Troublesome Mental Health Knowledge in a Western Canadian undergraduate Nursing education program: Student and Faculty Perspectives

Thesis submitted in accordance with the requirements of the University of Liverpool for the degree of Doctor of Education by

Donald M. Leidl

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Acknowledgment

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Abstract

This project was conducted under the assumption that examples of troublesome knowledge exist in mental health nursing education curricula. The purpose of the project was to identify specific mental health content that nursing students and faculty identified as being troublesome and organized them using the definitions established by Perkins (1999) and Meyer & Land (2003). A sequential mixed methods research design was used to investigate nursing students and faculty member perspectives on troublesome mental health nursing content. Data were collected using surveys and focus groups and analyzed using a combination of quantitative and qualitative methods.

From the project data, troublesome mental health nursing content was organized into five themes including the spectrum of mental illness, therapeutic relationships and boundaries, praxis, professionalism in nursing, and brain chemistry changes and management. Troublesome mental health nursing content was also organized according to troublesome form, revealing that students focused more on alien/foreign content and faculty focused more on tacit content.

The student and faculty perspectives on troublesome mental health nursing knowledge are different. However, specific mental health nursing content was identified by all participants as being troublesome. This overlap consisted of troublesome knowledge for students with unresolved troublesome knowledge for faculty. To explain the learning examples collected during this project, a learning pathway was created, providing a visualization of the student’s movement through the liminal spaces associated with learning troublesome mental health nursing knowledge.
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Glossary of Terms

RPNAS – Registered Psychiatric Nursing Association of Saskatchewan.

NCLEX – National Council Licensure Examination. A nationwide examination for the licensing of nurses in the United States and Canada since 1994 and 2015, respectively.

SRNA – Saskatchewan Registered Nurses Association.

CNA – Canadian Nurses Association.

ICN – International Council of Nurses.
Chapter 1 – Introduction to the Practitioner Research

1.0 – Introduction and overview

Nursing education has responsibility to adequately prepare undergraduate nurses entering mental health clinical environments after graduation. However, there are numerous examples from different nursing education perspectives that indicate that there is room for and a need for improvement (Warelow & Edward, 2009; Morrissette & Doty-Sweetham, 2010; Melo, Williams, Ross, 2010; Cavanaugh, 2014). In order for nursing education programs to adequately prepare students for practice in mental health nursing clinical environments, important decisions regarding the inclusion of mental health nursing curricula, student clinical learning placements, and supports for student learning need to be made. Student understanding of mental health nursing content is a prerequisite necessary before this knowledge can be applied safely, effectively, and efficiently in a mental health clinical environment, so issues related to student understanding need to be identified and taken into consideration when planning student learning experiences.

Knowledge is difficult to define as it is invisible and intangible, only to be recognized when it is experienced or acted upon (Hunt, 2003). Sveiby (1997, p.37) defines knowledge as ‘a capacity to act’; offering a clear distinction between having knowledge (which cannot be observed) and the action potential associated with knowledge (which can be observed). Troublesome knowledge by nature is difficult for students to learn and/or understand (Meyer & Land, 2006) and thus difficult to put into action. This project argues that there are un-identified, discipline specific examples of troublesome mental health nursing knowledge that are difficult for nursing students to learn, apply in clinical practice, and incorporate to their professional practice. To develop this argument, this research explored students’ and faculty’s perspectives on troublesome mental health nursing knowledge, gathering specific examples of mental health content/concepts within the curriculum of an undergraduate nursing education program in a large Western Canadian University.

It is important to also point out that the definition of mental health is still contested and that itself represents an example of a troublesome concept. Manderscheid et al.
(2010) provides an outline of how the definition of mental health has evolved over the last 50 years and presents a contemporary definition of mental health, splitting it into two distinct continua; mental wellness and mental illness. Mental wellness refers to the degree to which a person feels positive and enthusiastic about their life, factoring in their capacity to manage their feelings and behaviors, ability to realistically assess limitations, level of autonomy, and ability to cope effectively with stress (Manderscheid, 2006). By contrast, mental illness refers specifically to the presence or absence of disease (Ng, Davis, Manderscheid, & Elkes, 1981).

The Diagnostic and Statistical Manual or DSM is currently in its fifth version and is used within contemporary mental health practice as guide in diagnosing and treating mental illness. Clinical definitions of specific mental illnesses vary widely and include conditions that affect cognition, emotion and behavior (American Psychiatric Association, 2013). This is another troublesome aspect of understanding mental health, as the scope of mental illness continues to expand, with new diagnoses being introduced into each version of the DSM with other diagnoses being left out, renamed, or linking to other disorders (Busfield, 2012). The concept of recovery in mental health is another contested area where multiple definitions exist creating again another troublesome element of mental health (Bonney & Stickley, 2008). This has resulted in a number of recovery models being proposed, all of which attempt to set out how the theoretical principles of recovery can be actualized in mental health practice (Stacey & Stickley, 2012), further complicating the teaching of the concept of recovery to nursing students. Recovery-orientated care is grounded in the recognition of the importance of collaborative relationships, where the sharing of power enables mental health service userd to develop resilience and to improve the positive aspects of their lives (Shanley & Jubb-Shanley 2007). This research has the potential to further clarify the troublesome elements associated with mental health, contributing to the growing body of research in this area.

1.1 – The researcher

I have been working as a registered nurse since 2001 after obtaining my Bachelors of Science in Nursing degree. My clinical practice background started in
adult acute psychiatry and then moved into emergency room assessment and interventions for acutely ill adult and adolescent populations. Since 2011, I have been in a lecturer position in the College of Nursing at a large western Canadian university, teaching undergraduate nursing students. My current teaching responsibilities include courses in nursing foundations, therapeutic communication and relationships, mental health nursing, individual and group therapeutics, education and leadership, and global health systems and health policy development.

I have extensive experience in teaching mental health nursing content to nursing students in the program and clinical settings. In 2007 with another local nursing education program, I taught students in the program environment and clinical environments and previous to that taught students in the acute psychiatry clinical environments with four other institutions in another Western Canadian province. During these teaching experiences in the program and clinical environments, I witnessed many examples of students struggling to learn mental health nursing knowledge. It was from these early teaching experiences that my interest in investigating student learning in program and clinical environments started to develop.

Western Canadian culture, specifically that of the province in which I currently reside has also impacted and influenced my desire to undertake this research. Much open discrimination exists against people who use mental health services, eroding their trust and complicating their efforts to access the healthcare system as well as the therapeutic efforts of the mental health clinicians in the healthcare system. Having witnessed this discrimination in past personal and professional environments, I made a conscious decision early on in my nursing academic career to do something about it. Students entering into nursing education are also impacted, bringing with them assumptions, misconceptions, bias, and discriminatory views of people who access mental health services, all significant learning barriers that need to be overcome if they are to become therapeutic mental health nurses. Teaching future nurses provides the opportunity to engage and challenge the students’ perspectives on mental health and on those who access mental health services. My sense of social justice guides my actions in this regard, actively trying to bring about positive changes in the cultural and societal landscape where I live and work.
1.2 – The research environment

The Western Canadian University where I am currently employed has a long and distinguished nursing education history offering nursing degrees at undergraduate, graduate and doctoral levels. The current undergraduate program is four years old and aims to prepare a nursing generalist, providing the foundational knowledge and clinical experience needed for graduates to enter into a wide range of medical/surgical and mental health nursing environments after graduation. The pre-existing program is still being phased out, and collaborations between faculty members are resulting in the creation of new courses with new delivery and evaluation methods being trialed and/or implemented.

The mental health nursing curriculum is embedded within the generalist program, presenting the challenge of providing a balanced medical/surgical and mental health nursing education to students. A position statement for the International Council of Nurses (ICN) on mental health nursing education states that even though mental health is an essential element of wellness, it is often neglected, under-resourced in nursing education, and undermined by stigma in most societies (ICN, 2009). My college is aware of this trend in global nursing education and views the ongoing development of the new generalist nursing curriculum as an opportunity for improvements to be made in how mental health nursing content is organized, delivered, and evaluated.

1.3 – Project Background: Mental health nursing in Western Canada

Mental health nursing is a recognized specialty in nursing that focuses on the care of patients with mental health problems through the continuum of healthcare services offered in the Canadian healthcare system. Specialty knowledge is needed to effectively practice in this clinical environment and includes content focused on mental health assessment, therapeutic relationship building, psychotherapeutic theories and counseling, and psychopharmacology (RPNAS, 2015). Entry to practice in mental health clinical environments in western Canada is either by a Bachelor’s of Science in Nursing and Registered Nursing license (RN) or a Bachelors of Psychiatric Nursing degree and a Registered Psychiatric Nursing license (RPN). Licenses are obtained by passing an NCLEX style exam offered through the associated provincial professional
nursing associations. Maintenance of the licenses requires participation in ongoing professional development and education to enhance their practice (SRNA, 2015).

Historically, mental health services in western Canada have traditionally been delivered by Asylum attendants and registered nurses. In the early 1920’s, the first Registered Psychiatric Nursing (RPN) school opened in western Canada, providing for the first time an undergraduate prepared nurse with a specialty practice focus in mental health (Pringle, Green & Johnson, 2004). These schools arose to meet the significant nursing shortages that existed in mental health services at the time; just as other generalist programs were created to meet the shortage of nurses in the rest of the healthcare system. Some of these new programs were combined generalist/psychiatric programs producing graduated registered nurses with specialty knowledge in mental health (Pringle et al. 2004). After World War II, RPN standards and competencies were formalized by professional psychiatric nursing associations in western Canada, ensuring a high quality and consistency of education across programs. This trend or rise of RPN education programs did not spread across Canada, but stayed localized to western Canada, while eastern Canadian schools adopted more holistic nursing education models that incorporated mental health nursing content into the education of registered nurses (Pringle et al. 2004).

Focusing on mental health nursing in Saskatchewan, some unique challenges exist due to its rapidly expanding and diversifying population. Due to a strong economy that is driven by robust energy, agricultural, and technology sectors, Saskatchewan has become a destination for many new Canadians looking for a place to settle. This new wave of immigrants is something that Saskatchewan has not experienced since the 1920’s, after which the population growth stabilized at around a million people for the next 85 years (Government of Saskatchewan, 2015). During this time of neutral growth, the population consisted mostly of people of central and/or western European descent, with only approximately 6.3% consisting of visible minorities (Government of Saskatchewan, 2015). However, since 2005, the population has grown from 995,000 to over 1.15 million, an influx of over 115,000 people, most of which are new Canadians from places like Asia, Northern Africa, and the Middle East (Government of Saskatchewan, 2015). This expansion and diversification challenges the cultural views
of the population of Saskatchewan as well as nursing education programs in the province to prepare culturally aware and competent nurses to meet the healthcare needs of those new to Saskatchewan. This also presents a unique challenge to the preparation of mental health nurses in the province as mental illness and stigma associated with mental illness can have strong cultural roots that can only be addressed by culturally competent clinicians (Trujillo, 2008; Juckett & Rudolph-Watson, 2010).

The transformative nature of nursing education should also be acknowledged, as many student nurses have their existing mindsets and perspectives challenged during their program, leading to the new perspectives and self-definitions (Holland Wade, 1998; Kear, 2013). The program of study involved in this research uses the transformative learning framework of Mezirow (2000); a cognitive learning theory stating that new-perspectives and meaning are the result of an individual's lived experiences; and reflective practice as outlined by Schon (1983) to facilitate student learning and transformation. According to Mezirow (2000), for transformative learning to occur, adult characteristics such as awareness, emotional maturity, empathy, and self-control must be present in the student. Reflective practice is the capacity to reflect on prior actions so as to engage in a process of continuous learning (Schön, 1983), indicating that experiences alone are not sufficient for new learning and personal growth to occur. Schon (1983) and Benner (2001) both argue that it is the students' capacity to engage in reflection in and on their practice that leads to new perspective, new knowledge, and personal transformation. As students are exposed to new nursing knowledge, their existing perspectives are challenged. As they apply this new knowledge in clinical practice, reflection allows for existing perspectives to be challenged and new perspectives to be formed, thus resulting in both personal and professional transformations.

The concept of emotional intelligence is also relevant to this research due to its importance to mental health nursing education as well as professional and personal development. Emotional intelligence is defined as the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions' (Mayer, Caruso, Salovey, & Sitarenios, 2001). Described by Bar-On (2002) as a collection of emotional and social competencies,
emotional intelligence can also help to determine a person’s ability to adapt during interactions with one’s self and with others, a valuable skillset in mental health nursing. The nursing profession demands that the nurse utilize their perceptions in the process of care to gain an understanding of the patient emotions and to manage patient situations towards the goal of effective patient care, and thus involves emotional intelligence (Powell, Mabry & Mixer, 2015).

1.4 – Threshold concepts and troublesome knowledge

1.4.1 – Threshold concepts

Threshold concept theory offers a unique perspective on knowledge and transformation, viewing specific concepts within a discipline as ‘learning spaces’ that need to be passed through, understood, and internalized before a student can develop their level of understanding beyond that of a novice (Lucas, Mladenovic, 2007; Entwistle, 2008). Meyer and Land (2006, p.1) described a threshold concept as a “portal or gateway through which new and previously inaccessible ways of thinking” can be attained. Meyer and Land (2003) identified five characteristics of a threshold concept stating that it is (likely to be) transformative, (probably) irreversible, (potentially and possibly inherently) troublesome, and have the capacity to be integrative and bounded (Meyer & Land, 2003). Irvine & Carmichael (2009) stated that the majority of research into threshold concepts is focused on their identification within different disciplines and, to a lesser extent, on their characteristics in relation to mastery and expert discourse (p. 116). This research addresses the latter, focusing on the troublesome characteristics associated with mental health nursing content that is encountered by students during program and application education, viewing it as a learning barrier that needs to be overcome so student understanding can be attained.

1.4.2 – Troublesome Knowledge

Troublesome knowledge by definition is content that students find difficult to learn and/or understand (Meyer & Land, 2006), a requirement necessary before student nurses can apply new knowledge and incorporate it into their nursing practice. Troublesome knowledge as it relates to the nursing context will be explored in more
detail in Chapter 2. As stated previously, during my career as a nurse educator in both the program and clinical environments, I have seen many examples of mental health nursing concepts that were troublesome for students to learn. The first thoughts about my thesis project emerged from these past practice and teaching experiences, taking on more shape during the EdD programme modules, ultimately forming the questions that my project aims to answer. As a Faculty member and Registered Nurse (RN) with an extensive psychiatric clinical focus, I feel strongly about improving the preparedness of the new graduates entering in this clinical area and in the quality of care received by mentally ill patients. I believe my research project has the potential to enhance the learning experiences and skill development of new graduates as well as improve the teaching skills of Nursing Faculty, ultimately translating into a higher quality of care for the mentally ill. The focus of my research project fits very well with my professional and personal values as well as my professional nursing experiences and passions.

1.4.3 – Application to Nursing Education

The transformative nature of Nursing education is well represented in the nursing research literature (Owen-Mills, 1996; McAllister,2005, Tamara, 2013). Land, Meyer & Baillie (2010) state that the threshold concepts approach builds on the notion that there are concepts, or specific learning experiences from which a student can gain new perspectives, allowing things formerly not perceived to come into focus for the first time. This new awareness in the student has the potential to lead to a transformed way of understanding, or interpreting, or viewing something, resulting in a reformulation restructuring of the learners’ frame of meaning (Meyer, Land, & Baillie, 2010). Timmerman (2014) states that the threshold concepts approach also places a focus on the importance of different disciplinary contexts, specifically how different disciplines identify with different threshold concepts and have different ways of interpreting them and teaching them to students. This could mean that nursing education would identify with its own unique threshold concepts and troublesome knowledge related to mental health and that their identification has the potential to provide insights into student learning and possibly the transformative nature of nursing education.
1.5 – Mental health needs of the population and the Healthcare System

1.5.1 – Continuum of mental health nursing care

Undergraduate nursing students are expected to have the foundational nursing knowledge necessary for them to enter into the varied mental health clinical environments within the healthcare system. Within the Canadian health care system, different clinical environments are often referred to as the mental health services continuum of care, representing the flow of patients through the services offered in a healthcare system. In the province where this research takes place, emergency departments, in-patient acute units, short and long-term rehabilitation, community based clinical environments, and addiction/concurrent disorder services make up the primary mental health services offered through to continuum of care (Austin & Boyd, 2015). Partnerships with other healthcare related services and professions such as pharmacy, dietary, long-term care, and addiction services, are also included in the mental health services continuum of care (Austin & Boyd, 2015). A significant amount of knowledge and skills are necessary for a generalist nurse to practice in mental health, challenging nursing education programs to find efficient and effective ways of preparing students.

