the PM nurse, and when to get help and offer help (Expressing participation and acceptance & Operating sense of weather and positioning) were contributing factors to their participation, and the negotiation of Participating Spaces. Through engagement and imagination, they knew their abilities and position. Their alignment was rooted in their engagement in communication and mutual expectations.

Thus, Participating Space is reflective of members' abilities in meaning making and relational position taking in the Community of Practice and represents who they are in the Community. Participating Space can reflect both a self-perception of one's own abilities and position and also one's abilities and positions as perceived and accepted by others. Participating Space is a negotiated membership identity.

This conceptual architecture as a whole explains members' ongoing negotiation of participation and membership identity in the Community of Practice, which adds analytical clarity to Wenger's concepts of Regime of Competence and Modes of Identification – at least in its narrow application in this study. The concepts of Prized Tasks, Dimensions of Regime of Competence, Elasticity of Regime of Competence and Participating Space developed from this study indicate the impact of situational factors on members' participation.

Negotiating participation and Regime of Competence

On both the morning and afternoon shifts, each nurse is in charge of a number of patients in the ward. Within those few hours of their shift, the nurses have to handle all the changes, which are the doctor's orders for treatments and procedures, and carry out the monitoring of the patients and care of the patients' daily living activities. All these things are tasks which the nurses need to identify and put into priority order, while the ward's routines, such as the time for meals and the time for toilet/bathing and the time for medicine, are generally spelt out in a schedule, giving a sense of sequential order. This apparent sense of sequential order masks the nurses' effortful participation in the Regime of Competence to perform the Prized Tasks .

As previously noted (see Chapter 2, literature review), the current literature on novices' clinical practice found they lack the ability to

manage tasks and time. This study's findings indicate the complexity of negotiating their participation in all the Dimensions of Regime of Competence in order to manage the Prized Tasks within the limited time of their assigned shift.

Anticipating "weather" to navigate position and negotiate participation

Nurses find out who will be working with them the next day by checking the e-roster, which indicates the nurses on duty on each shift and their assigned patients, to anticipate the weather conditions for the next day, and to decide what position to take and what strategies to use. One example of such strategies is to serve medicine alongside the nurse who is assigned to be the first one to serve, and another example is to report for work earlier to serve medicine. The nurses share a common understanding of each member in the Community of Practice through their day-to-day interactions. This understanding is used by the nurses to anticipate the emotional temperature of the ward.

Informal labels are used to differentiate the nurses' characteristics, which mainly indicate if that nurse is rigid or flexible with the organisational policies and rules and his/her capabilities in managing tasks. For example, the policy might dictate that the nurses are responsible for keeping patients who are at risk of falls free from falls and defining the Dos and Don'ts. However, different nurses might take care of such patients differently. Some of the nurses learnt that these patients might become restless and try to climb out of bed and fall if forced to stay in bed, so they allowed the patients who could actually walk steadily to be out of bed and just kept an eye on their whereabouts. Other nurses might follow the policy strictly and insist on keeping these patients in bed.

I learnt the different terms the nurses used as labels to describe their colleagues with distinct characteristics, and their use of such labels made the effect of members' characteristics on their decisions in participation more observable. Such labels were used by the nurses to replace the names of the persons they were referring to. By using labels, the nurses created a shared imagination of that "category" of people labelled in such a way. The labels become part of their vocabulary in their daily conversations as a shared repertoire in the Community of Practice (Wenger, 1998). For example, "Super" was used by the nurses to describe colleagues who follow rules rigidly and always check on others, so the nurses had to "try to avoid trouble when working with them". "Chemical" was used as a label for nurses whose ability cannot be trusted and who "do not know what they are doing and mess things up and make everyone busy, so one has to be extremely careful working with them". The meaning of some labels was explained to me by various nurses, while some of them I picked up from their casual conversations.

Avoidance strategies were used when the nurses knew their hierarchical relationship left them with little room for navigation, and they often decided to align through avoidance, a kind of engagement through non-participation. According to (Wenger, 1998), non-participation is also engagement when people dis-identify with one another. Such anticipation and preparation seemed important to the nurses, "so I would get myself mentally prepared," as novice Eva said, "if it would be a good day or a bad day." I observed the measures Eva took to avoid "trouble" through her prediction of "weather conditions" and her position taking in relation to others in the following description.

One day during the shift handover, Eva asked Senior Nurse Mabel for information on a patient she was not in charge of. That patient was assigned to a "Super", but was in the room shared by Eva's patients. Knowing Super's work style and expectations, Eva got herself prepared by asking for this patient's information, as recorded in the field-note:

After taking over from David and Mabel, Eva asked Mabel about the patient in bed XX.

Mabel: "Why you are asking? This is not your patient."

Eva: "You know who is in charge of this patient, right?"

Mabel: "Super?"

Both of them smiled and asked me if I knew whom they were referring to... Soon, the nurse whom they referred to as 'Super' appeared and started to check the toilet and the washroom and the tidiness of the room. For a while it seemed that everyone was holding their breath and watching 'Super' going around the room. Mabel and Eva occasionally turned to each other and had an exchange of glances. 'Super' then asked Eva if Eva had helped her to check the patient in bed XX (Super's patient as she was away earlier) ... After 'Super' left, Eva and Mabel looked at each other and looked at me and smiled.

In the above scenario, both Mabel and Eva knew they had to employ strategies to avoid Super finding fault with their work, so as to avoid making trouble for themselves and making their shift less pleasant, which would affect their work progress. This was especially true for Eva, since she was working on the same shift with Super, and might be monitored more closely if she was found doing things Super considered improper, and her participation might be constrained.

As for those nurses labelled as Supers, they probably were aware of their position. One of the Supers shared with me her observations of the nurses and how she felt she could not force them to do things as she expected. As recorded in my field-note:

The ward is finally quiet. It is one of the rare days that things look settled before handing over. After some casual chats with me and us seeming to know each other more, Super told me to observe... "Everyone must fight to serve medicine; patients call — also nobody wants to attend...unlike in the past we follow what we are told to do" ...she continued, "Busy people don't have time to do patient education, not busy people also don't want to do it... They'd rather write their records...There is already feedback that we nurses 'serve the computer more than the patients'." The Super looked at me, sighed and said, "You watch lah4...see what you will observe. I know what's going on, but..."

So, in fact the Super realised the challenge of maintaining the Regime of Competence how she felt aligned to it as "in the past we follow what we told to do". She felt dis-aligned when she observed the change of practice from how it had been in the past. She used "watch" and "I know what's going on, but..." to express her changing position in the Community of Practice as a senior member and her dilemma over negotiating her own position in the shifting Dimensions of Regime of Competence as nurses' participation shifted towards certain Prized Tasks. The changes to the practice and the dis-alignment felt by old timers were discussed by Kubiak (2012) and identified as the overlooked learning needs in his thesis on support workers' practice, participation and identity in healthcare settings in UK.

In another incident described below, Eva negotiated her participation in her modified way by not strictly following the rules prescribed by the hospital in front of Super, while Super resorted to a "not seeing" or "not saying" strategy. Both Eva and Super aligned their engagement through

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⁴ "lah" in Singlish is a discourse particle in Linguistics terms, that is, a word or a particle that does not change the semantic meaning of the sentence, but for pragmatic functions such as indicating tone, can mean an affirmation, dismissal, exasperation or exclamation in different contexts. Source: https://theculturetrip.com/asia/singapore/articles/lah-the-word-holding-malaysia-and-singapore-together/. Accessed on 02/02/2020.

non-participation and renegotiated their relational positions and the meaning of their participation. In my field-note, I recorded:

Eva went to unplug the IV line for the patient who was to be fetched for a procedure. Super saw Eva went without an injection tray, so she quickly grabbed one and wanted to bring it to Eva. Soon Eva finished unplugging and Super looked at me and said, "She should take an injection tray...I wanted to give her the tray, but...she just did it in a hurried way... too late... no use to say anything..."

In the end, Eva managed to do her tasks in a modified way and the Super managed not to interfere since it was done, and nothing had gone wrong. Their engagement was aligned within the shifting threshold of Regime of Competence, Eva pushed for more flexibility for her to participate and challenged Super's tolerance level, while Super re-aligned her participation by not confronting Eva's practice. Thus their relational position was renegotiated, and their engagement was re-aligned.

Navigating ways to focus on Prized Tasks

The nurses use different strategies to manage tasks and they negotiate their position and participation through engagement, imagination and alignment.

Beating the queue

The nurses are assigned in a sequential order to serve medicine and they call it their "queue" to serve medicine. When the nurses know they are going to work with the kind of members (such as Supers) who insist on rules, they need to adhere to their assigned place in the queue. From their work experience, the nurses learnt the way to go about jumping the

queue, and they needed to do it in such a way as to avoid scrutiny. Using serving medicine in the morning as an example, Alan told me the nurses' reason to beat the queue:

"By the time it's your turn to serve, the ward is busy, doctors make rounds and you don't want to miss them. The senior ones are the first to serve medicine," said Alan one morning when he was waiting for his "queue" to serve medicine. At the same time he was trying to write and update records in between attending to the patients' calls – and, as he checked the time by looking at the clock, he said to me, "By 10am, I must write (in the patient records) to indicate the changes (the orders given by doctors). The PM shift nurse will come early to read my record (If my record is not updated, they won't know what has been done.)" (like a shift log, this is called "nursing report" in Singapore. I use "record" to differentiate it from an oral report such as face-to-face handover).