1.5.2 – Recruitment and Retention

Clinical environments such as mental health have high levels of caregiver burnout as well as problems with nursing recruitment and retention (Sorgaard, Ryan, Dawson, 2010). Morrissette (2011) argued that recruitment and retention problems could be eased if students were better prepared to enter into mental health clinical environments and/or have had positive learning experiences during their clinical learning. Factors that greatly impact their decision to work in mental health after graduation included their apprehensiveness about going into mental health environment as well as their own biases and attitudes towards mental health and patients with mental illness (Cleary, Happell, 2005). Any actions that result in enhanced student learning experiences in program or clinical settings can positively impact the recruitment and retention nurses into mental health.
1.6 – Thesis Overview

This chapter presented an overview of the researcher, the research environment, and the research project itself including and introduction to threshold concepts and troublesome knowledge. Chapter 2 is focused on the literature review associated with my research and is organized into content themes that form the theoretical foundations and rationale for my argument. The process used to search and review the literature is described and the research question is introduced. Chapter three presents the project methodology and design, including its rationale a review of the ethical considerations involved with this project. The participant inclusion and exclusion criteria along with a complete overview of the project are also presented. In Chapter four, the quantitative analysis is presented. This chapter also contains graphs and diagrams associated with the data collected from the student and faculty surveys’. Chapter five presents the qualitative analysis, organizing the qualitative data as content themes’ and discussing the process of how the data were clustered together. Chapter six is an integration of these findings, organizing them into a comprehensive answer to the projects research question. A conceptual learning pathway developed in response to the data collected is also presented. Finally, Chapter 7 presents the implications and limitations of this research as well as new knowledge gained from this research.
Chapter 2 – Review of the Literature

2.0 – Introduction and overview

An extensive literature review was undertaken with existing related theoretical knowledge and research being explored and its robustness examined for the purpose of establishing a foundation for the research. Gaps in the literature were uncovered and used to guide my research question development. The rationale for inclusion and relevance of the six main content themes explored during the project planning stage are presented below. Research drawn upon during the data analysis will be presented separately at the end of the chapter.

2.1 – Searching the literature

Health sciences and education databases available through my local institution and the University of Liverpool were the primary literature sources used for my project. The terms ‘threshold concept’ and ‘troublesome knowledge’ were combined in a Boolean search with ‘Nursing’ yielded around 150 and 50 resources respectively. These same terms when combined in a Boolean search with ‘Nursing’ and ‘education’, narrowed the results further to around 76 and 18 resources respectively. As the project aimed at identifying forms of troublesome mental health nursing knowledge, a background search into what is viewed as ‘Nursing knowledge’ was completed. The phrases ‘Nursing knowledge’ and ‘Nursing education curriculum’ yielded many results, but when combined in a Boolean search with ‘troublesome knowledge’, results were again narrowed to around 60 and 5 results respectively. To understand student barriers to learning troublesome content, educational methods in nursing education was the next literature area explored. The term ‘educational methodologies’ yielded thousands of results, but when combined in a Boolean search with ‘Nursing education’ and ‘mental health curriculum’, the results were narrowed to around 50 resources. It was from this initial pool of resources that I reviewed and organized the literature into various themes that served as the foundational support for the various aspects of the study.
2.2 – Reviewing the literature

Only literature subjected to peer reviews were selected. Additionally local, national, and international professional body websites were searched for relevant literature. The publication dates of the selected resources range from 1960 to 2015 and included seminal works as well as recent publications. The majority of the resources used were between 2007 and 2015. Foundational themes were established to help categorize and organize the search. These themes started out as areas of preliminary research focus and changed throughout the duration of this study, with new content being introduced and the focus of research changing slightly as the study progressed.

As the project is focused on troublesome knowledge exploration, a major search and literature process was focused around troublesome knowledge and threshold concepts. As Nursing is the discipline in which troublesome knowledge is being investigated, the body and boundaries of nursing knowledge needed to be clearly defined and explored. Literature related to educational methodologies associated with nursing education also needed to be explored. The boundaries and scope of the mental health nursing curriculum also needed to be explored so that a clear distinction can be made between mental health nursing knowledge and general nursing knowledge. Related student learning experiences associated with mental health nursing knowledge were also explored to uncover potential examples of troublesome mental health nursing knowledge from the student perspective that may have already been identified but not classified as troublesome knowledge. Faculty teaching experience with mental health nursing knowledge was also explored for the purposes of uncovering examples of troublesome mental health nursing knowledge from a faculty perspective. These six themes are explored in more detail below and represent not just the scope of the literature review, but also the order in which it was undertaken.

2.2.1 – Theme 1: Threshold concepts and troublesome knowledge

The idea of troublesome knowledge was first described by Perkins (1999) who applied a social constructivist perspective to the field of education with the intention of being able to encourage students to become more active in their learning (Hill, 2010). In his research, Perkins (1999) identified four types of knowledge that can be
troublesome for learners; inert, ritual, conceptually difficult, and foreign. Meyer and Land (2005) built upon the work of Perkins, adding that professional knowledge can also be troublesome to learn or explain due to its tacit nature; so ingrained into their practice that it is used unconsciously or without thought. The transformative nature of threshold concepts are a logical fit for a healthcare curriculum such as nursing that encourages personal transformation, life-long learning, and ongoing professional development (SRNA, 2015).

Threshold concepts are closely linked to troublesome knowledge. Cognitively understanding of a threshold concept is significant and substantial, often transforming the learner’s view on related materials or concepts, their belief system, or even their world view (Meyer & Land, 2005). However, these cognitive changes are dependent on the learner’s ability to understand and gain meaning from the threshold concept, a process that requires the troublesome characteristic to be recognized by the student and overcome (Kiley & Wisker, 2009). This project is focused on uncovering examples of troublesome mental health nursing content that students must resolve during their transformative nursing education process.

To expand on the forms of troublesome knowledge identified by Perkins (1999) and Meyer & Land (2003), inert knowledge is about the information that people carry around in our minds but is rarely used in our everyday lives, an example being the specific words in our vocabulary that people only rarely use (Perkins, 1999). Hills (2010, p.81) describes ritual knowledge as “information that lacks meaning and tends to form part of a routine”, an example being the names of persons, places, or specific dates (Perkins, 1999). Conceptually difficult knowledge can be found in practically any discipline, but is most often associated with academic areas such as mathematics or the sciences (Perkins, 1999, 2006; Meyer & Land, 2006). Foreign or alien knowledge is described as a conflict between different perspectives, an example being an historical event perspective that is interpreted from a current perspective (Perkins, 2006). An example of foreign or alien knowledge is the specific vocabulary or language associated with a discipline, forming a barrier that must be overcome become learning can occur (Hill, 2010). Lastly, professional or tacit knowledge is described as common or professional knowledge that is used on a regular basis but of which people are only
peripherally aware (Meyer & Land, 2003), an example being professional knowledge that is applied intuitively or unconsciously in everyday practice after years of formal education and lived experience in a specific discipline. As tacit nursing knowledge is gained through lived experiences, it cannot be taught directly to students in program setting. Rather, students can be instructed in the clinical setting on how tacit knowledge can be gained through application, reflexive practices, lifelong learning, and participating in ongoing professional development activities.

The literature review uncovered a few articles related to threshold concepts and troublesome knowledge in mental health nursing education. In a theoretical review, Stacey and Stickley (2012) explored recovery as a potential threshold concept in mental health nursing and Clouder (2005) explored caring as a potential threshold concept for a more general healthcare professional perspective. McAllister, Lasater, Stone, and Levett-Jones (2015) arguing for the utilization of literature within a transformative learning approach to integrate threshold concepts into an undergraduate nursing curriculum, used the examples of otherness and stigma as threshold concepts. Levett-Jones, Bowen, and Morris (2015) present the findings on a research project using virtual online communities to teach threshold concepts in an undergraduate nursing education program, identifying social justice, patient safety, and person-centered care as threshold concepts. These research-based articles are focused on potential mental health nursing threshold concepts, all of which were identified as being troublesome for student to learn. In my study, these examples informed the creation of the first student survey, formulating a list of troublesome mental health nursing knowledge that could be presented to student participants.

2.2.2 – Theme 2: Nursing knowledge: Roots and forms

With the identification of troublesome mental health nursing knowledge being the focus of my research, clear definitions of what constitutes nursing knowledge needs to first be established. It will be from these discipline specific definitions of nursing knowledge from which examples of troublesome mental health nursing knowledge will be identified. A perspective on nursing knowledge held by my program and many others in Western Canada is rooted in the work of Carper (1978) who proposed ‘four
ways of knowing’ which include empirics, ethics, esthetics, and personal. Empirical knowledge is the objective, abstract, and general knowledge that is quantifiable and verified through repeated testing over time. Ethical knowledge involves the choosing, justifying, and judging actions involving moral duty, rights. Esthetic knowledge involves the unique and individual art of Nursing. Personal knowledge involves the development of nursing intuition, or the awareness of self and others in a relationship that is subjective, concrete, and existential and does not require mediation through language obligations (Carper, 1978). Regarding their impact on my study, these classifications represent distinct forms of nursing knowledge, each having the potential of containing specifics concepts and/or content that could be troublesome.

My program’s perspective on nursing knowledge has also been greatly influenced by the work of Benner (1982) whose foundational research into nursing knowledge led to the creation of her ‘novice to expert’ learning model. Benner’s work is particularly well aligned with Meyer & Land’s (2006) description of professional knowledge and why it is troublesome for students. Building on the Dreyfus model of skill acquisition (1980), Benner generalizes the model and applies it to the development of professional nursing knowledge stating that nurses move through phases of knowledge development, starting out as a novice and progressing to an expert. The professional development of the nurse described by Benner’s model represents parallel thinking to complexity theory, providing a descriptive model that offers a framework from which to understand how a complex system adapts to its environment and deals with stressors and uncertainty (Sussman, 1999). This model also fits well with troublesome knowledge in that for student to move from novice to expert, troublesome content that represent learning barriers must be identified and overcome. The Dreyfus’s skill acquisition model (1980), with Benner’s novice to expert model (1982), and troublesome knowledge (Perkins, 1999; Meyer & Land, 2003), provide a framework from which to understand how professional nursing knowledge is developed, the barriers involved, and a means of evaluating student learning and development. With the existing definition of troublesome knowledge focusing on cognitive knowing, nursing knowledge that includes affective, application based, and intuitive knowledge may uncover examples’ of troublesome knowledge that would be otherwise difficult to classify.
2.2.3 – Theme 3: Educational methodologies

As the methods used when teaching troublesome knowledge can positively or negatively impact the quality of the student learning experience (Meyer & Land, 2005), nursing education curriculum design and teaching approaches used, including their underlying theoretical foundations, need to be understood. Constructivism asserts that learning involves the building of constructs in the student mind through which they interpret the reality around them (Svinicki, 1999). Nursing education utilizes the constructivist educational methodology to provide a decision making framework to aide faculty in the design and delivery of content to students (Hunter, 2008; DeCoux Hampton, 2012). Hunter (2008) describes the use of constructivism to design and teach a nursing course in cultural competency and DeCoux Hamptom (2012) conducted a qualitative study on its effectiveness as a methodology to achieve specific mental health nursing learning outcomes. Both articles indicated that constructivist teaching approaches decreased things like stigma associated with cultural differences and mental illness by using teaching approaches that challenge the students’ existing beliefs and encourage reflection. Carper (1978) identified ways of knowing that align well with the description of scientific realism proposed by Moses and Knutsen (2007) as they incorporate aspects of both naturalistic and constructivist methodologies. Nursing and scientific realists share the same belief that “the social world is full of complexities (constructivist perspective) and that the best way of exploring these complexities is through scientific research (naturalist perspective) (Moses, Knutson, 2007, p.14).

These seminal works in addition to the contemporary nursing research helped to create my perspective on how nursing students learn, and their work continues to influence my perspective on how new knowledge is generated and validated within nursing education. An understanding of student learning, curriculum design, and teaching method selection should provide the knowledge necessary to effectively and efficiently identify specific mental health content that is troublesome.

2.2.4 – Theme 4: Mental health curriculum in generalist nursing education

Criticisms from Western Canadian mental health nursing regulatory bodies of the previous undergraduate Nursing curriculum provided by my institution identified that it
was inadequate in delivering mental health nursing content (Education Briefing: RPNAS, 2002), and I wanted to find out if this was a common problem within nursing education programs or if this was an isolated example. Understanding how trends in Canadian nursing education stand globally, comparable international nursing programs such as those in Australia and the UK were also reviewed (Stuhlmiller, 2005; Happell, 2006; Hewitt, 2009, Snowden, 2010).

Happell (2006) argued that mental health nursing education changed radically in the 1990’s when comprehensive nursing education programs became popular in Australia, a shift in nursing education that ultimately led to undergraduate nurses being poorly prepared to practice in mental health in Australia (Cleary, Happell, 2005; Happell, Robins, & Gough, 2005; Happell, 2009; Cleary, Horsfall, Happell, & Hunt, 2013). Stuhlmiller (2005, p.156) acknowledged this nursing education shift in Australia and argued that ‘desperate times call for desperate measures’, stating that the current mental health nursing shortage in Australia presented the opportunity for higher education to create new and innovative ways of teaching mental health curriculum. Stuhlmiller advocated for the creation of direct entry mental health nursing programs rather than attempting to ‘fix’ or modify comprehensive nursing education programs, an argument similar to those that have been made in Western Canada.

These changes to Nursing education in Australia mirror those that occurred in Western Canada around the same time. Happell (2006) advocated for Nursing education to recognize mental health nursing as a specialty and address the educational needs of students in a clear and organized mental health curriculum. Hewitt (2009) argued that evidence-based practice (EBP) approaches used in nursing education in the UK are not well suited to teaching mental health nursing content. She advocated for the inclusion of more self-examination and self-reflection content to be incorporated into Nursing education programs in the UK as well as for sufficient clinical learning opportunities to be offered to nursing students. In a survey research study, Snowden (2010) argued specifically about the struggles associated with the development of psychopharmacology knowledge in UK nursing students, stating that nursing students at undergraduate and practitioner levels need enhanced teaching methods to learn this content. Though only having a small sample size, Snowden
presented a strong argument for educational methods revision and curriculum organization that could positively impact student learning at all levels of nursing education. This article also represents a major difference in perspective between mental health nursing in Canada and in the UK. The landscape of mental health services in Canada is heavily dominated by the medical model, utilizing pharmacological interventions as the primary intervention, pushing psychosocial interventions, especially in the acute care setting, into a secondary therapeutic role. This is reflected in generalist nursing curriculum associated with this project, offering an extensive array of medical/surgical nursing course and only few communications, mental health, and counseling courses to students. The existing mental health focused courses focus on patient centered assessments and interventions and draw on the concepts of emotional intelligence and critical self-reflection to facilitate personal and professional development in the students.

This international research provided insights into a mental health educational trend taking place in Australia where generalist nursing education programs struggle to prepare graduates to enter into mental health nursing clinical environments after graduation. In the UK, a different model is used in mental health nursing education, but the research shows similarities to the mental health nursing education trends occurring in Australia. The program I currently work in is in the first run through of a new generalist nursing education curriculum with many revisions and modifications occurring on a regular basis. Stuhlmiller (2005) states that the initial implementation of a new curriculum is where it is the most open to change. With the current program at my institution being in the same implementation stage, the timing is right for changes to take place. Happell & Platania-Phung (2005) outline the difficulties experienced by Australian generalist nursing education programs regarding the integration of mental health nursing content into the curriculum and identified the implications for nurse educators and the generalist nursing education programs. In another Australian based study, Lamont & Brunero (2013) state that it can be challenging to implement mental health content into generalist program and advocated for the use of simulation a technology based teaching method to integrate mental health nursing content into medical based student nurse learning scenarios. Though informative about the inherent
difficulties involved, these authors do not comment on the review and/or improvement of existing teaching methods used with mental health curriculum in generalist nursing education. This would appear to be a knowledge gap that my project has the potential to address.

2.2.5 – Theme 5: Student nurses learning experiences in mental health

There is much literature on the troubles that new graduates have transitioning into the acute psychiatry clinical environment (Murray & Mullen, 2002; Shattell, 2009; Hazelton, Rossiter, Sinclair, & Morrall, 2011; Stevens, Browne, & Graham, 2013). Mullen & Murray (2002) and Stevens, Browne, & Graham (2013) suggested that new graduates transitioning into acute psychiatry face different challenges from other new graduates due to the fact that most undergraduate programs are biased towards general practice and that many do not receive adequate mental health related content or clinical learning experiences. Mullen & Murray (2002) used a questionnaire with a small sample of students to gain insights into their mental health clinical experience. Stevens et al.’s (2013) longitudinal study replicated and confirmed the findings of three previous independent studies, all concluding that few nursing students enter into mental health practice after graduation.

These articles are directly linked to a possible bias in nursing education against mental health nursing knowledge and skills. This bias is a significant barrier for undergraduate students to overcome if they are to enter into the mental health clinical environments upon graduation in countries which have a generalist education. This is another area where there is a dearth of research into models or methods to ease this transition and/or decrease the level of nursing education program bias against mental health nursing. The literature supports the perspective that new nursing graduates are often discouraged from working in psychiatry immediately after graduation by nurses and Nursing Faculty who believe that new graduates need more nursing experience before working in acute psychiatry, and that current undergraduate programs do not adequately prepare them for this clinical area (Shattell, 2009; Stevens et al. 2013). There is also a significant body of research that indicates that undergraduate nursing programs are failing to adequately prepare students to provide care to patients
with coexisting mental health problems, or stimulate interest in mental health as an interesting, worthwhile career option (Cleary, Happell, 2005; Kenny, McConnachie, Petrie, Farrell, 2009, Morrow, 2009). Cleary and Happell (2005) conducted a survey study which concluded that positive mental health clinical experiences have a positive impact on the recruitment of undergraduate nurses into mental health nursing. All of this literature indicates that there is significant room for improvement regarding the mental health nursing education students’ receive in generalist nursing education programs.

2.2.6 – Theme 6: Faculty experiences teaching mental nursing content

Nursing education in Canada is committed to providing undergraduate and graduate programs of the highest quality for the purposes of creating highly educated and skilled registered nurses at all levels of the profession (WNRCASN, 2011). With this goal in mind, nurse educators have the responsibility of providing high quality mental health learning experiences for their students on a regular and consistent basis. However, this is a difficult task and there are many examples from nurse researchers from all over the world regarding the difficulties educators experience when teaching mental health nursing to content/concepts to undergraduate nursing students (Bonnivier & Magoteaux, 2012; Stacey & Stickley, 2012; Karpa, Chernomas, 2013). The literature also held numerous examples of various strategies to overcome some of the identified difficulties or barriers to student learning with a few main educational trends emerging including the work of Koskinen, Mikkonen, and Jokinen (2011) on the use of case studies to teach mental health assessment, the work of Bonniveier & Magoteaux (2012) into combining teaching strategies with innovative educational materials to teach psychopharmacology, the work of numerous others on the involvement of patients/clients with mental health issues into classroom and clinical teaching (Rush, 2008; Maplethorpe, Dixon, & Rush, 2014), and the research related to the hiring of clinical instructors with lived mental health experiences (Happell, Bennetts, Harris, Platania-Phung, Tohotoa, Byrne, & Wynaden, 2015). As a means of providing nurses with the skills necessary to overcome learning barriers, Karpa & Chernomas (2013) acknowledge the value of critical self-reflection in psychiatric mental health nursing
practice and education. Viewing critical self-reflection as a foundational nursing skill given the relational nature of nurses therapeutic work, they argue that self-knowledge is necessary to navigate some of the difficult program and practice based student learning experiences (Karpa & Chernomas, 2013). By reflecting on their own previous learning and teaching experiences, nurse educators can gain valuable practice and teaching insights that can then be passed on to their students in the classroom and clinical environments.

2.3 – Synthesizing the findings from the literature review

The process of conducting the literature review exposed me to a knowledge base in research and learning methodologies, foundations of nursing knowledge, threshold concepts and troublesome knowledge, student learning, faculty development and teaching, innovations in mental health nursing education, and the transition of new graduates into mental health clinical environments. This process build upon my existing knowledge, challenged held perspectives, and led to an enhanced understanding of the literature related to my project. This knowledge was used to support the decisions made regarding the focus of my project as well as to support decisions made regarding project design and plan of execution. The review also allowed for the identification of gaps in the existing research that aided in the creation of my research question.

The literature review identified a paucity of literature available on forms of troublesome knowledge within a nursing curriculum, with only a few investigations into the identification of troublesome knowledge being previously attempted. Literature focused on the identification of troublesome knowledge within the mental health content was also difficult to find, with only the works of Clouder, (2005), Stacey & Stickley (2012), McAllister et al. (2015), and Levett-Jones, Bowen, and Morris (2015) being identified as relatable. The literature available was also slanted significantly to the faculty perspective, leaving the student perspective under-represented and therefore possibly missing valuable insights into which knowledge is troublesome and why. There is much literature on nursing professional development in nursing education, but only minimal research that focused on teaching professional development from a mental health nursing perspective. This gap could also be addressed by my project, providing
insights into the faculty perspective on the difficulties associated with teaching mental health content to undergraduate students. Another dearth of literature was identified in methods of easing the transition of new nurses into mental health clinical areas. Nursing residency programs are one option identified from the literature for easing the transition of students into the acute psychiatric clinical area by providing additional knowledge and mentorship (Nadler-Moodle, Loucks, 2011), but these programs do not address the need to revise existing nursing education curricula that are lacking mental health content or focus. My project will address this gap in the research and hopefully lead to enhancements in the quality of student learning experiences and ultimately better prepared graduate nurses.

This literature review also provided the examples of mental health nursing knowledge from which the 10 closed ended items used in the first student survey were identified. These items represent potential examples of troublesome mental health nursing knowledge viewed or suspected by other nurse researchers as being troublesome for students to learn. The identification of these items were the starting point for the data collection process, presenting them to the student participants with some open-ended questions for the purpose of gaining insights into their perspective on troublesome mental health content they experienced in the program or clinical settings.

2.4 – Research Question Development

Influenced by the identified gaps in the literature, my project was framed by the forms of troublesome knowledge identified by Perkins (1999) and Meyer & Land (2003) and the scope of mental health nursing knowledge that is represented in the undergraduate nursing curriculum. The terms ‘mental health content’ and/or ‘content’ are used throughout this thesis to refer to all mental health nursing knowledge that is taught to students in the classroom or clinical environments. With the primary aim of my research project being the enhancement of the quality of the mental health student learning experiences at the Western Canadian university where I am currently a faculty member, my research question is focused on learning areas or in this case mental health nursing ‘content’ that are defined by Meyer & Land (2005) as places were students get ‘stuck’. By identifying these content, changes to student learning, teaching
and evaluation and curriculum planning can be made, having the potential to lead to the
graduation of better prepared undergraduate generalist nurse, enhanced patient care,
and more competent nursing faculty. The research question then is:

What troublesome forms (if any) and associated mental health nursing
content in a Western Canadian undergraduate nursing education program
are difficult to learn from the student and faculty perspectives?

To formulate a response to this question, additional literature was drawn upon as the
data analysis progressed. The following is an overview of the literature reviewed
during the data analysis process.

2.5 – Literature reviewed during data analysis

Early on in the data analysis process it became apparent that the process of
searching for troublesome mental health content, the mental health nursing education
curriculum, and student learning when viewed as separate entities are all quite complex
in nature. They become even more complicated when looked at holistically from the
perspective of mental health nursing education, with much overlap and
interdependence. To enhance my ability to comprehend and understand these complex
processes and phenomena, I started to draw on complexity theory which focuses on
behaviors of complex adaptive systems (James, 2010). Systems thinking, a holistic and
inclusive perspective, is necessary for the application of complexity theory (Davidson,
Ray, & Turkel, 2011) and involves the recognition that component parts of a larger
system are best understood in the context of their relationships to the whole rather than
in isolation (Capra, 1996).

Another influential aspect of complexity theory is the requirement to adopt an
organic perspective when viewing the system, implying that all systems evolve, grow,
and eventually die out (James, 2010). Complexity theory provided the lens necessary
to further clarify what occurs when students experience troublesome mental health
nursing knowledge and was drawn upon during the creation of a learning pathway that
was derived from the project data to help visualize the patterns that were emerging
related to student learning (Figure 6.1).

Literature related to liminal space and/or liminality was also drawn upon as the data analysis phase of my project processed. Liminality means, “being on a threshold and involves engaging in a state or process that is betwixt-and-between” (Turner, 1969, p. 465), a space of transformation in which the transition from an earlier understanding (or practice) to that which is required is effected (Land, Rattray, Vivian, 2014). In essence, the ‘stuck’ space referred to by Meyer & Land (2005) is encountered when students move into liminal space. Liminality provided a theoretical framework from which to understand the student struggles with troublesome mental health nursing knowledge in the program curriculum. Meyer & Land (2005) describe threshold concepts as conceptual gateways that are often the points in which students experience learning difficulty, often finding the transformative process of letting go of existing perspectives in favor of the creation of new ones as troublesome. This troublesome process provokes a state of liminality, or the liminal space in which this transformation takes place (Land, Rattray, & Vivian, 2014).

The literature review of threshold concepts and troublesome knowledge focused on the cognitive changes associated with threshold concepts and troublesome knowledge, but did little to address the associated affective and/or behavioral changes that occur as a result of the learning process. As data analysis progressed, some examples of troublesomeness appeared to be associated less with the cognitive domain of learning and more with the affective and behavioral domains. For this reason, literature related to the nursing knowledge and the affective and behavioral domains of learning was reviewed. The link between the cognitive, affective, and psychomotor or behavioral domains is well established within cognitive psychology research focused on cognitive behavioral theory, in seminal works by Ellis (1955), Beck (1967), and Meichenbaum (1977) and cognitive learning theory, in seminal works by Bloom (1956) and Piaget (1971). These theorists argued that that cognition, affect, and behavior are intricately linked and that changes in one of these domains will impact and influence the other two. If this belief holds true, it poses an interesting question with regards to troublesome knowledge and its association with the cognitive domain; is troublesomeness experienced in the cognitive domain linked to affective and behavioral
domains of learning? This also raises the question of whether or not troublesomeness in one domain could cause troublesomeness to be experienced in another domain. This line of thinking challenges the existing definition of troublesome knowledge and is explored further Chapter 5.

2.6 – Chapter 2 summary

The literature review for my study was an ongoing process and uncovered knowledge and research to support the various decisions made during project planning, modification, and execution. The review spanned a wide range of topics including threshold concepts and troublesome knowledge, the roots of nursing knowledge, educational methodologies, mental health nursing curriculum, nurse educator professional development, student transition to professional practice, and faculty experiences teaching mental health content. Gaps in the related literature were identified and used to help formulate my research question. Literature drawn upon during data analysis related to complexity theory, liminality, and the affective and behavioral learning domains were introduced as was the role of the literature review in the creation of the first student survey. The project methodology, design, and ethical considerations along with their supporting literature are presented in Chapter 3.
3.0 – Introduction and overview

The idea of the researcher worldview or paradigm was popularized by Kuhn (1962/1996) as a way of summarizing the researcher’s perspective or belief about how they should go about creating knowledge. Generally speaking, a researcher’s worldview or paradigm refers to how they use their beliefs, assumptions, and values to help guide their inquiries (Creswell, 1998). As a researcher, clarifying and understanding one’s worldview aids addressing issues that arise related to decisions about how to approach a topic or best investigate a phenomenon (Morgan, 2007). Worldviews and paradigms thus impact upon how a researcher asks and answers questions, so they need to be clarified and understood early in any research project. This chapter will present my worldview and link it with the projects methodologies, design, and ethics.

3.1 – Researcher worldview

The process of clarifying my researcher worldview began in some course modules taken earlier in this doctoral program. Assignments and questions asked led to me gaining a view of myself as an educator who prefers constructivist rooted methods. My professional nursing background also provided me with a pragmatic oriented perspective on practice and education, supporting a belief that no single research approach is suitable to answer all questions. Rather, the research approach that represents the best fit to the question or phenomenon being studied should be used. Howe (1988) proposed that pragmatism is a viable alternative research paradigm to purely qualitative or quantitative research arguing that there are benefits to combining the methods.

My professional educator background provided me with a background in constructivist educational knowledge. Constructivism asserts that learning is about the building of constructs in the mind of the student through which they interpret the reality around them (Svinicki, 1999). This belief asserts that student learning starts with the introduction of basic concepts that can be built upon, eventually leading to a more
comprehensive understanding of a particular topic, and finally the linking of topics together to create more complex learning constructs.

3.2 – Selection of methodologies

3.2.1 – Previous methodologies used in Health Science Research

Research methodologies including phenomenography (Male & Baillie, 2011), action research (Stamboulis, Jaffer, & Baillie, 2012), and grounded theory (Quinlan, 2012) have been used in the past to identify threshold concepts and troublesome knowledge in fields such as mathematics and engineering. The literature review found a paucity of research studies related to the investigation of threshold concepts and troublesome knowledge in the health sciences, specifically from a nursing perspective, a gap that my project can start to address. Previous nursing researchers before me have investigated threshold concepts and troublesome knowledge from a phenomenological perspective (Nambiar-Greenwood, 2010), and the use of survey method (Angell, Taylor, 2013). Finding that a range of methodologies have been used was not entirely unexpected as many questions still remain regarding the best methods used for researching threshold concepts, analyzing the data, and translating the findings into enhancements in curricula and pedagogy (Quinlan, Male, Baillie, Stamboulis, Fill, & Jaffer, 2013). With this in mind, and having only a few previous Nursing research studies to serve as a guide, I decided that I needed to take on a more adaptive-pragmatic approach to my study, incorporating a liberal amount of flexibility into planning that would allow for methods changes to be made when necessary as the study progressed.

3.2.2 – Mixed methods approach

Selection of the research methodology started with a thorough review of my research question.

What troublesome forms (if any) and associated mental health nursing content in a Western Canadian undergraduate Nursing education program are difficult to learn from the student and faculty perspectives?
The question was created in light of the gaps in research identified during the literature review and focuses on uncovering examples of troublesome mental health nursing knowledge, a focus that has both quantifiable and qualitative elements. The quantifiable element involves the measurement of the numbers of participants who view specific examples of mental health nursing knowledge as being troublesome and the qualitative element involves the rationale provided by students and faculty as to why the examples were viewed as being troublesome. With quantitative and qualitative needs being identified within the research question, information from both research perspectives would be needed to create a comprehensive answer. It was at this point that either an exclusively quantitative or qualitative project was rejected in favor of a mixed method approach.

Mixed method research is described as the ongoing combination and integration of qualitative and quantitative methods throughout the research process (Siddiqui & Fitzgerald, 2014). It can be applied in either a concurrent and sequential project design (Creswell, 2003, 2009) and lead to results that are either convergent or contradictory (Morgan, 2007). For this project, a quantitative approach was utilized to explore the empirical aspects of the research question using survey tools to obtain data on any patterns within the participant responses (Driscoll, Appiah-Yeboah, Salib, Rupert, 2007). A qualitative approach in the form of participant focus groups were used gain a deeper understanding of the survey data (Driscoll, et al. 2007), in this case in the hopes of uncovering the rationale as to why participants view specific mental health knowledge as troublesome. These data collection approaches were integrated sequentially, alternating back and forth, with data from each being used to guide the development of the tool used in the next step of the sequence. A similar sequential approach was applied to the data analysis as well, combining quantitative analysis methods with qualitative analysis methods to utilize the data from the mixed method data collection approach into a triangulated and integrated analysis framework. This mixed method data collection and analysis design is advocated by Ostlund, Kidd, Wengstrom,& Rowa-Dewar (2011), but warn that even though mixed method approaches are becoming more popular, other examples of research that utilize a triangulation framework are rare and may be difficult to find in the literature. By combining the quantitative and
qualitative data collection and analysis methods in a sequential project design, my intent was to use the quantitative methods to guide qualitative methods as the project progressed, putting the priority on the qualitative approaches and maximizing the benefits of each research perspective to answer my research question.

Similar approaches in project design have been used previously in Nursing and educational research, described respectively by Morse (1991) as sequential triangulation design (Qual-quan; Quan-qual), by Morse & Niehaus (2009) as qualitatively driven simultaneous design, and by Teddlie & Tashakkori (2009) as sequential mixed design, with the later serving as the most accurate description of my project design. Though no previous examples of these types of research project were identified in regards to troublesome knowledge nursing research literature, they provided past examples of research designs that were suitable to explore my research question. My project design would be best described as a sequential triangulation design (Qual-quan), in which the quantitative and qualitative data supplement each other, and uses a triangulated analysis to create a complete and cohesive argument in response to the research question.

3.3 – Ethics Approval and Institutional Access

Ethics in nursing research is especially important for a number of reasons. Nurse researchers often work with people during vulnerable times, requiring an awareness of the participant’s emotional and psychological state and issues of informed consent, privacy, and confidentiality (Polit, Beck, 2008). Nursing research also often requires participants to invest their own time and energy while discussing intimate or personal perspectives on a wide range of topics and receive little or no benefit from the research (Guillemin, Gillam, 2004). My research involved both student and faculty participants, getting their perspectives on mental health content that they view as being troublesome, so issues related to informed consent, the sharing of sensitive personal knowledge, privacy, anonymity, and confidentiality needed to be addressed in the participant information sheets and ethic review applications (Appendix A & B). To manage the research goals while addressing these ethical concerns and protecting the participants from the risks that may be associated with the research, an ethical sensibility or
awareness must be maintained by the researcher throughout the research process (Kjellstrom, Fridlund, 2010).