From what Alan said, the nurses should take their turns, one by one, to serve medicine. But by the time those who are in the second or third place in the "queue" come to serve medicine, the ward is getting busier: the doctors start to make rounds and the nurses need to catch up with them; the patients start to call more often for hygiene needs after their meals, the movement of patients in and out of the ward for procedures picks up when the other departments in the hospital start running for the day. Those nurses who are assigned later in the queue to serve medicine feel they are stuck during the early hours of the shift. They end up having to handle too many things simultaneously by the time it is their turn to serve medicine, which is obviously a very intense and demanding situation.

The nurses, then, worked out a way to deal with the demands of their work every day: They modified their participation to "beat the queue".

One of the ways was when the first assigned nurse was using the Computer-on-Wheels to serve medicine, the other nurses assigned later in the queue also started to serve medicine by getting their particular patients' medicine drawer from the Computer-on-Wheels. They took the advantage of the gaps in between the assigned nurse's using of the scanner to register in the online system the medicine they served to the patients. Speaking of why they tried to squeeze into the queue to serve medicine, RN Zana said:

"It's my responsibility to serve medicine on time. Patients can not bath, but I cannot *not* (she stressed the word 'not') serve them medicine."

To the nurses, if the patients do not get their medicine on time, it is counted as their responsibility no matter which "turn" they are assigned to serve medicine. The challenge for the nurses is how to do it carefully to manage their position and relationship, so they can "clear" this Prized Task at the beginning of the morning shift in order for them to focus on other Prized Tasks, such as catching up with doctors' rounds, carrying out new orders, performing procedures and writing records, liaising with other services for their patients, assessing newly admitted patients, managing critically ill patients or dealing with any sudden deterioration of patients' conditions, and many more tasks, which all demand their attention.

If nothing else disturbs their plan, serving medicine is the first thing the nurses do, regardless of their assigned position in the queue. It is unanimously the prioritised Prized Task in the morning. This is their realigned engagement in practice through dis-alignment with the assigned turns which, according to the nurses, do not take into consideration the complex situations they face in their practice. So, cubicle after cubicle, the nurses may be observed serving medicine early in the morning. This is carefully managed by spotting opportunities to do so, or by stopping temporarily when they sense they might be watched and reprimanded.

By doing this, the nurses negotiate their local practice, and manage tasks and their relational position.

Coming to work early to avoid the queue

Serving medicine as a Prized Task is made more difficult by their scheduled turns and complicated by the busy morning-hour activities and other ward situations, such as whom they are working with. Navin told me that when Supers are assigned to be the first ones in the team to serve medicine, they usually take a long time to complete their medicine rounds. Another strategy the nurses engaged in is to come to work early to avoid the queue, as shared in the focus group discussion:

Navin: So, I can have peace of mind to serve (medicine) and complete the morning medicine before the first (assigned) nurse arrives. So, I can give her/him the *time* to serve medicine." (said with an emphasis on "the time"). Eva: Many of us do that. We want to be busy at the beginning to get things settled.

Both of them smiled at each other with a sense of triumph and mocking when they said this.

This notion of being "busy at the beginning" is the nurses' strategy to negotiate more flexibility for the rest of the shift in case anything comes up suddenly. It is know-how they developed through their experiences in handling their work and dealing with sudden changes in the ward. The nurses reported that to complete their medicine round before the doctors' round is the logical priority for them to manage their work. This strategy was developed by the nurses who know they are not in a position to challenge a Super's work style or to blame them for taking too long to serve medicine. The nurses also know they are in no position to change the timing of the doctors' round. So, avoiding the queue is their way to manoeuvre tasks and time, their re-aligned engagement through

imagining of their position with other nurses on the shift and the other healthcare professionals in the overall management of their patients. By starting work earlier than the scheduled time to serve medicine, Supers' Participating Spaces are respected as they do things according to rules, while this shifting in times to serve medicine was tolerated among members. In this way, the nurses navigate their relationship, give and gain their flexibility in participation within the Elasticity of Regime of Competence.

• <u>Juggling priorities</u>

When things are happening at the same time, demanding the nurses' attention and time, other strategies are used to manoeuvre tasks and time. For example, sometimes, when they were busy doing their Prized Tasks, the nurses would ask patients who made requests to wait. When the nurses used this delaying strategy, they had already made a decision about their own position and about which tasks were important to focus on, and which tasks could be either delayed or *tai ji* (a local expression meaning "pushed away") to other members in the team. Both delaying and *tai ji* strategies were used in the following scenario I observed:

Eva and Patricia were serving medicine, when one elderly patient called for their help to change her pants. "Wait ah, ah *Poh* ('granny' in Chinese dialect), we are serving medicine now," Patricia said to the patient, while the Nurse Assistant was busy doing a toilet bath with another patient... Later on, the Nurse Assistant helped the elderly patient to change and she murmured to me as I offered to help her, "They really know how to play *tai ji*", while Patricia and Eva carried on with their medicine round.

In this scenario, the delaying and *tai ji* strategies were a realignment of position between the nurses who were taking the nurse-in-charge role and the Nurse Assistants who were expected to assist them. The nurses-

in-charge used the delaying strategy to align their positions as the incharge doing their Prized Tasks: serving medicine, doing changes (carrying out and updating doctors' instructions), arranging procedures, and writing records, and left the other tasks which both the nurses-incharge and Nurse Assistants were capable of doing to the Nurse Assistants: attending to patients' requests and hygiene needs, measuring parameters, supervising meals, and updating intake and output charts. They were aware of each other's position; the negotiable and undefined boundaries were constantly being assessed as the nurses managed the advantage and disadvantage of their positions.

Nurses who were confident of their relationship with their patients were observed to negotiate a delay by reasoning or even joking with the patients. In the scenario below, Navin negotiated a delay to a patient's request which gave him the time to focus on his Prized Task. By showing his familiarity with the patient's preferred type of coffee and the language the patient speaks, his rapport with the patient was subtly expressed and this enabled him to negotiate a position that he desired and imagined:

When a patient called for coffee, Navin was busy following the doctors' round, and he smiled and said to the patient, "I will get your coffee in 15 min ok? *Kopi O Kosong* (a mixture of Malay and dialect, meaning "black coffee without sugar"), right? I am following the doctors' round and I don't want to miss their orders for *you* (Navin emphasised "you" with a smile)."

In this instance, Navin's position was challenged by the patient's request, and his ability to negotiate a delay gave him flexibility in his participation. Negotiation and alignment of relational position are happening all the time; sometimes it goes unnoticed as everyone just knows what to do and their participation is mutually accepted. But this is not always the case: sometimes the Nurse Assistants feel they have been left alone to struggle:

Nurse Assistant Ameer was busy with toilet baths and bed sponging the whole morning as the RNs in the team all seemed busy serving medicine. When I met her and asked her how she was and if she wanted my help to change the bedsheet when she brought another patient for a toilet bath, she happily accepted with a sigh of relief and said to me exasperatedly, "I am dying...I am alone doing all this (bed sponging and toilet baths)!"

After some time in the ward, the Nurse Assistants know which RNs they must help first, or which RNs they are willing to help first, and which RNs they can leave to do the work themselves. The more junior RNs might, however, find it more difficult to give instructions to those more senior Nurse Assistants. By the nature of their work and their assumed responsibilities, the nurses-in-charge have to "cover everything, as I am the in-charge" (often mentioned by the RNs), including those things being left not done.

Novice David was serving medicine under the supervision of Helen. When serving bed XX, Helen told David to check the most recent temperature on the chart first. It had not been taken. So Helen asked David to ask their Nurse Assistant to do a temperature check on that patient as it was due. It ended up that the temperature was still not taken after a while as they'd been told by the Nurse Assistant that she was busy with another RN's patient. After a while, David took the thermometer and did the temperature check himself.

In the above scenario, the nurses assessed the progressing situation and negotiated their relational position in their participation. David, being a novice RN, was still not independent. The Nurse Assistant assigned to assist him might not help him as David did not feel he had the authority to command this Nurse Assistant's help. Helen, being one of the Senior

Nurses who always checked on others, did not want others to view her as less capable. So, the Nurse Assistant assessed the situation and decided to prioritise her tasks by helping the other RN in the team. In one of the reviewed studies mentioned in Chapter Two, Charette, Goudreau and Bourbonnais (2019a) reported that the novices had difficulty managing their relationships with LPNs and delegating tasks to the LPNs. This evidence and the evidence from my study show that negotiating participation and position is complicated, and that job designation does not ensure authority or the command of alignment. In the scenario described above, the Nurse Assistant assessed the situation and her relational position in the team, and adjusted her relational position in the team accordingly.

At times, when the nurses are squarely faced with competing tasks, their different views on the Prized Tasks and whose priority should be respected could surface. If they do not negotiate their relational positions well, a dis-alignment could fracture their engagement and result in a confrontation.

"When I'm busy I can't help to position the patient; when I'm not busy also I can't..." Helen said this as she dragged a highchair and helped a Nurse Assistant to sit a patient out of bed. She looked at me and signalled toward Irene's room, and made sure Irene was able to hear her. A moment later, Irene came out of her room, holding some forms from doing her changes on the doctors' orders and walking towards another room and said, "one ear in, one ear out (it means "in one ear, out of the other") ...we all have to survive with so many things to do!" It was obvious she meant that for Helen without directly addressing her.

The nurses' position taking in the team is constantly negotiated according to the "weather conditions" of the ward. The above situation arose when Helen felt obliged to help the Nurse Assistant to transfer the

patient when her hands were already full of her own tasks, and while Irene, the nurse-in-charge of that patient, was occupied with other tasks. Such different views on prioritising tasks challenged their relational position, and the indirect confrontation happened through an outburst of verbal exchanges, with each of them trying to maintain their own position. However, most of the time the nurses negotiated their position in a way they call "give and take".

A reciprocal way to negotiate and align participation

The reciprocal way was described as a 'give and take' strategy, a collegial way of doing things among the nurses most of the time. The nurses accepted it as a way to participate with one another and to make compromises to align with one another in order to move on. Novice Aidan described how the nurses "give and take" by switching roles or responsibilities. Aidan told me when I followed him one day how he learnt and developed his ability to perform different roles.

"We would each take a role and get each other to know and agree. For example, when I went to top up (patients') medicine (drawer) for the medicine trolley, I asked the other nurses in the team if any of them wanted to take this role or to update the parameter charts and intake and output chart. We then agree with one another. We know which one we have done and switch roles the next time, so nobody is taking advantage by taking the easier roles. In a way, it's fair and square and we also learn different things by taking different roles."

The way of participation described by Aidan above showed the mutual respect and negotiation of relational position among nurses. The 'give and take' strategy could be those in an obvious power position giving instructions to the weaker ones, with some leaving more and some

leaving less space for the weaker ones to make decisions. It is through engagement, imagination and alignment that the nurses observed their relational positions. Novice David used the word too "nagging" to describe Helen, who would give him instructions in a way that made him feel his participation was interrupted and controlled. In the following scenario, David engaged in a submissive manner based on his assessment of the situation and his relational position to Helen.

Helen once in a while asked David to do something or reminded him to do it..."David, have you written the date on the (patient's newly inserted) IV plug?"...."Remember the patient you need to check the back of the head (of a patient who а fall and had had iust admitted)."..."Have you done a pain assessment for this patient? (before David was about to serve the patient his pain medicine)".... "He is on hourly CLC (consciousness level chart)"...David was interrupted many times during his medication round...

On another shift, Navin distanced himself from David to give David more space to make decisions, and meanwhile Navin helped out with some junior work. David had the flexibility to prioritise tasks and to carry out his in-charge role. The episode below describes when both of them seemed to know what position to take while processing a new admission.

After the doctor and APNs (Advanced Practice Nurses) left, Navin went to talk to the newly admitted patient while he left David to handle the changes ordered by the doctor. David put up the care instructions and informed the patient – CRIB (complete rest in bed), NBM (Nil by Mouth), drug allergy and telemetry monitoring. After informing the telemetry team, David started to write a record... while on another computer, Navin checked the orders for the patients as he told me, signalling towards David, "I am

shadowing, just to be around and make sure (David is doing things accordingly)."

This means Navin intentionally gave David space to participate. If David did not show his ability in his participation, that space might be taken away. The situation might also be played out in such a way that one was ordered to do the tasks of the other member and sacrifice his/her own time: in return, one gained a favourable relationship and a credit to ask for help when one encountered difficulty. In the case scenario of Navin and Sarah (see Chapter Five), giving support and gaining a favourable impression of each other were observed in their participation. In the two scenarios above, David worked with different preceptors under similar ward situations. In both scenarios he took submissive positions to his seniors but with more or less limited space to make decisions in his participation.

In this section, I used observational data to show how the nurses try to manage their tasks within their shift. The tasks they viewed as Prized Tasks drew their attention and they engaged with one another in different ways in their attempt to manage their Prized Tasks. The strategies were based on the "weather conditions" they anticipated, their sense of positioning and the aligned participation with their expectations of one another in the Community of Practice.

In any given situation, the different members negotiated their relational positions within the Elasticity of Regime of Competence. Some days their strategies worked well: they managed tasks and time and maintained a good relationship with other nurses, and had their Participating Spaces mutually respected. Occasionally, their strategies did not work well, and they ended up with unfinished tasks and messed up their prioritised tasks, or they felt upset over some conflicts and their Participating Spaces were challenged.

Negotiating Participation through Handover Activities

Nursing work carries on from one shift to the next, so it is important for the nurses to achieve an understanding of one another's participation, not only within the shift but also across the shifts, by handing over to one another. Nursing handover consists of a series of tasks such as record writing, record reading, face-to-face verbal reports and informal chats. The off-going nurses express their participation through record writing, showing what has been done and what is to be followed up. The oncoming nurses anticipate the ward situation and the work to be done through reading the records written by the off-going nurses. The face-to-face verbal report gives the opportunity for both the on-coming and off-going nurses to exchange their understanding (i.e. their imagination) and to align their engagement.

Participating through record writing and reading

On a busy shift, when many tasks are demanding the nurses' attention, record writing as a Prized Task is an integral part of their participation, which competes for their attention and time. This finding of the study also revealed the complexity and the nature of record writing, while the reviewed studies in Chapter Two only identified the burden of documentation and record writing whether in terms of volume (Charette, Goudreau and Bourbonnais, 2019b), or in the form of administrative work such as writing patient records or keeping up with email correspondence to others (Seah, Mackenzie and Gamble, 2011). As novice Aidan said to me when he quickly logged in and recorded something on the system:

"I must write it down after I have done something, or I might forget as there are so many things going on." However, their ability to manage the continual record writing task is complicated by many situational conditions. One of them is the doctors' ward round patterns and work styles. I learnt this from Aidan:

"Every team of Reg (Registrar) and MO (Medical Officer) have their own style" Aidan told me. "Our current Reg and MO usually come early, and they finish their round before their consultants' round, and they update their orders promptly after the consultants have seen the patients. So, I know roughly by 10 am, almost all the changes (the new orders by the doctors) are out and I am ok to do the changes and update my record (shift log)."

This means that whether the orders are ready for the nurses to carry out as tasks depends on the doctors' work style and ability, and the trust the consultants have in them. Furthermore, each order has its own indications for the nurses to decide on the priority among all the tasks. These factors include the conditions of the patients, the hospital's operating system, different professional groups' work and the availability of resources. These aspects require future studies to explore further.

In addition, the nurses estimate their own progress of work and record writing in comparison to their peers to keep on par and to position themselves in relation to them. "So, I'm not the odd one out here to finish my record too early or too late," as Nurse Hong explained when she showed me the online system, which tracked every activity the nurses and the doctors did. Through the online system, the nurses can project an impression that they are aligned with the rest of the nurses on the shift. This work of alignment indicates the nurses' assessment of each other, as well as their knowledge of the online system which made their work traceable. By what time the nurses should have written their draft record and suchlike things are not spelt out in the ward's procedures, but the nurses work out the norms, engaged and aligned among themselves.

The nurses are careful to negotiate their relational position with the evolving nature of their shift and the changing weather conditions. Novice Aidan's statement summarises the continual record writing and the nurses' alignment of participation across their shifts. One day, after his handover, Aidan told me about the habit of record writing he and most of his colleagues had developed as their way of participation:

"I write at least three times. I always try to make sure the first draft is out for my handover (face-to-face). Some PM nurses come very early to read (the patient's note and the nursing record is part of it), so I try to give them the information (by writing my draft record). And then I update it during the shift. Now I am finalising my record." Aidan continued, "I still need to do something after this (face-to-face handover)". I continued to follow Aidan and was wondering what that "something" would be. Before Aidan went off and called it a day, he approached the PM nurse with a smile, "Do I still owe you anything?" the PM nurse signalled "OK" to Aidan. Aidan explained to me, "This is our way to clear (the tasks) with each other."

Through record writing, the nurses express their participation, and the nurses' record writing is adjusted to the on-coming nurses' characteristics. Tina and Navin shared in focus group discussion:

Tina: If I know the next shift is someone new, I make sure I write in detail, as I am worried they might not understand and miss things out.

Navin: Yes, I do that too.

Researcher: How do you know if they understand?

Tina: I will ask them questions and ask them to tell me what they need to do.

Navin: I will emphasise and even put highlights and remarks in the record.