The goal of this process was to obtain ethics approval from both the University of Liverpool and the western Canadian University where the study would be conducted. Before approval could be gained, detailed rationale for the project design, participant selection, and the risks associated with research were submitted to each institution for review. Measures taken to ensure participant anonymity and privacy, informed consent to participate, and the confidentiality and security of project data were outlined in the ethics applications. Access to student and faculty participants was obtained via an authorization letter from the Associate Dean Research, Innovation and Global Initiatives in the College of Nursing at my institution providing me with permission to access the names and email addresses of the student and faculty participants eligible to take part.

No physical risks were expected for any of the participants. However, it was anticipated that minimal psychological distress may be experienced by participants concerned about their participation being viewed by the researcher as a criticism of the nursing program or of the teaching efforts of their peers. This fear was addressed by including a statement in the student survey and faculty focus group instructions asking participants to provide critical observations and thoughts on the mental health content and how it is presented to students and that no repercussion or consequence will come from their participation. Though no physical or psychological risk were expected, counselling services offered through the Student Union and Faculty association were identified as being available should any participants experience discomfort during the participation process, counselling services offer through the Student Union and Faculty association are available.

Ethical concerns associated with data security and storage were addressed. This was of particular interest to my institution, especially regarding the use of cloud storage solutions based outside of Canada and the transmitting of data across international borders. These concerns were addressed by including statements on the participant information sheets indicating that all appropriate measures to ensure participant privacy, confidentiality, and data security were being taken in accordance with the Canadian Privacy Act (2014).
During the data collection process, amendments were made to the data collection tools and methods, requiring consultation from the University of Liverpool’s Virtual Programme Research Ethics Committee (VPREC). After reviewing the suggested amendments, VPREC deemed them as minor and granted permission to move forward with the project under its original approval. The specific changes are discussed in more detail in the data collection section of this chapter. Had more significant changes been necessary, additional VPREC consultation and another ethical review process may have been necessary.

3.4 – Participants: Rationale for Inclusion

According to Onwuegbuzie & Collins (2007), the sample size should be informed primarily by the research objective, research question(s), and, subsequently, the research design. To aid the sample selection process, I turned to purposive sampling method which involved critically thinking about the question and then choosing the individuals best suited to answer it (Silverman, 2010). After reflecting on my research questions, I purposively chose a student sample that were nearing the end of their program as they would have experienced the entirety of the mental health nursing curriculum embedded in the nursing education program. The student sample included all fourth year undergraduate nursing students from my institution’s primary site, including students from first graduating class of both the new Post Degree undergraduate Nursing program (PDBSN) and the undergraduate Nursing program (BSN), and the last group of 4th year students from the old nursing program. The majority of the mental health content/curriculum is completed by the end of third year, with the exception of the students’ 4th year final senior practicum which may or may not have a mental focus, students at earlier stages of the program would not be appropriate for my study.

Regarding my targeted faculty participants, I focused on the faculty who were familiar with the mental health nursing curriculum either through curriculum development/review or teaching. As mental health nursing is viewed as a specialty nursing area, only the faculty with knowledge in this specialty area would receive an invitation to participate. The faculty sample included all those from the program primary
site with experience of teaching mental health concepts/content to students. This included fulltime faculty with the university and contract faculty members who work with student clinical groups and also hold roles such as nurse manager or nurse educator on some of the mental health clinical environments within the local health region.

3.5 – Participants: Rationale for Exclusion

With the study focus being on mental health nursing content, undergraduate Nursing students who were enrolled in the nursing education program but had not yet completed the mental health courses were excluded from the study. Undergraduate Nursing students who were taught the mental health content previously by me were also excluded from participating in the student focus group portion of the data collection but were still eligible to participate in the student surveys. This exclusion was done to minimize researcher bias, any unintended coercion to participate, and to decrease any participant anxiety associated with critiquing the learning experiences that they had experienced during lectures facilitated by the researcher. Nursing Faculty who did not teach the mental health curriculum in the undergraduate programs were also excluded from participation.

3.6 – Project Design

3.6.1 – Data collection Tools

The development of the first student survey (Appendix C) was informed by the definitions of troublesome knowledge and its ten potential content areas as identified within the literature. This survey had 12 items focusing on student learning in both program and clinical environments. It presented 10 potential areas that could be troublesome for students to learn using a Likert scale for them to gauge their approval or disapproval that the example was viewed as being troublesome. Two open questions were also included in the first student survey, one associated with lecture and one for clinical learning, so as for individual students to list concepts/content that they viewed as troublesome but were not already listed in the survey.
Scales or rating questions are used to measure a variable and comprise four types of scale: nominal, ordinal, interval, and ratio (Field, 2009). A Likert scale is a common scale type on which respondents are asked to indicate how strongly they agree or disagree with a series of statements (Gray, 2014, p.363-4) and is an example of an ordinal scale which is typically associated with non-parametric statistics as the most appropriate analysis option (Bishop, Herron, 2015). A Likert scale typically has four or five points (Harpe, 2015) with the one in this project having four, eliminating the central neutral point to focus on the collection of data that is either in agreement or disagreement with the variable. The scale is named after Rensis Likert who first developed the method and is essentially a multiple-indicator or –item measure of a set of attitudes relating to a particular area (Bryman, 2012, p.68). The goal of the Likert scale is to measure the intensity of feelings about the area in question (Bryman, 2012), in this case, examples of troublesome mental health nursing content. When constructing a Likert scale, several points must be taken into account regarding the items of the survey. The scale must be statements and not questions and the statements must relate to the same objects. The statements should also be inter-related and should be worded to imply a positive or negative view in order to identify responders who exhibit response set (Bryman, 2012, p.68).

The first student survey was piloted for internal validity by asking five students to give their opinion on the questions and their relationship in respect to being able to answer my research question. Internal validity refers to whether or not an experimental treatment/condition makes a difference to the outcome (Halperin, Pyne, & Martin, 2015) whereas external validity refers to the estimation of effectiveness by which its results can be applied to non-study patients or populations (Dyrvig, Kidholm, Gerke, & Vondeling, 2014). From the pilot study, minor wording and organization of item changes were made. The first student survey was offered online via an online survey application called Survey Monkey™. A short introduction and completion instructions were included at the start of the survey followed by seven items identified in the literature that students were likely to encounter in the program environment and an open question asking for examples of content participants viewed as being troublesome in the program setting. Three additional items from the literature review that student
were likely to encounter in the clinical environment were then included along with another open ended question asking for examples of content participants viewed as being troublesome in the clinical setting. Following this design, the survey was uploaded into Survey Monkey, ready to be distributed to student participants. The decision to use an online survey method was influenced by my perception of the busy student schedule and high level of familiarity with the use of communications technology within their program.

Electronic distribution and collection of surveys may offer improved speed and efficiency (Wellington, 2015). However, even with these benefits, problems with electronic distribution and collection still exist. Firstly, early respondents are more likely to be a self-selecting sample and consist of those most familiar with the use technology (Wellington, 2015), potentially indicating that these responses are unreflective of the participant group as a whole. This problem also can exist with a paper survey, but may be even greater with electronic distribution (Wellington, 2015). Response rates associated with electronically distributed surveys are not always high (or as rapid) as paper surveys, with research from Mann and Stewart (2000) indicating that emailed surveys often only result in response rates slightly better than half of that experienced with paper surveys. Poor response rates to the online survey prompted consultation with my advisor and VPREC which resulted in a switch over to a paper survey (Appendix C). This change dramatically improved the overall response rate to the first student survey.

A second student survey was developed to obtain insights into the student perspective on examples of mental health nursing knowledge that the faculty perceived as being troublesome for students to learn. The second student survey (Appendix E) was offered only in paper copy and consisted of 14 content areas identified from some initial thematic analysis of the Faculty Focus Group data. These content areas represent potential mental health nursing knowledge that faculty participants identified as being troublesome for students in either the program and/or the clinical learning environment. These content areas were further subdivided into specific knowledge or concepts related to the content area, resulting in a total of 38 items.
3.6.2 – Focus group development

The decisions to use focus groups for data collection were also guided by the research question. Where the in-depth one-on-one interview allows the researcher to capture a vivid picture of the participant’s perspective and personal feelings on the research topic, the focus group allows for the discussion from which perceptions, thoughts, and impressions on a research topic can be identified (Milena, Dainora, Alin, 2008). As the purpose of this research was to identify examples of troublesome mental health nursing knowledge and their associated troublesome forms, the focus group approach was the better choice. If the research focused on uncovering why exactly content is viewed as being troublesome, ono-on-one interviews may have been an appropriate choice.

All of the focus groups were recorded, audio only, using a microphone attached to a laptop computer and saved as an mp3 digital audio file. After each focus group, the audio recording was played back into another microphone attached to another computer running the voice to text software Dragon Naturally Speaking to achieve a full transcription of the focus group which was saved as word document. Errors in the transcription process were corrected manually by the researcher during the process and the final transcriptions were used for the qualitative analysis and served as the source for all of the participant quotations.

For the first faculty focus group, four questions were formulated as the discussion points. The questions were created to obtain data on troublesome mental health nursing content experienced by students from the faculty perspective (Appendix D), with the aim of collecting differential data between the student and faculty perspective. The first question focused on exploring mental health nursing content that was troublesome for students in the program or clinical environments. The second question focused on exploring the faculty's own lived experiences associated with learning mental health content that they viewed as being troublesome. The third and fourth questions focused on the identification of similarities and differences between the student and faculty perspective regarding troublesome mental health nursing content. Prior to use, these questions were reviewed by two mental health nursing faculty members who indicated interest in the project but were not able to attend the first focus group due to prior
engagements. Following the review, minor word changes were made to the questions prior to being introduced in the focus group.

The second faculty focus group used a different format, presenting and discussing the items and data from the open questions from the first student survey. In total 14 different mental health nursing content areas were discussed. The second focus groups more closely resembled a Delphi model approach, with a group of content experts discussing the associated materials for the purpose of clarification and consensus (Hsu, Sandford, 2007). From the second faculty focus group, potential examples of troublesome mental health content were clarified and rationale for the content being viewed as troublesome was explored.

The purpose of the student focus group involved was to explore the rationale for why the examples of mental health nursing content was viewed as being troublesome and focused on items from the second student survey and the second faculty focus groups. This process further clarified the specific mental health nursing content examples and provided some insights into where exactly students get ‘stuck’ during their learning process. Details of the application of the survey tools and focus groups are discussed in more detail in the following section.

3.6.3 – Data Collection

Data collection for this project was divided into student and faculty streams, running sequentially, impacting and influencing each other by using the data collected from one stream to generate discussion and/or survey questions for the other stream (Figure 3.1). The plan for data collection from student participants included two large group student surveys and a small focus group. Faculty data collection involved two rounds of focus group as well as an accompanying survey completed before the second focus group. Data from the first student survey was used to guide the development of the discussion points used in the second faculty focus group while the data from the first faculty focus group was used to develop the second student survey.
For the first student survey, an invitation email was sent out along with an eCopy of the student participant information sheet (SPIS) a week before sending out a link to the online survey (Appendix G). After a minimal participant response in the first week of data collection, a reminder email sent to the student participants. Due to a low response rate in the first 10 days of data collection, and after consulting my supervisor and VPREC, I deviated from the original project plan and created a revised paper version of the first student survey to present to the student participants directly. The SPIS required minor revisions including amendments related to the description of the data collection process. Research on the decision to use either online or paper surveys focus on the difference in response rates between paper and online surveys, with Masallam, Schallert, & Kim (2011) arguing that a small difference in favor of paper surveys exists and Morrison (2011) arguing that online surveys have a significantly lower response rate.
Though different in their conclusions, both Masallam et al. (2011) and Morrison (2011) were in agreement that having an understanding of the participant preferences regarding the use of computer technology is a significant factor in deciding whether or not to use an online or paper survey. In my case, even with the student participants’ busy schedule and familiarity using communications technology in their program, the online survey was rejected in favor of the paper copy (the change in method was approved by VPREC). This paper hardcopy survey reflected the online survey in design and content. Administrative support staff were contacted to find out the student schedule, looking for course where all of my student participants would potentially be present and contacted the associated faculty member to ask for permission to access the students. Access was granted and I presented a brief overview of my project to the student participants. Those students that did not wish to stay to hear about the project were free to leave the room. The SPIS emailed out earlier was referred to and paper versions of the revised SPIS were distributed to the remaining students that decided to remain in class. Students were told that if they decided to participate, they should pick up a copy of the survey after class. Students were reminded to review the SPIS and to contact the researcher directly with any questions to ensure that they each gave their informed consent to participate. Those students who consented to participate were asked to submit their completed questionnaire into a collection box designated for the study. I reminded the students that if they had already completed the online survey that they should not complete a second hardcopy survey.

This approach yielded a significant response, providing 70 completed surveys within the next 24 hours bringing my total completed survey count to 90 out of a possible 196 (n=90), giving a 46% response rate. Regarding survey response rates, Bryman (2012) cites Mangione (1995) who identified the following classification bands of response rates to postal questionnaires; over 85% excellent, 70-85% very good, 60-70% acceptable, 50-60% barely acceptable, below 50% not acceptable. Using these bands, the response rates for the student surveys are not acceptable. However, acceptable response rates are difficult to define, resulting in many researchers often comparing their response rates with those of similar studies in order to establish a ‘norm’ to which they can compare their results (Paraboo, 2006). In a survey research
study that explored the student perspective on specific nursing competencies by Blazun, Kokol, and Vosner (2015), they reported the 69 (51.9%) from a total of 133 students returned completed surveys. In a descriptive study by Wahoush and Banfield (2014) on information literacy skills of senior level Canadian nursing student, they reported a response rate of 62 (47%) from a total of 132 potential student participants. Using the response rates from these studies to establish a 'norm', the response rates from my first student survey appear to be acceptable.

The first faculty focus group was planned to be semi-structured, using the prepared questions discussed earlier to stimulate and focus the discussion (Appendix D). It proved rather difficult to find a single date and time at which all faculty participants could meet for the focus group, a problem identified previously by Shaha, Wenzel, & Hill (2011), so two dates were scheduled to accommodate the largest possible number of faculty participants. Fern (1982) supports the decision to use a larger focus group arguing that they can yield more relevant concepts whereas Morgan (1996) supports the opposite, arguing that there is often more interaction in small groups which results in better quality of concepts being provided. With both options having benefits and drawbacks and no clear choice proving to be superior, it was decided to split the participants up and hold two small focus groups as it allowed more faculty to participate in the project, evidence of pragmatism in action. Rooms booked for the focus groups were chosen deliberately for their privacy and for their location being away from common areas to ensure a higher level of confidentiality and participant privacy, an approach supported by past research on the use of focus groups (Doody, Slevin, & Taggart, 2012: Shaha, Wenzel, & Hill, 2011).

A week prior to the first faculty focus groups, faculty participant information sheets (FPIS) were emailed to the participants to review (Appendix G). At the start of each focus group, participant consent forms were distributed and completed, and four questions were presented to the group for discussion and their responses were collected question by question by the researcher on a paper flip board. In addition to the flip board, an audio recording of the focus group was made using a laptop computer with a separate microphone. The audio recording was then played into another computer with an attached microphone that was running voice to text software call
Dragon Naturally Speaking. This process was monitored in real time by the researcher to identify any transcription errors and resulted in a complete and accurate transcription. The first focus group lasted approximately 75 minutes and the second lasted for approximately 65 minutes. From both focus groups, 13 out of a possible 17 faculty members participated, giving a 76% response rate for the target faculty participant group. After the focus groups, the collected data from the paper flip charts were transcribed verbatim into word documents in preparation for analysis.

The second student survey (Appendix E) used data collected informed by the first faculty focus group and clustered together to create a total of fourteen content headings, each consisting of specific examples of content or concepts that were referred to in the survey instructions as focus areas. Each of the 14 content headings along with their associated focus areas were organized into a framework using the same Likert scale used in the first student survey. In the second survey, no open questions were used. This was intentional as the purpose of this second survey was about narrowing in on and confirming potential forms of troublesome knowledge identified from the first faculty focus group. This survey included a place at the end for the students to enter their email address to indicate their interest in participating in the student focus group. The second student survey was only offered in paper form.

Similar to the first student survey, after getting permission from the course leaders, the researcher met with two separate groups of students to present a brief project update and invite to participate in the second student survey. As before, those who did not want to hear about the project were free to leave the room. A paper copy of the SPIS was distributed to the remaining students who were told that if they decided to participate, they should pick up a paper copy of the survey after class. However, due to a large number of student absences during these classes and after receiving some informal feedback from some student participants stating that there was some misunderstanding of the survey’s purpose and completion instructions, the response rate was very low, with only 15 surveys being submitted. Due to these factors, I decided to revisit the survey, make appropriate changes, and present it again to the same students in the different courses the following week. The previously collected surveys were shredded and placed in a confidential materials recycling bin. Revisions
to the next version of the second survey involved the inclusion of a clear purpose statement and more detailed completion instructions. In hindsight, a valuable lesson was learnt; I should have conducted a pilot before employing the second survey. Student participants were told that the surveys from the week prior were not being used and that if they wanted to participate, they would need to complete another survey. This approach was much better than the first attempt, yielding 57 completed surveys and 6 incomplete surveys for a total count of 63 out of 196 (n=63), or a 32% response rate.