There are no specific criteria for ways of record writing to express their participation. It is through their day-to-day engagement that the nurses are able to write appropriately for the expectation and abilities of the oncoming nurses, and to read and imagine the intended stories of the offgoing nurses. This tacit aspect of their practice can only be learnt in a manner that no school education can replace, and it needs the learners' intentionality (Billett, 2016; Eraut, 2011; Illeris, 2011). In the case of Novice David's written record being amended by his preceptor Patricia, it showed the negotiation of shifting thresholds of Regime of Competence among the nurses: the record might be briefly written and accepted by some, while others might demand more detail in the records. In my field-note I noted:

...Patricia amended David's record here and there. In one place, he had written "BP [blood pressure] was high and reported to doctor". Patricia checked the patient's BP reading on the clinical chart and changed it to "BP was 158/94 mmHg at 2.10am, no complaint of headache". Patricia then told David, "You need to write the reading (the measurement of the BP) and the time of the BP, patient's condition and what you have done. Your record can't be so brief. What do you mean by 'BP was high'?"

This means the nurses' need to be able to interpret one another's written records. Additionally, they need to know about the important indications of disease management and the comprehensive use of information. Most of the time mutual understanding is reached. As Nurse Winnie shared with me one evening while she was checking Eva's written record:

"I think it is light pinkish, while Eva described it as serumlike. We have different ways to describe the drainage, but what's important is that we know the drainage is getting lighter and it is no longer fresh blood, as we just checked (during the team round)." Winnie told me when I asked her about their way of writing the description, "She (Eva) can have her style. As long as she makes herself clear and her patients are safe...so the bottom line is to carry the (management of) patient from one shift to the next safely..."

Variations in descriptions were observed among the nurses; some nurses accepted while others demanded an amendment. The nurses managed to align their engagement and understanding. Their own vocabulary of record writing is mutually created with variations, yet members are able to understand and accommodate. It could be the description of the food, or urine or other bodily discharges. It could be patients' wound condition and their mental status. In Atkinson's (1997) ethnographic study on medical students' clinical learning, the consultants' various description of signs and symptoms in medical records were something that was difficult for the medical students to understand, and they had to learn to align. The detail of these descriptions included the notice of "bluish tinge to the complexion" of a patient with myocardial infarction, or to illustrate "the pattern of a pulse" in producing a "competent descriptions of clinical phenomena" (Atkinson, 1997, p168-169).

The nurses learn through such variations. While there are no fixed ways to express their participation through written records, it is aligned with the sense that the on-coming nurse should be able to grasp the main information. The nurses negotiated their record writing and record reading based on this fundamental rule, but with flexibility. Nurse Tina explained:

"Some worry about missing out important information, so they make sure they include all of it (information) under 'Follow ups' ('Follow ups' is one section of the online record format) and make this section very long. The nurses know who are the *Kiasu* ones (*Kiasu* means 'afraid of losing' in Singlish). So, some nurses only read their record in 'Follow ups', especially when they are in a hurry (trying to finish reading before face-to-face handover). Actually, reading the full record can help to learn the patients' condition better...but we also know where to read when we are short of time...after a while, you know whose record can be trusted and whose you need to read more carefully...it's scary when someone missed something accidently, after a few shifts it's difficult for you to trace what has been missed..."

To express participation through record writing and to understand participation through record reading, the nurses are in an on-going journey of engagement, imagination and alignment. For example, a few of them expressed their admiration for those nurses who could sift through the vast amount of information quickly and recognise the important tasks. The nurses developed this ability through their ongoing engagement, but how different nurses achieved different levels of such ability is worth future exploration. There is a shifting threshold of Regime of Competence in their expression and understanding of one another's participation. To develop an understanding of one another's ways of expression is something the nurses learnt through participation in practice.

Negotiating Participating Space through handover

I mentioned that writing a record is a way the nurses express their participation, and through reading the record the nurses interpret it and anticipate/imagine the ward situation. My study findings indicate the face-to-face handover gives the nurses the opportunity to clarify meaning with each other, and exchange what they intend to express and what they understood, so their adjustment of relational positions and their negotiation of participation were shown.

Position taking and alignment in team rounds

At the start of the face-to-face handover, the nurses in the same team make a team round to do a visual check on the patients. Usually the offgoing and on-coming nurses-in-charge take the lead to greet and check the patients, while the rest of the nurses in the team follow. During the round, the nurses make observations of one another and adjust their relational positions. I wrote in my field-note:

Ketty started a conversation with a patient. This patient was more vocal and started to talk about his family and how his wife was trying to juggle her work and visit him in the hospital. Ketty then asked him if he knew roughly about his treatment arrangement... the conversation seemed engaging and took a bit longer... the rest of the nurses started to make eye contact with one another and they seemed to reach an understanding and started to move away, and soon drew a distance away from Ketty and the patient. Ketty then sensed she was left behind and stopped her conversation hastily and went to catch up with the rest of the team.

Most of the time, the nurses do a quick check on the patient during the team round. For example, they assess the patients visually to ascertain their general condition, and the devices attached to them such as IV lines, drainage, dressings, and monitoring machines. Meanwhile, they introduce themselves to the patients. Though there is no standardised checklist for the team round, everyone seems to know the norms of what to check and when to move on to the next patient. The extended chat Ketty engaged in with the patient prolonged the process and it was something out of the normal routine the group expected. Though Ketty is one of the Senior Nurses in the team, her engagement was dis-aligned with the rest of the team. She adjusted her position by stopping her conversation with the patient abruptly in order to catch up with the team.

Her position was challenged under team pressure. The need for experienced members to learn and adjust their position indicates the changing nature of Regime of Competence.

Negotiating participation in face-to-face handover

During their face-to-face handover, the nurses negotiate their participation through the negotiation of tasks and position amongst themselves.

Sarah told Jenny that the doctors had ordered a procedure to be done tomorrow for this newly admitted patient, as she moved the cursor along her record to point out this order (on the PC screen). They noted there was a pre-procedure medication to be served. Jenny asked Sarah to serve it as it was ordered during Sarah's time and it was due. Sarah asked Jenny to help: "This patient just came in and this medicine needs to be counter-checked by another RN, while everyone is busy handing over now." In a way, Sarah explained her situation and tried to negotiate with Jenny. Jenny then said, "OK lah, fair enough. I'll give it lah."

The need for the nurses to negotiate tasks in such a manner arises frequently due to the changing "weather conditions". Sarah's ability to negotiate tasks was based on her relationship with Jenny, her assessment of the patient's condition, the medicine and its effect, the procedure the patient was prepared for, and the potential for flexibility in serving that medicine.

Nurses' position taking, challenge and adjustment of position happen during their face-to-face handover. In the scenario below, David was "shown up" by his senior's signalling David's junior position. Alan initially took control of the handover, but Patricia's interruption brought a pause to that momentum and a challenge to their relational positions.

Alan informed David of the current dosage it (the medicine pump) was running. With that, Alan asked, "any questions?" and looked at David. David, with his patient list in hand staring at the medicine record on the PC, did not ask any questions. When Alan was about to move on to the next patient, Patricia asked David, "Do you need to check something?" David looked a bit puzzled. "Have you checked the pump?" Patricia added. David said Alan already told him that (about the pump). "But you still need to check if it is running at the correct dosage!" Patricia's voice sounded a bit critical (and there was a pause for a few seconds). With that, Alan brought David to the patient's bedside and both of them checked the pump. After that, Alan showed David a formula on the computer and how he had derived the dosage (in deliberate detail) ...later on, when I was alone with David, he told me that Alan had told him before the handover that Patricia had already checked the pump...

Atkinson (1997) reported that medical students got "shown up" by their consultant in rather humiliating ways in medical teaching sessions, in front of their peers at the patient's bedside, to indicate their junior position. The nurses told me the on-coming nurse-in-charge is supposed to ask questions and to clarify things, however, their position taking in asking questions varies from nurse to nurse and situation to situation. In the scenario above, David had limited ability to negotiate his position in relation to Alan and Patricia. To ask a question would have seemed to challenge the position Alan had pre-set for him, while not to ask question would not be accepted by his preceptor, Patricia. The subtle challenge to the relational positions happened during the pause and the subsequent interactions: the nurses exchanged their expected participation and adjusted their relational position. Through the

deliberately detailed showing of dosage calculation, Alan showed his ability to reinforce his position and to retain his control of the handover in relation to David and Patricia.

In a way, the nurses' position taking in the face-to-face handover signals their ability and how they are perceived by other members. It is a strategic movement by the novices and their preceptors and the other members, to gradually give and gain Participating Space:

Ava was holding a patient list and asked, "Has bed XX been for his scan already?" novice Eva said, "Yes. This patient will go to another ward after the scan. The patient and his family were informed. But another patient out of ICU will come to this bed." Eva and Ava had another few exchanges of questions and answers. After that, they cleared (checked and no questions asked by Ava) the medicine record and charts on the computer. Eva then looked at Irene, who was her preceptor (who was listening to the handover though standing at a short distance, giving the impression she was not checking Eva in minute detail), as if she was asking her permission to complete the handover... Irene added a bit of information on the arrangement of a patient who was going to be transferred to a community hospital, as she was the one who had just talked to a MSW (medical social worker) over the phone before the handover.