Data from the second student survey guided the creation of a list of potential forms of troublesome mental health content to be used as the discussion points presented to the second faculty focus groups. These same discussion points were organized into a faculty survey using the same format and Likert scale as the revised second student survey. This survey was presented to faculty participants (n=8) prior to the start of the focused discussions to collect faculty data from a singular faculty perspective, and not one impacted or influenced by the group discussion (Wolfe, Knodel, Sittitrai, 1993). This collection approach provided data from an individual and group perspective on the emerging themes taken from the second student survey.

Differing from the first focus groups, set dates were used instead of polling the participants using an online scheduling application. As scheduling was again a problem, I decided to again to hold two small focused groups to accommodate the most faculty participants. A total of 8 faulty out of a possible 17 participated in the second faculty focus groups, a 47% response rate. After participant consent forms were distributed and collected, each of the thirteen discussion points were presented one at a time to the group. Data generated from the discussion were collected point by point by the researcher on a paper flip board and were later transcribed in preparation for analysis. An audio recording and transcription of the second focus group was also completed using the same process as the first faculty focus group. This part of the data collection process resembled the Delphi process, which utilizes a panel of experts to discuss and/or expand on data collected from other data collection methods such as questionnaires or surveys, and method that is well suited to build consensus on a topic (Hsu, Sandford, 2007).
Student participants interested in taking part in a student focus group indicated their desire to do so by leaving their email address at the end of the second student survey. As only six student participants volunteered to participate, all of them were invited to participate in the student focus group. A list of potential forms of troublesome mental health nursing content was created using the data gathered in the second student survey and the second faculty focus groups. Participant consent forms were distributed and collected, and the data generated from the discussion were collected point by point by the researcher on a paper flip board and later transcribed in preparation for analysis. An audio recording and transcription of the student focus group was also completed using the same process as the faculty focus groups. Data collection for the project was now complete.

3.6.4 – Data Analysis

The sequential mixed design of my project used the quantitative data to guide the development of the qualitative data collection and vice versa. The analysis priority was on qualitative methods, using the quantitative analysis for the purposes of guiding the qualitative data collection and analysis processes. The questions in the first student survey were split into closed ended questions identified from the literature and open ended questions that focus on the program and clinical environment, allowing for student responses to be analyzed using a mixed methods approach. The open-ended questions underwent a qualitative thematic analysis from which the examples of mental health nursing content were organized into potential forms of troublesome knowledge. The closed ended questions were subjected to a descriptive statistical and frequency analysis and organized into emerging content themes that were aligned with the definitions of troublesome knowledge by Perkins (1999) and Meyer & Land (2003). These emerging themes were then cross referenced with the forms of Nursing knowledge as identified by Carper (1978) and Benner (1984), creating a method for classifying mental health nursing knowledge.
Quantitative Analysis

The purpose of the quantitative analysis was to inform and guide the qualitative data collection processes associated with the project. Though additional tests of reliability and validity were completed during the quantitative analysis, only the descriptive analysis tests were included in this thesis. Descriptive analysis measures of the quantitative data were selected and used due to their ability to show the distribution of participant responses across all of the potential forms of troublesome knowledge that were offered to the participants. I used both a large and small participant samples to obtain sufficient amounts of raw data from which to start the qualitative analysis process. Descriptive statistics are commonly used for summarizing data frequency or measures of central tendency (Field, 2009). When considering the choices of statistical methodology to analyze Likert scale data, Lantz (2013) argues that the researcher needs to be aware of how the participants perceive the scale. If the scale is perceived as being equidistant, parametric tests can be used where as if the scale is not perceived as equidistant, nonparametric tests should be used (Lantz, 2013). Research on the rescaling of ordinal data indicated that subjects perceive the Likert scale as non-equidistant (Kennedy, Riquier, & Sharp, 1996; Mundy & Dickinson, 2004; Lee & Soutar, 2010). For this reason, statistical measures of central tendency such as mean, median and modes and measures of dispersion such as standard deviation were excluded.

Qualitative Analysis

Throughout the project, I kept a reflective journal in which I recorded preliminary insights, questions, or concerns that arose, particularly during the data collection and qualitative analysis phases of the research project. Audio recording and transcriptions of the focus groups were read and listened to repeatedly early on in the analysis, using the reflective journal to record notes of potential emerging themes and/or any patterns noticed in the data. As the data collection and qualitative analysis progressed, some of my initial impressions and intuitive beliefs about the project data served as starting points for further qualitative analysis. This practice provides a recorded project timeline and makes transparent the decisions I made during my project, enhancing the credibility and quality of my qualitative research (Engward & Davis, 2015).
Themes that emerged from the reflections and notes from the early stages of the thematic analysis of the student and faculty data were organized according to the forms of troublesome knowledge, and presented again to student and faculty participants to clarify the various forms of mental health nursing knowledge as troublesome, an approach modeled on the Delphi process (Hsu, Sandford, 2007). The thematic analysis started with the data collection process and was expanded after its completion into a more comprehensive analysis to identify and present the main themes and provide insights into why and how the forms of mental health nursing knowledge are troublesome for students. The examples of troublesome mental health nursing content and/or concepts from the literature review, together with the responses to the open ended questions in the first student survey and the responses from the first two questions presented in the first faculty focus groups, allowed for a comprehensive list of potential forms of troublesome mental health nursing knowledge to be created. From this list, the mental health content and/or concepts were clustered together into concept maps or Mindmaps to create content categories. From these categories, emerging content themes were identified, each consisting of associated examples of troublesome mental health nursing knowledge.

3.7 – Chapter 3 summary

This chapter identified the theoretical and methodological foundations of the study, the ethical considerations associated with the project, the decisions made regarding the selection of participants, and the data collection and analysis process undertaken during the project. The next chapter will present a more detailed overview of the quantitative data analysis process and include some discussion on the quantitative findings.
Chapter 4 – Quantitative Analysis and Discussion on Findings

4.0 – Introduction and Overview

This chapter presents the quantitative analysis of the survey data, starting with the first student survey, then the second student survey, and finally the faculty survey. A descriptive analysis and frequency analysis were completed for each of the surveys for the purpose of informing and guiding the qualitative data collection. The results of the analysis are presented in the discussion of findings section of this chapter.

4.1 – Quantitative Analysis of the First Student Survey

Out of a possible 196 participants, a total of 91 student nurses participated in the first student survey with a response rate of 46%. Table 4.2 shows the descriptive variable analysis of the first student survey data. The items of interest include those that have low variances and those with the high positive skew and low negative skews.

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>N</th>
<th>Variance</th>
<th>Skew</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovery</td>
<td>91</td>
<td>0.531</td>
<td>-0.047</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>91</td>
<td>0.579</td>
<td>+0.261</td>
</tr>
<tr>
<td>Cultural Competency</td>
<td>91</td>
<td>0.653</td>
<td>-0.075</td>
</tr>
<tr>
<td>Caring Skills</td>
<td>91</td>
<td>0.697</td>
<td>-0.192</td>
</tr>
<tr>
<td>Brain Chemistry</td>
<td>87</td>
<td>0.714</td>
<td>+0.382</td>
</tr>
<tr>
<td>Nursing Intuition</td>
<td>87</td>
<td>0.476</td>
<td>+0.034</td>
</tr>
<tr>
<td>Pharmacokinetics</td>
<td>87</td>
<td>0.609</td>
<td>+0.136</td>
</tr>
<tr>
<td>Restraints</td>
<td>86</td>
<td>0.686</td>
<td>+0.317</td>
</tr>
<tr>
<td>Therapeutic Relationships</td>
<td>86</td>
<td>0.733</td>
<td>-0.031</td>
</tr>
<tr>
<td>Moral Distress</td>
<td>86</td>
<td>0.493</td>
<td>+0.246</td>
</tr>
</tbody>
</table>

Figure 4.1 show the frequency variable analysis of the first student survey data. Items with high numbers of agreement or disagreement are of interest.
4.2 – Quantitative Analysis of the Second Student Survey

Table 4.2 presents the descriptive variable analysis of the second survey. The items of interest in this table are those that have low variances and those with the high positive skew and low negative skews. Figure 4.2 present the frequency variable analysis. From this table and figure, items with high numbers of agreement or disagreement are of interest.
<table>
<thead>
<tr>
<th>Survey Items</th>
<th>N=</th>
<th>Variance</th>
<th>Skew</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boundaries1 - Establishment</td>
<td>59</td>
<td>.498</td>
<td>-.552</td>
</tr>
<tr>
<td>Boundaries2 - Maintenance</td>
<td>59</td>
<td>.442</td>
<td>-.367</td>
</tr>
<tr>
<td>TR1 - Trust and Rapport</td>
<td>61</td>
<td>.687</td>
<td>-.245</td>
</tr>
<tr>
<td>TR2 - Social vs Professional</td>
<td>61</td>
<td>.605</td>
<td>-.535</td>
</tr>
<tr>
<td>CS1 - Relationship Building</td>
<td>60</td>
<td>.490</td>
<td>-.337</td>
</tr>
<tr>
<td>CS2 - Interviewing and Assessing</td>
<td>60</td>
<td>.376</td>
<td>-.154</td>
</tr>
<tr>
<td>CS3 - Nursing Interventions</td>
<td>60</td>
<td>.366</td>
<td>-.114</td>
</tr>
<tr>
<td>Stigma1 - Impact on the Patient</td>
<td>61</td>
<td>.618</td>
<td>-.231</td>
</tr>
<tr>
<td>Stigma2 - Impact on the Nurse</td>
<td>61</td>
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<tr>
<td>Delusional disorders - Religious Based</td>
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<td>.758</td>
<td>.533</td>
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<td>Mindfulness and professional practice</td>
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<td>-.296</td>
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<td>Life-long learning/Nursing best practices</td>
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<td>-.350</td>
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<td>Praxis1 - Best Practice Gap</td>
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<td>Praxis2 - Role of the Community</td>
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<td>-.699</td>
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<tr>
<td>Safety1 - For the Patient</td>
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<td>.505</td>
<td>-.626</td>
</tr>
<tr>
<td>Safety2 - For the Nurse</td>
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<td>.517</td>
<td>-.672</td>
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<tr>
<td>D1 - What to include and What not to</td>
<td>61</td>
<td>.484</td>
<td>-.400</td>
</tr>
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<td>D2 - Mental Health Vocabulary</td>
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Table 4.2 Descriptive analysis of Student survey 2
Figure 4.2 - Frequency analysis of Student Survey 2 (N=63)
4.3 – Quantitative analysis of the Faculty Survey

Descriptive statistics from the Faculty Survey are presented in Table 4.3. The items of interest in this table are those that have low variances and those with the high positive skew and low negative skews. The frequency analysis is presented in Figure 4.3. From this table and figure, items with high numbers of agreement or disagreement are of interest. Survey items in the tables have been abbreviated with the complete item being listed in Chapter 6. Out of a possible 17, a total of 8 Faculty members participated in the survey that was delivered in hardcopy prior to the faculty focused discussions. A concern regarding external validity involves the question of whether or not the results of a study can be generalized beyond its own specific research context (Bryman, 2012). The small number of respondents could limit the generalizability of any conclusion drawn from this data, but could still be valuable for identifying a distinction between student and faculty perspectives. The results of this analysis are presented in the discussion of findings section of this chapter.
<table>
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Figure 4.3 – Frequency Analysis of the Faculty Survey
4.4 – Discussion on the Quantitative Findings

4.4.1 – Student Surveys

From the first student survey, the items with a high variance and those with a high positive or low negative skew were focused upon. In data that are positively skewed, the mean is greater than the median and responses are concentrated at the lower end of the range (Foster, Diamond, & Jefferies, 2015) and in this case are represented by the strong disagreement perspective. For data that is negatively skewed, the mean will be lower than the median and response, concentrated at the higher end of the range and in this case are represented by the strong agreement perspective. These specific test results are focused on for different reasons.

Item variance and skew were reviewed in hopes of uncovering items that were viewed differently by the participants. In accordance with the projects methodology regarding the use of quantitative testing to guide the qualitative analysis, the items with the highest and lowest variances were not tested further. A high positive or low negative skew may be a part of an overall positive or negative response from the majority of respondents, but this is not always the case as some are explained by the existence of subgroups of participants with the opposite perspective of the majority (Field, 2009). Skewed distributions are not symmetrical and instead have the most frequent scores clustered at one end of the scale. For this project, a positive skew greater than 0.1 indicates a large cluster of responses on the agreement end of the scale and a skew less than -0.1 indicates a large cluster of responses on the disagreement end of the scale. The items from the first student survey with a positive skew greater that 0.1 were the development of critical thinking skills in mental health nursing, changes in brain chemistry associated with various mental health diagnoses, psychopharmacology, nursing decisions related to the use of restraints, and skills associated with moral distress. Only one variable had a negative skew less than – 0.1, the application of caring skills in mental health nursing. In the first student survey, the items cultural competency and decisions regarding the ethical use of restraints had numbers of strong agreement and disagreement that were equal but had very different numbers for agreement and disagreement thus significantly changing their skew by distributing the cluster. From the second student survey, the items neuro anatomy and
brain chemistry and pharmacology: antidepressants and antipsychotics had the highest positive skew with the items praxis: role of the community in recovery, safety: patient focused, and safety: nurse focused had the lowest negative skew. These items as well as others with high or low skews could represent content in which there is a large group of students whose perspective goes against that of the majority, a possibility that was explored further in the qualitative analysis.

4.4.2 – Faculty Survey

The faculty survey, though very similar to the second student survey regarding the items included, yielded very different responses. An interesting aspect of the faculty survey was the number of variables that did not receive any level of disagreement from the faculty participants. In total, only 18 of the 40 variables had any level of disagreement with no variables receiving a strongly disagree response from the faculty participants. Both recovery based variables, all of the critical thinking related variables, all ethical, therapeutic relationships related variables of social vs. professional nurse/patient relationships, items related to boundaries, all of the personality disorder related variables, all the praxis related variables, and communication skills related variables all had very high levels of agreement from faculty indicating that they viewed this content as being troublesome for students. A difference between the faculty survey and the student survey’s results were the number of strongly agree responses. Twelve of the items scored a level of strong agreement from more than 50% of the faculty (n=8). In comparison, the students seem to be more cautious to use the positive extreme of the Likert scale used in the survey than the faculty participants, a finding that is expanded upon in the qualitative analysis. This difference was unexpected and has some future research implications by raising the question of why are faculty participants so much more confident in identifying troublesome knowledge than students? Even more unexpected is that the faculty response goes against the long acknowledged belief that the extremes of Likert responses tend to get less use than the more central choices (Guilford, 1954; Bishop & Herron, 2015).
Also of interest may be the variables that registered a level of disagreement, as there were only a few examples from the data. The items recovery - role of the acute care nurse, recovery - role of the community based services, critical thinking - critical reflection, and mental status exam - thought content had the highest number of faculty participants who did not view this content as troublesome for students. This response from the faculty may represent a confidence in the program content and its delivery by program and clinical faculty and that none of the content presented in the survey was viewed by faculty as being troublesome. In essence, faculty identified areas of perceived teaching strengths within the mental health curriculum. This response could also provide a level of validation that the content variables presented in the faculty survey are examples of possible forms of troublesome mental health nursing knowledge. These possibilities are discussed further in the student focus group.

4.5 – Chapter 4 Summary

This chapter presented the results of the quantitative tests applied to the data gathered by the student and faculty surveys. Each survey went through a descriptive analysis process, focusing on variance and skew, and a frequency analysis to provide empirical data that could be used to help guide qualitative analysis. Cronbach’s Alpha was applied to each survey to test their internal consistency and Spearman’s Rho was used to assess the level of validity of inclusion for each surveys items. The results from these tests are presented in this Chapter’s tables and figures with discussion in the results being presented at the end of the Chapter. The qualitative analysis of the project data is presented in Chapter 5.
Chapter 5 – Qualitative Analysis and Discussion on Findings

5.0 – Introduction and overview
The previous chapter presented the quantitative analysis; this chapter presents the qualitative analysis. A thematic analysis of the data collected from the open-ended questions from the first student survey and the participant focus groups was conducted. The qualitative data collected from this project were organized into data clusters, and then further clarified into emerging theme. These themes’ were used to inform the development of the second student survey, the faculty survey, and faculty and student focused discussions. All quotes in this chapter are taken from the participant focus groups and use the pseudonyms provided by the participants to anonymize the data and protect the confidentiality of the participants. The following is an overview of each emerging themes including discussion on the rationale for the inclusion of each examples inclusion.