In this handover, Eva showed her ability to express what she had done and what Ava needed to follow up, showing Ava her ability in overall management of patients and tasks, and her awareness of her position in relation to Ava. Meanwhile, Eva carefully managed her relational position with her preceptor, Irene. This approach by Eva could have helped to ease the potential fear of losing position and incurring the jealousy of the Senior Nurses which has been reported by researchers

such as Charette, Goudreau and Bourbonnais (2019a), Walton et al. (2018) and Ebrahimi *et al.* (2016), cited in my literature review in Chapter Two.

• Gaining access and information in the unofficial handover

Nurses' verbal handover always starts earlier, unofficially, in the tearoom before their shift starts. Through their casual chats, the nurses assess the weather conditions of the ward and decide their position in their participation. The nuanced understanding of patients and colleagues was shared through such chats, which were not written in the records or mentioned in the official handover. They might share stories about how they handled a patient who asked for coffee too many times and disturbed their workflow, by telling the patient "doctor said too much caffeine is harmful to your condition" which seemed to work, though the nurses felt upset that they had to rely on using the powerful word "doctor" to persuade the patient. The nurses shared such strategies to make progress in their work and to avoid unwanted complaints or conflicts. On another occasion, the nurses described how allowing a confused patient who would always "dress himself for work every day" to wander around in the ward could be a better option as long as the patient was safe and did not disturb other patients, rather than confining him to bed according to the guidelines, which would surely agitate this patient. They described this patient's behaviours vividly, and from there the nurses learnt what was "normal" for this patient, based on his medical, family and career background.

They might gossip about patients who needed special care and attention – they categorised such patients under the label "TLC" (Tender Loving Care) – or gossip about their colleagues. The tales were usually focused on the things the nurses considered needed special attention, and the strategies they used to deal with the situations, what worked and what

did not. Through such sharing, the nurses bring their past experiences and various strategies into their negotiation of participation. Therefore, access to such information is important for the nurses to negotiate their participation. One such story I heard over their meal break was about an encounter with doctors who put pressure on the nurses to free up a bed.

Nurse Zana was chatting with novice Eva about her encounter with a new MO in the morning, and told Eva to be careful of this MO who always wanted to hasten the patients' discharge and free up a bed for his new patient. "He wanted to discharge the patient today. I told him that the patient can't be discharged...he cannot even stand...He said he ordered him to be referred to PT (physiotherapist) and why did we not make him walk. I told him it was over the weekend and there was no PT except the on-call ones...but this new MO still insisted!" Sarah asked, "What happened?" "I don't care," Zana said, "I took this up to his consultant..." The consultant agreed and told his MO, 'Listen to the nurses...they know the patients the best...' Ha ha, he really made my day!"

The doctors' styles and their preferred ways of doing things were shared among the nurses in such tearoom chats. The experienced members knew their consultants' styles so well that they could anticipate what would be ordered and get prepared beforehand, or what a consultant liked and disliked and how to avoid trouble with that consultant. Occasionally, the nurses might have an unpleasant encounter with a consultant or a patient or someone else during the course of their work. These unpleasant encounters would then become tearoom stories shared among the nurses.

While this aspect of handover is meaningful for the nurses to learn from others' experiences and get the information necessary to position themselves and align their participation, it also nurtures various

subcultures and biased opinions. Access to the private stories depends on the nurses' relationships, which potentially lead to cliques. Eva and Aidan were observed intentionally spending time in the tearoom to join the chats, Sarah occasionally joined in, while David was in his own world and was not aware of the function of such chats. For the novices, having the chance to hand over independently, to draw the attention of other nurses, to listen to them, and even to join a private chat are highly significant aspects of their participation and gaining of membership in the Community of Practice.

The nurses' sense of accountability to the normative agenda of handover activities was complicated by the need to be flexible to manage work and relationships. They negotiated their relational positions through different Modes of Identification and the Elasticity of Regime of Competence, blending their diverse knowledge into their negotiation of participation, into their Participating Spaces.

In this chapter, I discussed the conceptual architecture and the concepts of Prized Tasks, Dimensions of Regime of Competence, Elasticity of Regime of Competence and Participating Space which were developed in this study. Their meaning and interconnection to Wenger's concepts of Regime of Competence and Modes of Identification were discussed and further explained and supported through research data.

Chapter Seven: Discussions and Implications

<u>Introduction</u>

In this chapter, firstly I make my thesis claim and discuss my findings

from addressing the research question and examining the current

literature on novices' transitional issues. Secondly, the strengths and

limitations of this study are mentioned. Thirdly, I discuss the implication

for policy, education and practice. Finally, the aspects for future studies

are suggested.

Thesis claim and findings

I started my enquiry into novices' transition with the current literature,

which indicated novices' incompetence and difficult experiences during

their transition (Chapter Two). Those reviewed studies attempted to

understand transition and the issues between education and practice, to

try to ease the difficulties of novices' transition. However, over the past

four decades, study findings show that novices' transitional woes persist.

I argued that those research studies were based on a fixed model of

competent identity, while what really happens during novices' transition

was not well understood. Therefore, my research aimed to explore

novices' transition with this research question:

What is the novices' transitional mechanism?

My research findings indicate that novices' transitional mechanism is

their ongoing learning of the sociocultural factors of the workplace and

negotiation of membership identity, which give more nuanced

understanding to the complexity of work and the demand of such

complexity on members' interactions. From the findings, we can better

understand how the novices were learning to do their work, about the

workplace, people and their positions in relation to others, and to make sense of what competence is in the workplace.

Complexity in negotiation of participation and competence

I identified sociocultural factors which the nurses interpret and negotiate when doing their work. These sociocultural factors are the elements which I categorised into three Dimensions of the Regime of Competence. These elements indicate the need to assess the situation in the workplace, to recognise the different characteristics of people and to be able to work with them, to identify and prioritise Prized Tasks, and to express and understand each other's participation. As a whole, these elements indicate the local rules the nurses make reference to with their ongoing negotiation of meaning and relationships in their participation, which are specific, situational and necessary for the nurses to function, rather than the general normative organisational policies which project officially held expectations.

The current transitional literature focuses on novices' personal qualities, comparing them against a fixed model of competent identity: the novices were always found to be incompetent in performing skills and professional roles (refer to Chapter Two). The studies highlighted their incompetence as problematic, but did not lead us to understand the complexity of performing these skills and roles. I analysed the demands of performing Prized Tasks to better understand the workplace dynamics and how the meaning of their participation and competence were negotiated and renegotiated among the nurses.

I mainly used the administration of medicines to patients and nursing handover as examples of such tasks. As with other Prized Tasks the nurses' participation began before they had even started their shift, with their pre-assessment of the ward environment and people they were working with. Their participation was dynamic as they continually reassessed the ward environment and navigated relationships when performing these Prized Tasks simultaneously with many others.

The multiple Dimensions and Elasticity of Regime of Competence indicate the changing nature of the sociocultural factors, and the nurses' decision making and position taking are always situational and relational. Every decision they make in their participation will affect other aspects of their practice. This study illustrates how this happened through the nurses' engagement, imagination and alignment. The seemingly discrete tasks entail multiple sociocultural facets which require nurses not only to able to perform them, but also that they know the workplace, work, and people in the workplace, and are able to negotiate meaning and relational position in practice.

By exploring the nurses' participation in Prized Tasks, my study leads us to better understand the sociocultural factors which blur the empirical sharpness of the distinction between tasks which seems obvious and which one could logically make based on their checklists. The picture of what happened and how things happened behind the complexity of the job of nursing are revealed in this study. The research study findings help us to better understand the workplace, the work, and the kinds of competences and abilities required in the nurses' participation. It also poses more questions and brings further implications, which I will discuss later.

How novices negotiate their membership identity

In this study, the novices were found to be practising at different levels, and negotiating their Participating Space differently with different people in different situations. Sarah managed her relational position with Navin by taking a more submissive position, while she took a much more equal

position when negotiating tasks with Jenny. Sarah joined in casual chats occasionally. Eva was very much blended into the culture of the ward and joined in small chats intentionally; she also learnt the labels and different strategies to work with different people in different situations. She learnt when to show her abilities and take her position and when to show her seniors her respect for their position. She also tried to gain more flexibility in her participation carefully. Aidan showed the ability to share different roles and negotiate tasks with other nurses, and he participated carefully in record writing according to the workflow and the characteristics of the on-coming nurse. Aidan was observed staying in the tearoom longer when getting ready for his shift, chatting and laughing with other nurses. David was found in much a submissive position; his Participating Space was limited, and he needed support from his preceptors. He faced dilemmas over negotiating his relational position and seemed uncertain as to what was expected of him in different situations. He came to the ward much earlier than his duty time and tried hard to complete reading patients' records; he did not seem to have the time or intention to join in the chats. Overall, the novices' Participating Spaces indicate their ability to negotiate meaning as well as their relational positions with different nurses in different situations, indicating the effect of the sociocultural factors on their practice and the formation of membership identities.

I argued that there is limited focus on novices' negotiation of position in the current transitional literature (refer to Chapter Two). In this study, Participating Space as a new concept helps us to better understand members' meaning making and position taking in their participation. When members are trying to negotiate their Participating Spaces, they assert their social control over their own participation and the participation of others. For example, their Participating Spaces give them more or less flexibility in their participation with others. In a study focusing on paraprofessional workers' negotiation of personal and social agency, Kubiak and Sandberg (2011) found the care workers' negotiation of self to lie in their capacity and position in their caring work,

while power in decision making was negotiated and not fixed. Similarly, in this study, the novices and experienced nurses were found to negotiate and re-align their roles and positions. Therefore, individual learners impose their influence, as well as being influenced by their workplace.

The novices were actively involved in the negotiation of membership identity and they were found to have various degrees of status, with more or less power in their participation, rather than only being submissive as they are portrayed in the current literature (refer to Chapter Two). The novices' active participation found in this study supports the theoretical claim Wenger made, that individuals exert their agency in social experience (Wenger, 1998, p15) and through doing, talking, thinking, feeling and belonging in practice; this involves the work of identity (Wenger, 1998, p54-56). Similarly, Billett (2010) claimed that individuals engage with and make sense of their experiences through their subjectivity, and their identity emerges through their subjectivity under certain social conditions.

Therefore, novices' ongoing negotiation of Participating Spaces represents their trajectories of identification in transition. This conceptualisation extends our understanding of transition from a fixed model of competent identity to a concept of dynamic and complex membership negotiation.

Strengths and limitations

Firstly, this study is based on an acute care setting in Singapore. It depicts nurses' day-to-day participation and interaction with one another in a clinical ward and revealed the "complexity" of their workplace and their work.". The research findings could be relevant and meaningful for practitioners in that workplace or in similar settings. Although effort was

made to explore the full range of activities, this study did not aim to cover the full array of professional nursing practices. Policy makers, managers, researchers, educators and practitioners may judge whether the described context is similar to their own practice context when making any adaptation of the research findings.

Secondly, I carried out data collection, literature review, theory engagement and reflection alongside the data analysis to ensure the research processes were iterative and reflexive. As far as possible, I made constant reference to the theoretical framework to keep my observation and analysis to a social perspective, and to ensure the theoretical relevance of the whole research process. These reflexive and iterative processes also enabled me to know that I had reached the point of understanding the clinical Community of Practice, the novices and its members who worked with the novices when repeated patterns were observed. Nonetheless, my background as a nurse and my position as an insider and outsider in terms of the research setting gave me a different perspective in my data collection and data analysis from someone with a different background, and therefore the findings and the interpretation of findings might be different.

Thirdly, the observation duration was four months, which is shorter than a traditional ethnographic study. Although the findings indicate that the novices' Participating Spaces are negotiated differently in practice, they are not conclusive as to how an individual novice's Participating Space might change over time. A longer period of observation might help to understand the changes in novices' Participating Spaces and their ability to negotiate their Participating Spaces. Novices' reflective diaries could be a useful data source to add their perspective of transitional experiences. However, how well they are able to reflect on their practice and write reflective diaries might affect the data quality. Follow up interviews after the observation could be considered.

Fourthly, my study focused on nurses and their interactions. In a hospital ward, nurses work and collaborate with many other professional and nonprofessional groups, patients and the general public, handling both medical and administrative tasks, and they are at the intense focus of conflicting perspectives. Each group has its own effect on the ward situation and the nurses have to understand their perspectives and how these perspectives conflict with one another. In my study, I observed the nurses' responses to patient requests or behaviours that disrupted their workplan, and the nurses and doctors being in conflict with each other, each trying to assert their own point of view; however, these were not explored in great detail. Future larger scale studies are warranted to explore the nature of such situational factors in order to understand the hospital workplace better.

Finally, this ethnographic study explored novice nurses' transitional mechanism during their first year of practice using a theoretical framework of Regime of Competence and Mode of identification, underpinned by Wenger's Community of Practice theory. The concepts of Prized Tasks, Dimensions of Regime of Competence, Elasticity of Regime of Competence and Participating Space developed in this study add clarity to Wenger's Community of Practice theory in analysing the sociocultural factors and members' meaning making and position taking in practice. My research findings have been interpreted through the theoretical lens I adopted, which focused more on interactions and meaning making and relational positions of the nurses in practice. My findings might be different had I chosen an alternative theory.

<u>Implications for policy, education and practice</u>

The research findings suggest that novices' transition is a new learning experience for novices as well as the experienced practitioners. It is a difficult period and perhaps there is no absolutely problem-free transition. Instead of blaming the novices' incompetence, or the schools'

insufficient teaching (refer to Chapter Two), my research findings suggest we should change our views on novices' transition and see it as a necessary learning process in novices developing their membership identities. We need to find ways to better understand transition in order to ease the novices' transitional difficulties.

With the understanding that transition is part of their practice for novices as well as experienced practitioners to learn the workplace, work and people, to make meaning of their practice and negotiate their membership identity, policy makers should consider the effect of workplace sociocultural factors on novices' practice and learning. The meaning of competence in a practice setting needs to be deliberated among practitioners and reflected in policies.

As discussed, Prized Tasks indicate where the practitioners' focus of attention is. The Dimensions and Elasticity of Regime of Competence concepts illustrate the sociocultural elements of the workplace and the fluidity and negotiable nature of the Regime of Competence among the practitioners. The practitioners bring with them diverse knowledge from their past experiences into the Community of Practice and contribute to the continuing negotiation of the Regime of Competence. Therefore, the Community of Practice is evolving. The Participating Space concept indicates members' active role in meaning and identity negotiation. This concept also reflects how members navigate the interrelated Dimensions of the Regime of Competence in their negotiation of meaning and relational member-to-member positions, rather than the concept viewing their transition as a linear progression from peripheral to full participation. In this study, this shift in concept helped us to identity the novices' active involvement in meaning making and identity negotiation.

I suggest that educational effort should support practitioners in understanding the sociocultural aspects of the workplace. As Evans (2012) suggested, learning activities can be developed from work challenges. For example, in healthcare education, case scenario based simulation is used in the aspects of disease management and teamwork (McCormick, Burton and Werts, 2010), mastering of clinical procedures such as infection control (Tartari *et al.*, 2019), handling of complex clinical situations (Kesten, Brown and Meeker, 2015) and clinical emergency situations (Sevgisun, 2017). One important learning objective across all these studies was to enhance practitioners' abilities to handle situational factors. However, there was a lack of conceptual framework to help the practitioners in realising this learning objective more comprehensively.

In addition, reflection has been incorporated in professional and academic learning to develop practitioners' emotional competences (Horton-Deutsch and Sherwood, 2008), identities and roles (Coward, 2018; Cunningham, 2018). From my experience in teaching and guiding nursing students, they realised the benefits of reflection in heightening their awareness of situational factors and enhancing their abilities in communication, participation and handling of emotions. However, they felt they needed some theoretical concepts to guide their analysis of the clinical encounters they reflected upon (Chen, 2018a). In a literature review, Epp (2008) highlighted the nurse educators' struggles to incorporate reflective processes in their education due to a lack of tools and strategies to facilitate reflection.

The new concepts developed in this study can be used to construct case scenarios for simulated learning, or they could be incorporated into reflective practice to enhance practitioners' abilities in situational assessment and identifying issues of concern. The case scenario of nurse Navin and novice Sarah's interactions is such an example from the nurses' daily activities, and the new concepts were used to analyse

and understand their meaning making processes (refer to Table 9: A field-note of RNs' activities, Chapter 6). Such case scenarios can also help to make the implicit learning explicit, and incorporate multiple perspectives from different stakeholders, especially in fast-paced healthcare settings (Morris, 2012). The following aspects could be considered in workshops and guided reflection sessions:

- What is the socially desirable way for people to behave in a specific work situation?
- What are the sociocultural factors to be considered and how might these factors change?
- How does the change of sociocultural factors affect members' relational positions and meaning making in their participation?

The facilitators need to develop a good understanding of the conceptual architecture and the workplace. This can be achieved by collaboration between the teaching staff from the schools and the educators from practice settings. Their roles as border crossers (Wenger, 1998) need to be carefully analysed. Students could also learn about the sociocultural elements of the workplace through case studies and guided reflections during their clinical placements.

<u>Implications for further research</u>

The multiple Dimensions and Elasticity of Regime of Competence imply that participating in the Community of Practice requires much more than just doing the tasks. In my study, the novices' ability to negotiate their Participating Spaces varies. The novices all went through school education, so the question of 'Why can some of the novices adapt better and be accepted more quickly at work than others?' should be explored. My observation of these novices over four months found them to be at different performance levels. The trajectories of novices over time and how they progress in the Community of Practice are still not well understood. Future studies could consider exploring novices' practice

and learning over the first year of practice, or even include their final work placements during their education in schools. Observation, reflective diaries and interviews could be used for data collection. Novices' preceptors and practitioners working with novices could be invited to participate as well.