5.1 – Thematic Analysis of the Qualitative Data
5.1.1 – Theme 1 - Spectrum of Mental Illness
Student participants in the first survey identified content such as personality disorders, manipulative behaviors associated with patients, delusional disorders, adolescent psychiatric disorders, forensic nursing and deviant patient behaviors such as pedophilia, mental health pathophysiology or the disease processes associated with mental illnesses, the environmental factors related to patient with mental illness such as schooling and home life, and the ability to clearly differentiate between various mental illnesses as examples related to the specific content covered during lecture and/or during their clinical experiences, potentially representing gaps in their knowledge associated with the spectrum of mental illness.

Within this theme are arguments for both sides of an ongoing historical debate within mental health nursing education as well as a critical perspective on how well the current mental health nursing curriculum meets their associated student learning objectives. One side of this debate is centered on the importance of using a neuropsychiatric focus for mental health nursing education, a position advanced by
Gournay (1996), and Flakerud & Wuerker (1999) who focus on concepts such as neuroanatomy, brain chemistry changes associated with mental illness, and the manipulation of brain chemistry through the use of psychotropic medications, representing how the medical model of care has historically influenced nursing education. On the other side of the debate is a more distinctive nursing approach which has deviated from the medical model and involves relationship-focused means of care (Barker, 1998; Moyle, 2003, Hewitt, 2009, Happell, Bennetts, Tohotoa, Platania-Phung, Wynaden, 2015). The current landscape of the mental health nursing education programs in Western Canada, including the program in this research, lies somewhere in the middle attempting to find a balance between these two educational and care delivery perspectives. Picard & Mariolis (2002) added to the debate the perspective that knowledge alone cannot replace the clinical experience in which praxis occurs and mental health nursing skills are acquired, arguing for a balanced approach between course content and clinical experience to be used. This perspective is one that logistically presents substantial problems for nursing education programs such as the program in the study as it advocates for additional clinical placements which requires a large and diverse clinical placement pool, something the community at the center of the research lacks. Student and faculty participants are keenly aware of this fact, with many participants from both groups providing critical comments regarding the clinical environments utilized within the mental health curriculum.

When discussing mental health disease pathology, student participants generally expressed that there was not enough yet known about the sources or root causes of mental illnesses in general and that this lack of knowledge makes it very difficult for them to understand specific mental disorders in the lecture. One participant stated:

“At least (the faculty should) present the current research projects that are underway to further our understanding of (a particular) mental illness as this would provide a reference point for what is known and what is currently being investigated. ” (Sam, Student Focus Group – hereafter SFG)
There may be some truth to this perspective, but with only limited research available into the impact of the quality and quantity of theoretical components of mental health nursing on knowledge competency and the promotion of more positive attitudes to mental health nursing as a career choice (Happell, 2006, Happell, Welch, Moxham. & Byrne, 2013), it is difficult to accept it in totality. The student focus group agreed that more exposure to actual patients with mental illnesses in the clinical environment was would be beneficial to gain a comprehensive understanding of the various disorders. However, students added that not all the clinical experiences provided exposure to a wide range of disorders and some clinical experiences were viewed as more desirable than others:

“In some clinical(s), you see just more. At RPC (Regional Psychiatric Center – a maximum security psychiatric jail and treatment center), depending on where you are placed, you only see schizophrenia or personality disorders. In acute psych, you see everything. It’s not fair!”
(Peach, SFG)

In the student focus group when specifically discussing the disease pathology of patients with delusional and personality disorders, concerns about diagnosis and treatment of delusional disorders as well as mental health disorders in general were presented. One participant offered the observation that:

“They (Nursing faculty) teach about chronic illnesses (such as delusional disorders) that are not fully understood; they do not know the cause (of the illness), or how the med’s (medications) used to treat it works. And then they expect us to understand about mental illnesses? How can we fully understand with all these (knowledge) gaps?” (Lily, SFG)

Another student asked the group “how can you distinguish extreme religious beliefs from a delusional disorder, they look exactly the same” (Leigh, SFG) to which the other participants did not offer a response.
Interestingly, during the entire Faculty Focus Group data collection process, only one specific disease process was identified as being troublesome for students; delusional disorders. The idea of detachment from reality, a symptom of delusional disorders, was identified by faculty participants as being troublesome for students, as the concept of patient insight, or lack thereof into their delusional illness. One faculty participant stated that:

“Students struggle to understand how patients cannot make the distinction between reality and delusional thinking, in particular, the distinction between faith and religious based delusional belief systems.” (Alison, Mental Health Professor, First Faculty Focus Group – hereafter FFFG)

Wolf (2001) stated that students experience fear and anxiety when talking with delusional patients due to the unpredictable nature, often causing the student to avoid the patient during their clinical experiences. However, most students overcome these fears through support and mentorship from staff nurses and are able to develop therapeutic relationships with delusional patients (Wolf, 2001). Regarding religious based delusional thinking, Bassett, Baker, & Cross (2015) state that the ability to distinguish between religious belief and delusional thinking is difficult for many nurses and that ‘getting it wrong’ can significantly impair the patients recovery process.

Personality disorders were also identified by some students in the first survey as being troublesome, but when brought up in the focused discussions, the students felt that the troublesome part was not with understanding the diagnoses, but with understanding the patient behaviors associated with personality disorders. This troublesome area was explored in a research study by Weight and Kendal (2013) who reported that staff nurses and students often struggle to understand and manage the difficult and/or extreme behaviors of patients with personality disorders and that this lack of understanding and/or knowledge can lead to patient stigmatization and an overall poor level of care being provided. Walsh (2015) argues that nursing education programs can never completely prepare the student for working with patients with personality disorders and identified the importance of the nurse mentor to help guide the
education needs of new graduates entering psychiatric nursing. Walsh’s argument supports the statements made by the faculty participants; that prolonged clinical exposure and mentorship for students by staff nurses is necessary for students to gain a comprehensive understanding of personality disorders and their associated symptomology and clinical presentations. This perspective was noted in the student focus group by one of the participants:

“They (patients with personality disorders) seem just like a normal people, I mean, they don’t look sick. Then after working with them for a bit, you find out how dysfunctional they are. You realize that they (personality disorders) are a real thing. You need to see it to get it.” (Emily, SFG)

Regarding personality disorders, during the second faculty focus group, one participant stated that they "are troublesome for nurse at all levels of experience, not just students" (Joanne, Nurse Educator, Second Faculty Focus group – hereafter SFFG), a statement that many other faculty participants agreed with. Manipulative behaviors of patients diagnosed with personality disorders were identified by faculty as being especially troublesome for students as it is often a patient response that they have not experienced before in the caregiver role. Another participant stated that:

“Students struggle with the personal feelings associated with being manipulated by a patient they are caring for” and that “negative patients interactions involving manipulative behaviors can further bias students away from working in mental health environments after graduation.” (Sue, Mental Health Professor, SFFG)

Some faculty felt that students lacked the experience and skills necessary to effectively work with patients diagnosed with a personality disorders, even at the graduate nurse level, and that they struggle to make the distinction between personality traits and a full blown personality disorder. One participant stated that:
“This lack of knowledge leads to students having a personal response to patients’ behaviors first, and then they follow it up with a professional response.” (Sue, Mental Health Professor, FFFG)

The concerns expressed by the students and referred to by the faculty could represent a normal professional development process for many nursing students or it could show how a troublesome group of mental disorders can disorient student nurses who are still developing their own style of providing care and professional identities. In a literature review Hewitt (2009) identified the trend of mental health education in the UK and US moving towards skill acquisition in the clinical setting and ability to critique best practice and stated that this model leaves significant gaps in the ethical and moral mental health nursing knowledge of students. She argues that this imbalance between content and experience is a problem within nursing education and advocated for the use of a values based teaching model to aide in application of mental health knowledge in the clinical experience, enhancing praxis and student skillset development (Hewitt, 2009). This approach could benefit the nursing program in my research, for it follows a best practice teaching model and approach to curriculum development that if unchecked could result in an unbalanced educational model.

Concerns identified by the students and faculty are also linked to the design of the mental health curriculum and the decisions made regarding the inclusion and exclusion of content. A study conducted by experienced nurse researchers recognized as leaders in this area focused on the perspectives of 12 directors of nursing in Queensland Australia, classifications of mental disorders, along with mental health and wellbeing, the biopsychosocial impact of stress/trauma were identified as foundational knowledge for mental health nursing education (McAllister, Happell, Flynn, 2014). This view on foundational mental health nursing knowledge was also shared by my study’s faculty participants who participated in the design of the mental health nursing curriculum in my college of nursing. However, in my study, there appears to be a difference in perspective regarding the mental health curriculum, with students on one side being concerned with the type and duration of the clinical experience and faculty on the other side being concerned with issues such as the inclusion/exclusion of content
and quality of student learning in the clinical environment. Figure 5.1 presents a visual representation of the complex relations that exist between the examples of troublesome mental health nursing knowledge associated with theme 1.

**Figure 5.1 – Theme 1: Spectrum of Mental Illness**

5.1.2 – Theme 2 - Therapeutic Nurse/Patient relationships and Boundaries

Considered by many nurses as the foundation from all which all nursing care is built upon, the idea on the therapeutic relationship and it accompanying model was first introduced by Hildegarde Peplau in her seminal work, *Interpersonal Relations in Nursing* (1952/1998). However, this model comes with its own challenges, with research studies identifying barriers to teaching students the communication and
interpersonal competencies necessary for the development of the therapeutic relationship (Patzel, Ellinger & Hamera, 2007; Happell, Robins, & Gough, 2008; Robinson-Smith, Bradley & Meakim, 2009; Stuart, 2009; Miles, Mabey, Leggett, & Stansfield, 2014). One example of the barriers identified is the negative stigmatization of mental illness in society that can affect nursing students, who often experience heightened anxiety interacting with patients with a psychiatric diagnosis (Miles et al., 2014). Another barrier is that nursing students often lack the essential skills and knowledge to care for patients with psychiatric diagnoses, resulting their experiencing of feelings such as fear and anxiety (Happell, Robins, & Gough, 2008). If unchecked, these feelings can result in the development of negative attitudes about working with patients with mental illness (Stuart, 2009), and ultimately lead to these students not developing the necessary mental health nursing skillset. In my study, similar concerns regarding the student’s ability to learn this content were identified by both student and faculty participants in addition to other content/concepts related to the therapeutic relationship and nurse/patient boundaries.

In the open-ended question in the first student survey, student participants identified content such as therapeutic relationship building, clinical decision making, the stigmatization of those with mental illness, communication skills, nurse/patient boundaries, cultural competency, and nursing intervention selection was viewed as being troublesome. Troublesome content related to this emerging theme identified in the first Faculty Focus Group included critical thinking and decision making, impact of stigmatization, patient/nurse safety, professional nurse/patient boundaries, therapeutic relationship building, and communication skill development. In both Faculty Focus Groups, professional nurse/patient boundaries were quickly identified as an area where students struggle, specifically their ability to distinguish the difference between a professional and personal relationship with the patient. A participant offered this opinion on boundaries:

“That they either get it or they don’t”…“boundaries are not just a struggle for students, but nurses at all levels of experience.” (Jane, Nurse Manager, FFFG).
This sentiment was shared by many other participants. All faculty felt that nurse/patient boundaries were hard to teach in lecture and that most nurses learn about how to establish and maintain professional boundaries in the clinical environment under the supervision of a staff nurse mentor or clinical Nursing instructor.

From the student focus group, the therapeutic relationships and boundaries as concepts were viewed as easy to understand, but sometimes difficult to establish in practice. One student stated:

“*We understand therapeutic relationships, but in other clinical(s), you just have a normal relationship with the patient. You don’t think about trying to make it therapeutic. In psych (acute psychiatry clinical), trying to make it therapeutic or purpose makes it feel fake. It’s hard to be genuine when it (forming a therapeutic relationship), it feels fake.*” (Emily, SFG)

It was at this point in the qualitative analysis that literature on liminal space and liminality started to become relevant. For successful boundaries to be established and maintained, students must move through a space of uncertainty (liminal space) (See Section 2.7). They start from a position of theory only, putting into action movement towards the establishment of something tangible such as a nurse/patient boundary. Student movement through liminal space is explored more in the qualitative analysis section.

Directly linked to professional boundaries, faculty identified therapeutic relationship building as a concept and process that students found to be troublesome. Participants agreed that many students struggle to take the nurse/patient relationship beyond a superficial level to create a supportive therapeutic relationship with clear nurse/patient boundaries and expectations. One of the faculty participants noted that:

“*Students struggle with what to do next after rapport has been built… students specifically have difficulty understanding the steps involved in the development as therapeutic relationship.*” (Joanne, Nurse Educator, FFFG)
However, participants also agreed that most students have the potential to gain competence in this area with experience and support in the clinical environment. This perspective is concomitant with previous research studies (Lyons, 1999; Reed & Fitzgerald, 2005; Waite, 2006; Dwyer, Hunter-Revell, 2015) that provide examples of nursing students overcoming barriers to learning troublesome aspects of nursing content before being able to fully comprehend the content and gain the ability to integrate it into their professional practice. Nurse role models and mentors that support student learning are critical during these times providing the guidance and knowledge necessary for the student to efficiently navigate the associated liminal spaces.

Safety issues in respect to mental health nursing were also discussed by faculty as potentially troublesome content for many students. One participant stated that when it comes to assessing safety in the mental health clinical environment that sometimes “there is a ‘disconnect’ between what the student’s heart says what their mind knows” (Sue, Mental Health Professor, FFFG). Another participant stated that sometimes “the caring instincts and knowledge about patient/nurse safety are sometimes viewed by the student as contradictory” to each other (Amy, Mental Health Professor, FFFG). These statements describe the disconnection or contradiction between caring and safety that could be explained by how and where students perceive that they learn about nurse and patient safety. The students understanding of safety potentially represents another example of the student movement through or becoming trapped in a liminal space.

Nursing research shows that students perceive general patient safety knowledge as being taught primarily in the classroom whereas skills such as recognizing patient safety issues, implementing safety solutions, and anticipating and managing high risk situations primarily takes place in clinical (Ginsburg, Tregunno, & Norton, 2013; Tella, Smith, Partanen, & Turunen, 2015). This could be interpreted to mean that students learn the safety related concepts in the classroom and develop their initial mindsets towards patient and nurse safety issues before any application or actual nursing experience occurs. In short, the students enter into clinical praxis with a preconceived notion of what safety issues for the nurse and patient are and when these notions are contradicted by experiences that occur during clinical, it causes confusion for the students. This occurrence can be understood by cognitive dissonance theory.
(Festinger, 1957) which states that individuals need coherence in their beliefs and attempt to maintain coherence or consonance in them when new information causes conflicts with them, resulting in a state of dissonance. This is another area where the nurse role model or mentor can aide the student learning process.

Faculty participants felt that teaching safety issues related to mental health nursing is very hard to do in the classroom and that much of what students learn about safety concerns related to mental health nursing are learned in the clinical environment under the supervision of a Nursing clinical instructor. Safety issues in this context include both those directly impacting the patient as well as the nurse. One Faculty participant expressed the opinion that:

"Many students are either too cautious or overly engaged with patients" [and that] "they lack the assessment skills needed to make safe clinical judgements and decisions." (Erin, Clinical Instructor, SFFG).

This view is supported by research on the development of the mental health nurse identity, or what it means to be a nurse, and the impact that stigma can have on the student when making decisions related to boundaries and the therapeutic relationship (Tilley, 2005; Handley & Stocks, 2009; Secru, Ayala, & Bracke, 2015). Research from Tilley (2005) highlights the importance of the model of care subscribed to by the students and identified an educational shift in perspective, moving from the medical/surgical model of care to that of a more collaborative partnership between nurse and patient. Students that subscribe to a more medical model style of care may have a different learning experience from students with a therapeutic relationship model based style of care, and may experience more trouble assimilating therapeutic relationship knowledge and associated skills. Another participant added that:

"Stigma plays a big part in shaping the fears and attitudes they have about patients with mental illness, impacting how they interact with patients on the units." (Joanne, Nurse Educator, FFFG)
In short, without an awareness of nurse/patient boundaries, students who follow a therapeutic relationship model or patient centered approach to care risk becoming overly involved with the patient whereas students following the medical/surgical model or clinician centered approach risk becoming under involved and focused more on the disease process rather than the person at its center. According to Peplau’s theory of interpersonal relations (1952/1998), nursing care is viewed as an interpersonal process because it involves the interaction between two or more individuals, creating a therapeutic relationship in which participants have the shared goal of patient recovery. Regarding therapeutic relationship building, one student participant stated:

“I was a little scared at first. Then you sit and talk or play cards (with the patient), and then they don’t seem so scary. Then they ask to talk to you instead of the nurse or the doc. I didn’t even think about, but just interacting with the patients built a relationship.” (Lily, SFG)

Communication/interviewing skills were also identified by both student and faculty participants as being troublesome for student to apply in the clinical environment, specifically the breaking down of communication and/or interviewing skills into components that can be consciously used or not used by the nurse during real time nursing interventions. The groups decided that though troublesome, this mental health nursing content and/or skills could eventually be learned though gaining clinical experience, however, many students and faculty participants felt that the current program did not provide enough clinical experience for all students to gain these skills and that nurses actually only gain competence in these content areas after graduation. Figure 5.2 presents a visual representation of theme 2 and its associated content categories.
5.1.3 – Theme 3 – Praxis (putting theory into practice)

Newman (2002) defines praxis as a transformative process which brings theoretical and practical knowledge together to form a new whole. This definition is a popular one in Nursing education as it captures both the transition from knowledge acquisition in the classroom into clinical and the transformative nature of nursing education (Picard & Mariolis, 2002; Musker & Kagan, 2011; Smith, 2011). However, a conceptual clarification of praxis in nursing is an ongoing evolutionary process, and dialogues for the purposes of conceptual clarity are important for nursing (Lyckhage, Pennbrant, 2014). The student and faculty focus groups in my study are examples of
these ongoing dialogues, discussing praxis for the purposes of clarification of current standards and best practices. Both participant groups viewed praxis as a troublesome concept and provided numerous examples of theoretical content and/or skillsets that students struggle to implement in the clinical practice environment or into their developing style of practice. Though identified as troublesome by both groups, their perspective on praxis was very different, which was not entirely unexpected as one group (Faculty) has been ‘doing praxis’ for years and the other group (Students) are just starting to ‘do praxis’. This emerging theme focuses on the student difficulties experienced during the application of nursing knowledge in clinical and not the evolving definition of praxis.

In the first student survey, participants identified content and/or concept categories related to nursing praxis included the application of communication and/or interviewing skills, decisions related to the use of restraints, application of nursing skills into clinical, medication selection and off-label uses, selection of nursing interventions, critical thinking skill development, and the application of nursing knowledge and theory in clinical. These responses reflect the limited clinical experiences of the student participants who are in their fourth year of the program and preparing to start their professional practice career. During the student focus group, one participant’s perspective on praxis encapsulated the trouble they experienced putting their knowledge into practice:

“Everything is easy in your head, until you are expected to actually do it. Talking to patients, giving meds, even care planning. Things never go as you think they will yeah know. You eventually get it, right. But it’s so different that how you think it will go.” (Sam, SFG)

Faculty focus group participants identified troublesome content/concepts related to nursing praxis including the integration of nursing science into mental health clinical, documentation, application of the suicide risk assessment, application of the mental status exam, patient recovery/time of healing, measure of patient success related to recovery, and best practice gap. One participant observed:
“Just because they (the student) can identify something correct on an exam, (it) does not mean that they will be able to apply it in clinical. The understanding of a nursing concept or skill can’t just be measured on a test, it application in clinical needs to be assessed as well.” (Jane, Nurse Manager, FFFG).

This quote is supported by the work of Bendall (2006) who concluded that a student’s performance on written exams does not always translate into ability in the clinical environment. Altogether, 15 different categories were identified by the participants as being related to praxis, the largest number of categories of any of the identified emerging themes.

From the first student survey, the majority of students agreed that the development of critical thinking skills in mental health was troublesome. The examples of praxis are specifically linked to the application of the mental health nursing process, a decision making framework that utilized critical thinking skill a little differently than the medical/surgical nursing process of which the students are more familiar. This view is supported by arguments from Benner (1984) and Seymour, Kinn, & Sutherland (2003) who outlined how critical thinking skills learned in one clinical area may not be transferable into other clinical areas or onto nursing research or management roles. From this perspective, the student response does not indicate an absence of critical thinking skills, but suggests that the skills they do have may not be transferable into mental health nursing. Evidence of developing critical thinking skills in students can also be found in the other categories which they identified. An example being, clinical decisions related to the use of all forms of restraints. These students may lack the experience in mental health clinical practice to develop the critical thinking skills necessary to fully comprehend the decision making process associated with the use of restraints. Clinical placements such as forensics or acute psychiatry have higher levels of the use of restraints and students in these environments may be more comfortable with clinical decisions associated with their use (Austin, 2001).

Emerging critical thinking skills in the mental health clinical environment could also be linked to other categories related to praxis such as medication selection and off-
label uses and the selection of specific nursing interventions when creating patient care/treatment plans. Though prescribing medications for off-label uses is not illegal in Canada, it does present some interesting ethical issues. Off-label use of medications includes the use of medications for unapproved indications; using a drug outside of the recommended dosage range or time of duration; using a drug on a unapproved patient population (adult medication on a child), or intentionally using a medication in a patient who has a known contraindication (Howland, 2012). All of these uses go against the psychopharmacology education provided to undergraduate nursing students creating a learning scenario where common mental health clinical practices go against best practice, contradicting what is taught to them and complicating their understanding of the professional nursing role regarding appropriate medication use, again causing cognitive dissonance.

Clinical experience has a significant impact on the creation of patient care plans as the mental health treatment objectives differ greatly from the plans utilized in medical/surgical nursing. The recovery process is very different between these healthcare foci and although the process of creating the care plan remains constant, the student often requires some mental health clinical experience, knowledge, and critical thinking skills to create appropriate plans in the mental health clinical environment (Atay, Karabarak, 2012). Guided by a therapeutic relationships model of care, the clinical practice of working with the patient to collaboratively create a care plan involves the application of numerous nursing theories and skillsets, making it a praxis issue when the process breaks down, becoming troublesome for students.

Intuition was described by the faculty participants as taking time to develop and being a vital element of critical decision making. Nursing intuition is recognized as a legitimate source of nursing knowledge that comes into play when nurses access unconscious knowledge without inhibition or second-guessing (Robert, Tilley, Peterson, 2014). All faculty participants were in agreement that nursing experience is necessary for critical thinking, intuition, and decision making skill to development and that this process takes place during their mental health clinical learning experiences. Faculty identified the use of block courses as their preferred scheduling approach to facilitate the development of critical thinking skills. One participant noted that:
“The students like the block courses, I think that offering theory and clinical in a block course prepares better students. The intense focus has good results.” (Susie, Mental Health Nursing professor, SFFG)

Block course are intensely content-focused with a shorter time frame than traditional nursing courses and those advocating for their use argue that they are academically superior to a traditional course design and provide an alternative curriculum design to maximize clinical placements (Pringle, Green, Johnson, 2004). Though the Pringle et al. (2004) report is over ten years old, the argument remains evident today.

Student age, level of maturity, and life experience were identified during the FFFG as factors related to critical thinking skill development in mental health nursing. Faculty felt that students with lower levels of life experience and maturity were reported to struggle more with critical thinking skill development than older students with higher levels of life experience and maturity. One participant stated that “their (the student) expectations related to nursing diagnoses and interventions are completely unrealistic” (Irene, Mental Health Professor, FFFG), and that many students struggle to set realistic patient goals due to immaturity and a lack of experience and knowledge in mental health nursing. This view is supported by previous research from Jenkinson (1997), Kirkbakk-Fjaer, Andfossen, & Hedelin (2015) who link higher levels of student maturity to higher levels of preparedness, enhanced skill application, and development of confidence and identity in the clinical setting. Clinical instructors could benefit by knowing the level of student preparedness, attitudes towards mental illness, and maturity level prior to the start of clinical instruction (Kirkbakk-Fjaer, Andfossen, & Hedelin, 2015), for it allows for the planning of teaching experiences targeted to the specific learning needs.

Communication/interviewing skills were also identified by student and faculty participants as being troublesome for students to apply in the clinical environment. Specific difficulties identified by faculty related to the breaking down of communication and/or interviewing skills into components that can be consciously used or not used by the nurse during real time nursing interventions. Faculty decided that although troublesome, these skills could eventually be learned through gaining clinical
experience, however, on reflection many participants felt that the program did not provide enough clinical experience for all students to gain these skills and that many nurses actually only gain competence in these content areas after graduation. Similar to the discussion about praxis, one participant noted that the:

“Students age, level of maturity, and life experience often give them a better starting point from which to apply communications skills in (mental health) clinical.” (Tracy, Mental Health Nursing Professor, FFFG)

Again, faculty participants agreed that there was merit to this statement but that it was not the rule. Some student participants in the focused discussion groups stated that the use of communication skills, as applied in mental health clinical environments, was not emphasized enough in the communications course taught in the program. Some students felt that mental health content was poorly linked to the use of communication skills, specifically interviewing skills that are used when conducting assessment such as the mental status exam or suicide risk assessment. However, these views were not shared by all student participants with some stating that their instructors did make these links between the content and mental health nursing, leading to the group to come to the conclusion that individual course and clinical instructors play a big part in the quality of the student learning experience. One student expressed that:

“Just like some clinical environments were better than others, some lecture and clinical instructors were better than others, covering material better or linking (previously learned) knowledge and skills to mental health nursing.” (Leigh, SFG).

In the Second Faculty Focus group, when the topic of praxis came up, understanding praxis itself was not the focus of the discussion, rather, it was on how many students struggle to put into practice various knowledge that is introduced in lecture and reinforced and/or practiced in the clinical environment. This challenged my existing understanding of how troublesome knowledge is defined, opening up the
possibility that a single form of mental health knowledge could be troublesome to the student for multiple reasons and could occur at different times in their education program. Specific nursing actions and/or functions identified as troublesome by faculty included the application of the mental status exam and suicide risk assessments, mental health documentation, and communication/interviewing skills. Faculty participants stated that students are accustomed to standardized assessment tools and that they struggle with the application, data organization, and documentation aspects of ‘free form’ assessments.

The best practice gap associated with mental health theory and practice was also viewed by students as being troublesome. This again challenged my understanding of troublesome knowledge, moving away from a focus on a specific concept to a focus on the learning and application processes associated with the concept. This struggle with the best practice gap can be related to cognitive dissonance in that the best practices used to prepare students for mental health clinical may not be reflected or reciprocated in the actual clinical environments, causing significant disorientation and confusion for some students. In a longitudinal study using Naturalistic enquiry from the UK, researchers concluded that students struggle to apply nursing best practices and attitudes when encountering norms in the workplace such as obeying covert rules, a lack of support, poor nursing role models, structural and organizational constraints such as time pressures, role constraints, staff shortages and work overload (Maben, Latter, Macleod, 2006). I found this study informative as it was well aligned to the Canadian Nursing context, was conducted over a number of years, and clearly identified both nursing unit based and organizational based factors that can make this concept difficult for students to learn. My research now links this aspect of the best practice gap to troublesome knowledge. It highlighted the impact of unit and institutional culture on student learning and helped me to interpret the comments and perspectives of the faculty and student participants about their clinical learning experiences.

Student navigation of the best practice gap was also raised as a troublesome process for many students by the faculty participants during the SFFG. Specifically, how students struggle to understand how best practice should guide nursing practices and that as autonomous clinicians; they need reliable and valid nursing knowledge to make
the best practice decision possible. Like numerous other troublesome examples already discussed, faculty participants felt that this process takes time to master and that many students only gain full awareness after graduation. One participant stated:

“Students struggle with what they see on the units, especially negative attitude towards the patients or behaviors that they view as being unsafe or unethical in their eyes.” (Mary, Clinical Instructor, SFFG)

Faculty participants agreed that best practices need to be regularly reviewed and broken down to their core principles in the nursing curriculum, but stated that the reality of how the healthcare system functions sometimes gets overlooked and that students are sometimes shocked when they first witness the best practice gap first hand. All of these examples suggest that the process of navigating the best practice gap in mental health nursing practice is by itself troublesome for students and that its’ mastery is further complicated by the sheer number of best practice gap examples within mental health nursing practice that they must overcome during their clinical experiences.

The concept of patient recovery from mental illness was a common thread throughout most of the Second Faculty Focus Group that is related to praxis. In a theoretical review of the concept of recovery, Stacey & Stickley (2012) identity the learning difficulties experienced by students and present an argument for reframing recovery as a threshold concept within mental health nursing education. In this review, the distinction between medical recovery and personal/social recovery is presented, with the later form of recovery being the identified as the more difficult for students to conceptualize. They link student learning to liminal space theory stating that students understand recovery at a superficial level and fail to gain a deeper level of comprehension due to their inability to overcome troubles associated with engaging in the transformative learning process (Stacey & Stickley, 2012). From my data, recovery was also viewed from two perspectives, first from the medical/nursing perspective as an umbrella term that encompasses nursing knowledge and skills associated with nursing interventions, patient outcomes, patient insight and judgement, living with and managing chronic mental illness, and measures of success in mental health nursing. Secondly,
recovery as a concept was viewed from a personal/social perspective focusing on patient rights such as self-determination and freedom to live on their own terms, to obtain support from their peers and professionals to help them achieve these goals, and to facilitate community integration (Cleary, Horsfall, O'Hara-Aarons, Hunt, 2013).

Participants in the Second Faculty Focus group felt that the type of student clinical experience impacted upon their ability to understand the concept of patient recovery. Their argument was that students’ who had clinical experience in mental health acute care units were able to view recovery from the medical/nursing and the personal/social perspective, therefore witnessing a complete recovery or stabilization process first hand. One participant stated that “many students lack the experience and knowledge necessary to fully understand patient recovery” (Tracy, Mental Health Professor, SFFG) and questioned some students ability to accurately associate mental illness with chronic illness. Faculty identified specific examples such as assessment criteria, the mental health services act, discharge criteria, and community follow-up and support services as knowledge that is necessary for students to have in order to fully understand patient recovery. The discussion also included commentary on how students struggle to set realistic recovery expectations with patients due to their own views or medical/surgical bias or stigmatization of mental illness. One participant stated:

“They don’t know what recovery looks like yet (for patients with a mental illness), it’s not like an infection that gets better or a wound that is healing, they have no point of reference unless (it comes) from their own lived experiences with friends and family.” (Joanne, Nurse Educator, FFFG).

Noteworthy is that faculty discussion was solely from the medical/nursing perspective with no focus on the patient’s role in their own recovery. The participants were in agreement that in medical/surgical nursing, the goal is to cure the patient whereas in acute care mental health nursing, the goal is to stabilize the patient and mobilize support resources. Regarding this perspective on patient care, another participant stated that:
“The students grasp this (mental health recovery) goal, but very few actually understand it due to the limitations of their clinical placement.” (Amy, Mental Health Professor, SFFG).

This discussion revealed that the faculty themselves held some significant doubts about the quality of the current mental health clinical learning experiences and that they felt this problem could lead some students to be at a learning disadvantage. By way of a summary, Figure 5.3 illustrates the emerging theme of praxis, subdivided into examples of content with troublesomeness that can be resolved during clinical, through professional maturation, and those with a transformative troublesome learning process.

**Figure 5.3 – Theme 3: Praxis (Putting theory into practice)**
5.1.4 – Theme 4 - Professionalism in Nursing

Maranon & Pera (2015) stated that although there seems to be a theoretical consensus that care is the main function defining the nursing profession, many nurses continue to experience difficulty in acting as caregivers. This statement provides context for many of the student and faculty responses from the first student survey and faculty focus groups related to professionalism in nursing. During classroom instruction and clinical learning experiences, students are socialized into the profession of nursing. It is during these learning experiences that students learn the norms, values, behaviors, attitudes, and culture of the profession to which they aspire to belong (Maranon & Pera, 2015). Therefore, the aim of socialization is to develop a professional identity among future nurses (Fagermoen, 1997). Other research suggests that many pre-licensure nursing students already have a preconceived view of the nurse that they wish to become when they enter into nursing educations programs and use the socialization process to bring this notion into fruition (Ware, 2008; Hensel, Laux, 2014). Regardless of the source or process involved of development, the acquisition of a professional nursing identity is a significant learning outcome within nursing education as it is through this professional identity through which the skills, values, and attitudes of the profession are passed on to new nurses (Hensel, Laux, 2014).