Adopting an ethnographic research approach showed the potential to understand the sociocultural issues of the workplace in this study. In addition, case study method can be considered to explore the utilisation of the new concepts in broader professional contexts. For example, through case studies, Kubiak *et al.* (2015) explored different professionals' experiences of multimembership and identification using Wenger's concepts of Landscape of Practice and Modulation of Identification. To compliment this study, individual novices' trajectories of identification can be followed up using similar case study approach. More such studies are needed in professional practice, especially in healthcare settings, where in-depth understanding of sociocultural issues is important. The questions to be considered for future studies include:

- How do practitioners understand their workplace, their work and their position in the workplace?
- What is competence in practice? How is competence negotiated?
- How does the workplace contribute to the development of practitioners over time?
- How could we help novices to transit more easily?

To summarise, I assert that novices' transitional mechanism is their evolving learning of the workplace and work, and negotiation of their membership identity. This study extends the nursing literature and the wider interdisciplinary literature on transition from focusing on the discourse of competence by presenting transition as a troublesome linear phenomenon that is resolved with time through novices'

submission to the local culture, to a broader notion of meaning, and identity negotiation among community members in practice.

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LIST OF APPENDICES

Appendix 1: List of articles reviewed

NO	Study	Setting	Participants	Data collection
1	Brakovich and Bonham,	Five-hospital	157 novice nurses in four	Cross-sectional survey using Casey-
	(2012)	healthcare	cohorts	Fink graduate nurse experience
		system		survey tool.
		southeastern		
		United States		
2	Craig, Moscato and Moyce,	University of	83 novice nurses worked six	Cross-sectional survey using self-
	(2012)	Portland.	months in two cohorts	developed survey tool
3	Lima et al., (2014)	Paediatric setting	79 novice nurses, start point,	Using the Nurse Competence Scale
		in Australia	three months, six months and	(NCS).
			twelve months	
4	Thanomlikhit and	A hospital in	178 novice nurses within one	Thai version of Casey-Fink graduate
	Kheawwan, (2017)	Thailand	year	nurse experience survey tool
5	Feng and Tsai, (2012)	A hospital in	Seven novice nurses with five	Semi-structured interview
		Taipei, Taiwan	months' working experience	

NO	Study	Setting	Participants	Data collection
6	Kumaran and Carney,	An academic	Ten novice nurses in their first-	Interview
	(2014)	teaching hospital,	year working	
7	AbdulWahab et al., (2017)	One university-	Nine novice nurses within one	Interviewed in groups
		affiliated hospital, Singapore	year of work experience	
8	ten Hoeve et al., (2018)	A hospital in	18 novice nurses	Weekly written diaries during their first
		Netherland		two years
9	Zamanzadeh et al. (2015)	Seven hospitals in Iran	12 novices	Semi-structure interviews
10	Ballem and MacIntosh,	Two teaching	Eight nurses with minimum of 5	Interview
	(2014)	hospitals in	years' nursing practice	
		Canada.	experience	
11	Brown and Crookes, (2016)	Australia	500 experienced nurses	Consensus Delphi survey
12	Missen et al., (2016)	Australia	201 experienced nurses	Online questionnaire survey

NO	Study	Setting	Participants	Data collection
13	Clark and Springer, (2012)	A hospital in US	37 novices ranging from 8 days to 19 weeks	Focus Group Discussions
14	Ortiz, (2016)	A hospital in New York	12 novices with less than one year working experience	Semi-structured one to one interview, two rounds
15	Regan et al. (2017a)	Seven Canadian provinces	42 novice nurses within 2 years; 28 nurse leaders	Focus group and interview
16	Hunter and Cook, (2018)	New Zealand	Five nurse novices for less than 6 months	Semi-structured interview
17	Ankers, Barton and Parry, (2018)	An Australian metropolitan hospital	7 novice nurses 4 to 8months of employment	Semi-structured interviews
18	Walton et al. (2018)	New Zealand	54 reflective essays by 27 novices, full stories from 6 novices	Reflective essays

NO	Study	Setting	Participants	Data collection
19	Tan, Lopez and Cleary, (2016)	hospital in	11 novice nurses	Individual interviews
20	Lynn Glassburn (2020)	Singapore A Midwestern U.S. university	27 new MSWs employed for less than 18 months	Semi-structured interviews
21	Ali et al. (2016)	South-west region of England	16 dental students, academics, general dental practitioners, new graduates, specialists and representatives of the postgraduate dental deanery	Semi-structured interviews
22	Chan and van Manen, (2018)	University of Alberta, Canada	Nine paediatricians less than 5 years working	Three focus group discussions
23	Laschinger et al. (2016)	Across Canada	Novice nurses less than 3 years of experience Participants: A random sample of 3906 Registered Nurses with less	A national two-wave survey Time 1, 1020/3743 completed questionnaires (27.3%). One year later, follow-up survey; 406 completed questionnaires (39.8%).

NO	Study	Setting	Participants	Data collection
				Questionnaire variables include
				situational, personal, intermediate
				outcomes and job-related outcomes
24	Parker et al. (2014)	Australia	55 novice nurses	Online survey and focus groups
25	Pennbrant et al. (2013)	Sweden	Two national cohorts of novice	Online survey; Of the 2090
			nurses	respondents from the two cohorts, 330
				participants responded to a question
				with narrative answers of 4–138 words
26	Cleary et al. (2013a)	A university in	147 surveys sent to novice	Used the Nurses' Self-Concept
		Singapore	nurses, a total of 80 responded	Questionnaire (NSCQ) contains 36
			(54% response rate)	items in six dimensions: Nurse
				General Self-Concept, Caring, Staff
				Relations, Communication,
				Knowledge and Leadership, and
				career satisfaction questions

NO	Study	Setting	Participants	Data collection
27	Hu et al. (2017)	A children's hospital in Shanghai, China	25 novices with 3-6 months' work experience	Observation and interviews
28	Al Awaisi, Cooke and Pryjmachuk (2015)	A university hospital in Oman	New graduates and key informants including preceptors, clinical instructors, head nurses and managers who had experience of working with new graduate nurses	Qualitative case study research, interviews, observation and documentary analysis; New graduate nurses were interviewed at two different time points during their first year of experience, with a six-month interval
29	Charette, Goudreau and Bourbonnais (2019a)	A French- Canadian	19 participants including novices, preceptors, clinical	Individual interviews, focus groups, observation and documentation.
30	Charette, Goudreau and Bourbonnais, (2019b)	academic hospital affiliated with a university	nurse specialists and nurse managers, novices had graduated 6–24 months	
31	Seah, Mackenzie and Gamble, (2011)	Sydney	Eight novice Occupational Therapists	Single semi-structured interview, 60 minutes, face-to-face;

NO	Study	Setting	Participants	Data collection
				one Skype video call
32	Chen, 2018	Taiwan	Four novice teachers This research study investigated four Taiwanese high school novice English teachers in their first year of teaching.	
33	Stoikov et al. (2020)	Queensland public health sector hospitals, Australia	Nine novice Physiotherapists less than one year and six experienced Physiotherapists more than 5 years	Semi-structured interviews were conducted with 15 focus groups
34	Griffiths et al. (2019)	Australia	Eight novice midwives	Telephone interviews
35	van Stormbroek and Buchanan, (2019)	South Africa	103/240 novice OT Responded (42.9% of the population)	Self-developed questionnaire piloted, distributed via post or online
36	Walker et al. (2013)	A regional hospital in Victoria, Australia	Novice nurses and nurse managers	Survey data collected in two consecutive years; first year, 38 novices (92.6%) and 12 Nurse

NO	Study	Setting	Participants	Data collection
				Mangers (60%) participated, second
				year, 31 novices (77.5%) and 13
				Nurse Managers (76.5%) replied
37	Halpin, Terry and Curzio	London, UK	Novice nurses	Longitudinal, explanatory sequential
	(2017)			mixed methods, cohort study. The
				standardized Nursing Stress Scale
				(NSS) was used. At the point of
				qualification (n = 288), 6 months post
				qualifying (n = 107) and 12 months
				post qualifying (n = 86), newly qualified
				nurses completed the Nursing Stress
				Scale, with 14 completing a one-to-
				one interview at 12 months post
				qualifying. Phase 4 consisted of semi-
				structured, one-to-one interviews with
				the lead author
I	1	1		1

NO	Study	Setting	Participants	Data collection
38	Ebrahimi et al. (2016)	Iran	18 RNs, including one clinical, two educational supervisors, two head nurses, and 13 nurses	From unstructured interview to semi- structured interviews
39	Lee et al. (2013)	A hospital in Taiwan	16 novices worked less than one year	Weekly focused group discussion for eight weeks and each focused group discussion lasted for two hours
40	Leong and Crossman (2015)	Five government hospitals in Singapore	26 novices less than one year and five preceptors	Novices' reflective diaries over the initial 6 months and focused group discussions
41	Moorhead (2019)	Australia	17 MSW novices newly qualified social workers in	Three in-depth individual semi- structured interviews in first 12 months
42	Bisholt, 2012a;	Four general	18 novices seven and a half	Observation and interview,
43	Bisholt, 2012b)	wards, surgery and medicine at a county hospital in	months	ethnographic approach

NO	Study	Setting	Participants	Data collection
		the central part of		
		Sweden.		
44	Thrysoe et al. (2012)	Denmark	Nine novices in their first six	Observation of five to seven hours per
			months of clinical practice from	day over a period of four to six days
			the same unit in a hospital.	per participant. semi-structured
				interviews took approximately one
				hour each, and were conducted within
				a few days of the participant
				observations
				adopted Wenger's Community of
				Practice theory for their study. They
				focused on the concept of novices'
				gaining of peripheral participation;

Appendix 2: Information sheet and consent form

Information Sheet for Participants

1. Study Information

Protocol Title:

The Evolving Identity and Competence of New Nursing Graduates in Practice: A Community of Practice Perspective

Principal Investigator & Contact Details:

XXX

2. Purpose of the Research Study

This study will recruit ward with New Nurse Graduates (NNGs) from the XXX Hospital. This study will recruit (3-30) subjects, both NNGs and ward nurses, from XXX over a period of one year. About (3-30) subjects will be involved in this study.

You are invited to participate in a research study. It is important to us that you first take time to read through and understand the information provided in this sheet. Nevertheless, before you take part in this research study, the study will be explained to you and you will be given the chance to ask questions. After you are properly satisfied that you understand this study, and that you wish to take part in the study, you must sign this informed consent form. You will be given a copy of this consent form to take home with you. This study is carried out to find out your practice, interaction and experience with your practice community. You are invited because you are an NNG. You should be having less than one year of clinical nursing practice. If you have had worked as a nurse before your study, you are not eligible to participate in this study. You should be above 21 years old for this study.

3. What procedures will be followed in this study

If you take part in this study, you will be carrying on with your activities as what you are currently doing in the hospital. The researcher will be there to observe, but not to interfere or comment on your activities. XXX

You are also invited to take part in focus group interview with ward nurses. The focus group interview will be arranged in a private room and will be not more than 2 hours. The focus group discussion will be audio recorded. You will be provided with pseudonyms as an additional measure to protect your privacy. Topics about your practice and your experiences being an NNG will be discussed during the focus group. Ms Mary Chen, a lecturer from Singapore Institute of Technology (SIT), will carry out non-participative observation and focus group discussion. XXX The observation and focus group interview are the methods used to understand the ward routines and your interaction with people, not to judge your performance. You will be asked to verify the observation notes and the transcript when need. The research findings will be shared with you.

4. Your Responsibilities in This Study

During the observation, you will carry on with your routine work. The focus group discussion will be arranged out of your working hours.

5. What Is Not Standard Care or is Experimental in This Study

You will be followed by the researcher on the days of the observation. The study procedures are only being performed for the purposes of the research and are not part of your routine job training or assessment.

6. Possible Risks and Side Effects

This is a non-intervention study. Therefore, no injury is anticipated to you. If there is any emotional upset during the focus group discussion, you will be supported and referred to your peer buddy when needed.

7. Possible Benefits from Participating in the Study

This research could provide meaningful understanding of New Nursing Graduates' practice and how they negotiated their practice within nursing team. The findings will contribute to the understanding of the nurses' practice in the ward and the New Nursing Graduates in gaining their competence in practice.

Through the publication of the research findings, you and other members of the community will have better understanding of your practice in the social context.

8. Costs & Payments if Participating in the Study

If you complete the study, you will receive \$50 cash voucher as a token of appreciation.

There are no costs involved in your participation in this study.

9. Voluntary Participation

Your participation in this study is voluntary. You may stop participating in this study at any time. Your decision not to take part in this study or to stop your participation will not affect your work or any benefits to which you are entitled. If you decide to stop taking part in this study, you should tell the researcher

However, the data that have been collected until the time of your withdrawal will be kept and analysed. The reason is to enable a complete and comprehensive evaluation of the study.

In the event of any new information becoming available that may be relevant to your willingness to continue in this study, you will be informed in a timely manner by the researcher

10. Compensation for Injury

This is an observational and focus group study. The questions asked in the focus group are generally about your practice, therefore, it is unlikely to expect any injury to you.

XXX without legal commitment will compensate you for the injuries arising from your participation in the study without you having to prove XXX is at fault. There are however conditions and limitations to the extent of compensation provided. You may wish to discuss this with the researcher.

By signing this consent form, you will not waive any of your legal rights or release the parties involved in this study from liability for negligence.

11. Confidentiality of Study and Medical Records

Your participation in this study will involve the collection of "Personal Data". "Personal Data" means data about you which makes you identifiable (i) from such data or (ii) from that data and other information which an organisation has or likely to have access. Information and "Personal Data" collected for this study will be kept confidential. Your records, to the extent of the applicable laws and regulations, will not be made publicly available.

However, the NHG Domain Specific Review Board and Ministry of Health will be granted direct access to your original study records to check study procedures and data, without making any of your information public. By signing the Informed Consent Form attached, you (or your legally acceptable representative, if relevant) are authorising (i) the collection, access to, use and storage of your "Personal Data", and (ii) the disclosure to authorised service providers and relevant third parties.

Data collected and entered into the Case Report Forms are the property of XXX. In the event of any publication regarding this study, your identity will remain confidential.

Research arising in the future, based on your "Personal Data", will be subject to review by the relevant institutional review board.

Information collected for this study will be kept confidential. The research data, to the extent of the applicable laws and regulations, will not be made publicly available.

In the event of any publication regarding this study, your identity will remain confidential.

By participating in this research study, you are confirming that you have read, understood and consent to the Personal Data Protection Notification available at (https://www.pdpc.gov.sg/Legislation-and-Guidelines/Personal-Data-Protection-Act-Overview).

12. Who To Contact if You Have Questions

If you have questions about this research study, you may contact Ms Mary Chen Xiaorong at XXX

The study has been reviewed by the NHG Domain Specific Review Board (the central ethics committee) for ethics approval.

If you want an independent opinion to discuss problems and questions, obtain information and offer inputs on your rights as a research subject, you may contact the NHG Domain Specific Review Board Secretariat at xxxxxxxx. You can also find more information about participating in clinical research, the NHG Domain Specific Review Board and its review processes at www.research.nhg.com.sg.

If you have any complaints or feedback about this research study, you may contact the Principal Investigator or the NHG Domain Specific Review Board Secretariat.

Consent form

Protocol Title:

The Evolving Identity and Competence of New Nursing Graduates in Practice: A Community of Practice Perspective

Principal Investigator & Contact Details:

XXX

I voluntarily consent to take part in this research study. I have fully discussed and understood the purpose and procedures of this study. This study has been explained to me in a language that I understand. I have been given enough time to ask any questions that I have about the study, and all my questions have been answered to my satisfaction. I have also been informed and understood the alternative options available and their possible benefits and risks.

By participating in this research study, I confirm that I have read, understood and consent to the Personal Data Protection Notification.

Name of Participant Signature Date

Investigator Statement

I, the undersigned, certify that I explained the study to the participant and to the best of my knowledge the participant signing this informed consent form clearly understands the nature, risks and benefits of his / her participation in the study.

Name of Investigator / Signature Date
Person administering consent

Appendix 3: Observation plan

Observation field-note		Series No:
Hospital: Shift time: fromhrs to	Ward: hrs	Discipline:
Novice's assignment:		
Staff profile (Only the design will not be identified):	jnation, not the	e name will be recorded. They
Timeline of activities across	s the shift	
Activity observation record		
Name of activity:		
Activity starting time:		
Activity end time:		
Members involved (Only th recorded. They will not be i	•	not the name will be
Novice's role:		
Critical interactions among contact, conversation)	members (boo	dy movement, gesture, eye
Significant indistinguishable shift	e activities the	Novices have done during the
Was the Novice doing othe	r things?	
Did the indistinguishable ad	ctivity interrupt	his/her work?
How often did this happen?	?	
Was it Novice's initiation or	⁻ been asked to	o do?
Did Novice reject with or wi	ithout reason?	

Appendix 4: Focus group topic guide

Ask participants to share their typical day with the following sample questions:

- •Could you describe to me a typical day at work? What are the important things for you to manage during your shift? Why?
- •How do you work with your team? Or your preceptor? How do you get help when need? What would be the ideal situation you like?

Ask participants to share Handover activities with the following sample questions:

- •What is the purpose of roll call? What is your role in roll call?
- •How do you prepare for handover?
- •What are important during handover?
- •What are other factors influence nurses in handover?

Ask participants to share the role of in-charge nurse with the following sample questions:

•Tell me your day's work as an in-charge nurse. What are the important things for you to manage during your shift? Why? Any challenges?

Ask participants to share their view on NNGs (New Nursing Graduates) in practice with the following sample questions:

- •What are the challenges for NNGs? What are the difficulties NNGs are facing?
- •What are the things as NNGs should have?
- •What are the things you like to have in helping NNGs with their practice and learning?

Ask participants to share their work goals and values with the following sample questions:

- •What are the most important things in your work? What are they? Why?
- •In your opinion, what is the function of nursing in the system?

•How do you handle challenges and differences at work?

Other aspects on work and personal life, with sample question:

What is the impact of work on personal life/wellness?

Appendix 5: Analysis of record writing task