The topic of professional nursing and/or professional nursing identity development is well represented in nursing research, less so represented are the barriers related to professional identity development and/or problems students experience during the socialization process into professional nursing practice (Prato, 2013). Studies by Gray (1997), Reutter, Field, Campbell, Day, (1997), Oermann (1998), Gray & Smith (1999), and Wells (2007) all concluded that the journey of becoming a professional nurse can be challenging for students, identifying contributing factors such as student stress related to clinical performance and a general lack of confidence in their clinical skills as negatively impacting professional identity development. This is especially true for students in first year clinical experiences where their skills as very new and unproven and they rely heavily on the feedback from their clinical instructor to guide their professional development (Gray, 1997; Reutter, Field, Campbell, Day, 1997; Gray & Smith, 1999; Helmich, Bolhuis, Laan, Koopmans, 2011; Luanaigh, 2015). This
dependence on the clinical instructor for professional validation does decline during future clinical experiences as students become more confident in the skills and competent in their application (Gray, 1997; Reutter, Field, Campbell, Day, 1997; Helmich, Bolhuis, Laan, Koopmans, 2011). Evidence provided by participants aligned with previous research, indicating that students in the program find certain content and/or concepts associated with professionalism in nursing troublesome and that their clinical learning and socialization into the nursing profession during their clinical experiences play a big part in easing the troublesome emotional responses associated with the professional identity development process. This again challenged my existing understanding of troublesome knowledge, widening its scope to include troublesome emotional states that are related with the content.

From the open-ended question responses in first student survey, two categories of content related to professionalism in nursing were identified; political issues related to mental health nursing and moral/ethical issues in mental health nursing. When discussed further in the Student and Second Faculty Focus groups, the concepts of moral distress and/or ethical dilemmas’ in mental health nursing were not viewed as being troublesome; rather it was the troublesome emotional state that these ethical issues induce that the students struggled with. For nursing intuition to develop and for students to gain the ability to recognize and manage situations where moral distress or ethical dilemmas occur, Faculty reported that mindfulness/self-awareness and professional identity development needs to occur. One student participant stated that:

“The problem is with the way it (moral distress) makes you feel. I was not prepared (emotionally) for it. You can't learn this in class, you have to go through this (in clinical) to get it.” (Emily, SFG)

This response was not surprising as students have limited experience making decisions related to the care of patients with mental illness and may have never experienced an ethical nursing dilemma of any kind during their theoretical or practical nursing education. Ethical practice appears to be most problematic in daily ethical dilemmas
such as those that arise from situations that involve conflicting values or beliefs about what is the right or best course of action (Ham, 2004).

Faculty focus groups identified a number of categories related to professionalism including ethical dilemmas in mental health nursing, the concept/practice of lifelong learning, mindfulness and/or reflective nursing practices, professional identity development, the value of nursing experience – nursing wisdom, self-care/burnout awareness, teamwork skill development, and the flow of information through the mental healthcare system. One faculty participant stated:

“Students struggle with what they see on the units, especially negative attitude towards the patients or behaviors that they view as being unsafe, or borderline unethical in their eyes.” (Shandra, Clinical Instructor, FFFG).

This is an example of an ethical dilemma in nursing that occurs regularly in nursing practice (Dierckx de Casterle’, Izumi, Godfrey, & Denhaerynck, 2008) and something most nurses experience during their career (Dierckx de Casterlé, Grypdonck, Vuylsteke-Wauters, Janssen, 1997). This literature argues that it is beneficial for all students to possess the skills and knowledge necessary to overcome the ethical dilemmas that they will inevitably experience during their professional practice, and it is up to nursing education programs to facilitate this process. As this category was identified by student and faculty participants, program and/or curriculum deficits such as a lack of educational depth in this area and/or focus on the personal development aspect associated with managing ethical dilemmas in practice are potentially identified. A student participant commented that:

“You get definitions and brief examples, in like the first class (of the program). Then you do some med/surg clinical’s and (the) ethics seem clear. You think you know right from wrong. Then you go to psych, and all of a sudden you’re unsure. It’s like, what you know doesn’t apply.” (Leigh, SFG)
As creating and supporting the fundamental pattern of ethical knowing and evaluating student moral reasoning abilities are essential to the application of evidence-based practice in this area (McLeod-Sordjan, 2014), this category is fundamental to the professional development of students in mental health nursing practice.

Much of the Faculty Focus Group discussions involved topics related to professionalism in nursing with the importance of mindfulness/self-awareness and reflective practice, a specific set of concepts that all faculty felt were troublesome for many students to learn. Some faculty participants stated that students did not often see the value of mindfulness/self-awareness and that they are not naturally reflective. One participant stated that:

“Reflective practices (to enhance self-awareness) can be difficult for all nurses and not just students, for it does not come naturally for many nurses.” (Tracy, Mental Health Professor, FFFG).

Other faculty participants stated that these concepts are difficult to teach to students, specifically the selection of an appropriate reflective technique as well as how to incorporate insights learned from reflective practices into a student’s professional development process. Another faculty participant stated:

“That reflective writing is a tough sell to students, especially those who are focused on mastering the skills that they are learning; they fail to make the link between reflective practice and skill improvement.” (Joanne, Nurse Educator, FFFG)

All faculty participants were in agreement that these concepts could be fully understood by students after additional clinical and life experience. Though reflective practices were identified as troublesome content by the faculty, this discussion raised some interesting questions regarding the focus of the problem from the student perspective, again shifting form the content itself to its application. Faculty believed that the troublesome part of some knowledge may not involve its comprehension, but rather
it is the application or integration of the knowledge into their practice that was viewed as being troublesome. In a phenomenological study by Rees (2013), using an affective focused approach to teaching reflective practice to nursing students, links between reflective theory and application/integration into their professional practice were made that lead to an enhanced awareness of their professional self. Rees used a teaching approach focused on aiding in the application of reflective practices, and links the content to application and/or integration into their professional self. This research reinforces the perspective expressed by the faculty in the focus groups, that reflective practices can be difficult to teach and that they are valuable for student’s ongoing professional development beyond their program education.

From the First Faculty Focus Group, content and concepts related to professionalism in nursing were identified when faculty participants were asked to identify examples of troublesome knowledge or learning from their own past learning experiences when in the student role. Related to professionalism, Faculty participants also brought up and discussed the concepts of life-long learning, balancing the needs of care with burnout, and the flow of information within institutions and the healthcare system. This content is particularly interesting as it was not identified by student or faculty participants as being troublesome during the initial data collection, but only arose during the faculty focused discussion, after faculty had reflected on their own past learning experiences. However, these concepts are found in the literature related to the teaching of professionalism to student nurses. In another phenomenological study conducted by Secrest, Norwood, & Keatley (2003), students identified with three themes during their professional student development, belonging, knowing, and affirming. In their study, Secrest et al (2003) state that the students understanding of professionalism is shaped by their sense of belonging to the profession, their knowledge about the profession, and by the profession itself that provided them with affirmations during their education program (Secrest et al. 2003). Levet-Jones, Lathlean, Maguire, & MacMillen (2007) make the argument that difficulties associated with professionalism that are experienced by students in clinical are best understood ‘through the lens of belongingness’, a perspective that encompasses the socialization and professional development of student entering into the nursing profession. This perspective on
professionalism was evident in a statement made during the student focus group:

“I saw (unprofessional) behaviors (by the nurses) that really bothered me. Then I talked to my instructor and some of the other ward nurses (about it). These nurses showed me what professionalism (in nursing) was about.”
(Sam, SFG)

Similar themes were identified by Williams & Burke (2015) in a nonexperimental descriptive design study, this time identifying students as doing nursing, knowing nursing, learning nursing, and speaking nursing. The findings from these studies, along with those from my research, could indicate that student nurses do not initially recognize the troublesome nature of the professional development process and that the many mental health nursing concepts that are linked to professionalism may only be viewed as troublesome by students after reflecting on their past learning experiences in the classroom and clinical environment. From the FFFG, concepts such as life-long learning, self-care and burnout, teamwork skill development, and the development of nursing intuition are all related to the themes identified in these two studies. Like the concept of recovery, this content is not viewed as being difficult for students to superficially understand, but is viewed as being troublesome for students when they are engaging in the transformative learning process associated with its application or incorporation into their professional practice.

Regarding the flow of information within institutions and the healthcare system and political issues related to mental health nursing, this content is not in the mental health nursing curriculum, but is introduced to fourth year students in a general nursing course focused on health systems and policy development within a global context. This could potentially represent a flaw in the data collection process as this content, though related to mental health nursing curriculum, was not delivered to students until after the data collection process had ended. Since students in my research had not been taught this prior to data collection, it is understandable as to why it was viewed by some students in my study as being troublesome. These two examples represent an overlap in content between the mental health nursing and general nursing curriculum’s, an
occurrence not explored in this research, but still may represent a nursing curriculum and clinical placement area that includes examples of troublesome nursing knowledge.

An interesting turn in the discussion with faculty came when discussing the student responses to skills related to teamwork and/or the group process. Faculty participants stated that many students hate the idea of having to work in teams and that they did not fully understand the value of teamwork until they are in their senior practicums or working as novice nurses after graduation. One participant stated that:

“Students hate to work in groups, and yet in reality, almost all nursing in acute care takes place in the group environment, it goes against what they learn in the real world – every man for themselves.” (Amy, Mental Health Professor, SFFG)

This quote for the first time brings in an affective component into the troublesome knowledge debate, challenging again the existing scope of why content could be considered to be troublesome by asking the question if personal feelings towards a topic or activity impacts or influences the student’s ability to learn. The faculty perspective seems to supports this view, as does the literature associated with nursing student motivation and/or affective response to nursing content when it is introduced in the program or in clinical. In a descriptive study by Bengtssen & Ohlsson (2010) conducted with medical and nursing students, motivating factors that drive student efforts to learn were identified and classified as either intrinsic or extrinsic in nature. They argued that motivated students have more positive learning experiences and concluded that highly motivated students often have a combination of genuine student curiosity and a belief that that the content is relevant to clinical application (Bengtssen, Ohlsson, 2010).

Rose (2011) argues that positive student learning outcomes are associated with strong intrinsic motivation and that the positive and negative factors that motivate nursing students to learn need to be better understood. From my project, the student negative perception of teamwork or group work could represent a low level of intrinsic motivation and therefore lead to poor learning outcomes. From the perspective of
troublesome theory, low motivation or a negative view of the content could contribute to a troublesome learning process, increasing the student’s time in liminal space. In modern healthcare systems, there is often considerable uncertainty, rapidly changing work environments, and a lack of effective and efficient communication among team members (Johnson, Hamilton, Delaney, & Pennington, 2011). Students require team-working and building skills that are necessary to navigate these challenges including affective domain content such as interpersonal communication skills, assertiveness, adaptability, and a knowledge of team functions (Johnson et al. 2011). With teamwork being such a vital aspect of modern healthcare delivery, affective learning based barriers such as student motivation need to be better understood and managed. Troublesome knowledge from the affective domain will be explored further in Chapter 7.

Faculty participants also stated that many students do not realize how nursing experiences challenge their perspective on past experiences or how important and valuable reflective practice can be in gaining personal and nursing knowledge, again bringing up the idea of an affective link to troublesome knowledge. Faculty stated that many students find it difficult to see the value of reflection because they lack the life experience. One faculty participant stated:

“Age, maturity and life experience comes into play, some of the students, especially the post-degree ones who have worked as a professional in another field get it, but it needs to be lived to be understood, I think it’s very difficult to teach reflective practice and professionalism.” (Irene, Mental Health Professor, SFFG)

By way of summary, Figure 5.4 is a visual representation of the theme 4 with its associated content categories.
5.1.5 – Theme 5 - Brain Chemistry Changes and its Management

Current medical and nursing understanding of mental illness and mental health from a health promotion perspective involves an understanding of biological changes associated with mental illness such as changes in brain chemistry, normal/abnormal psychological development, and social/environmental factors such as the social determinants of health (Parham, 2008). Psychiatric medications, also referred to as psychotropic medications, that alter or manipulate patient’s brain chemistry are used in every specialty nursing area as a primary intervention in mental illness symptom management, requiring nursing students to have the knowledge and skills necessary for safe administration, assessment for efficacy and side effects, and patient teaching (Wilson & Ward, 2013).
Though significantly important to modern nursing practice, it is not uncommon for education on psychiatric medications to be skimmed over in nursing education programs in favor of other drug classifications (Rappa, Larose-Pierre, McDonald, Massey & Singh, 2006). This is also the case within the study's Nursing Education program, which has no dedicated pharmacology course and relegates this content to be included in the various related medical/surgical or mental health courses. This nursing education practice has resulted in many mental health nurses feeling that they do not have the pharmacology knowledge to practice after graduation (Hemingway, Stephenson, & Allmark, 2011). One student participant stated:

“It doesn’t seem too bad at first, then (in clinical) you realize how little you know. With no (dedicated) class and so much (pharmacological) content, how can we be expected to know this stuff and ready for clinical?” Sam (SFG).

In my university, the decision regarding the use of this curriculum design has been identified by students and faculty in previous course and program evaluations as an area of concern, questioning the overall quality of the student’s pharmacology education. Many of these psychototropic medications alter or manipulate the patients’ brain chemistry with the goal of decreasing the severity or removing completely the negative symptoms associated with various mental illnesses. With this prior knowledge about psychotropic medications and how they are introduced and taught to students in this study’s Mental Health Nursing curriculum, I was not surprised to see that content categories related to psychopharmacology and brain chemistry were identified by the participants as troublesome.

In response to the open-ended questions in the first student survey, students identified neuroanatomy, brain chemistry changes associated with mental illness, the selection and use of on-label and off-label psychotropic medications, and the role of medications in psychiatry and impact on patient recovery and time of healing as being troublesome. Faculty participants identified the same content areas as being troublesome for students, an agreement that was not unexpected as both participant groups had previously identified this content to be lacking in the current curriculum.
The categories of neuroanatomy and brain chemistry changes associated with mental illness were also discussed during the faculty focused discussions. Faculty thought that this content was troublesome for nurses of all levels of education and experience, specifically the various neurotransmitters and their purpose/function. They viewed this content as being troublesome due it being conceptually difficult, and stated that many students and faculty have concerns about how this content is currently being delivered in the program, outside of the nursing program in the pre-nursing courses through the college of health sciences. One participant stated that:

“Students need first hand clinical experience to see how changes in brain chemistry translate into changes in personality and behavior.” (Sue, Mental Health Nursing Professor, SFFG).

Regarding how this content is currently taught to students, faculty felt that there were deficiencies in both the nursing curriculum and clinical experiences that were negatively impacting the overall quality of student learning. Some faculty stated that as a generalist nursing education program, this content was deemed as specialty knowledge that it is only necessary for students to cover it in their senior practicums or as novice nurses who are stating their career working in mental health clinical environments.

During the student focus group, the categories of neuroanatomy and brain chemistry changes associated with mental illness were also presented for discussion. Student focus group participants were in agreement that neuroanatomy is not viewed as being troublesome; rather, the troublesome aspect of the content is associated with the brain chemistry changes associated with mental illness. One participant stated:

“It’s mostly just speculation. Only so many neurotransmitters are understood, they (drug companies and medical researchers) talk like these things (mental illnesses) are black and white, but they aren’t. The more you study it, the more confusing it gets.” (Leigh, SFG).
Similar to their perspective on mental illness pathophysiology, the student group voiced that not enough was known about the working of the brain with regards to mental illness and that students do not function well in content areas that are ‘grey’, or not fully understood. There is some truth to this statement as the internal working of brain and the manifestation of mental illness due to changes in the brain normal functioning are not fully understood (Atrens, 2009). Human knowledge in general about the brain is not very well developed theoretically or conceptually (Garel, 2013), so it is possible that everyone, including student nurses, will suffer from the vague understandings. As a means of summary, Figure 5.5 is a visual representation of Theme 5 with its associated content categories.

Figure 5.5 – Theme 5: Brain Chemistry Changes and Management
5.2 - Chapter 5 Summary

From the project data, five main emerging themes including the spectrum of mental illness, therapeutic relationships and boundaries, praxis, professionalism in nursing, and brain chemistry and its management were identified. Each theme was presented and linked to research identified from the ongoing literature review or from that drawn on during the data analysis. The presentation of themes included discussion on why each content category was viewed as being troublesome by the participants as well as preliminary insights into the troublesome knowledge forms associated with each emerging theme. Through this process, new insights not previously identified by the literature were starting to be uncovered. An integration of the quantitative and qualitative data will be presented and discussed in Chapter 6.
Chapter 6 – Integration and Discussion on Findings

6.0 – Introduction and Overview

In this chapter, the potential examples of troublesome knowledge discussed in the previous chapter are organized into a cohesive argument in support of the content being troublesome from both the student and faculty perspective. Troublesome knowledge by definition represents concepts and/or content that students find difficult to learn or apply in the clinical setting and has been classified into five distinct forms which are alien/foreign knowledge, conceptually difficult knowledge, inert knowledge, ritual knowledge, and tacit/professional knowledge (Perkins, 1999; Meyer & Land, 2003). A decision matrix was designed and utilized to create a means of identifying the forms of troublesome knowledge that are associated with the examples of troublesome mental health nursing content. The quantitative and qualitative analyses were integrated during the clarification of the student and faculty perspectives on troublesome mental health nursing content. The integration of analysis findings is the merged with the tables created through the use of the decision matrix to answer the research question.

The similarities and differences between the student and faculty perspectives lead to some insights into student learning. These insights provided the foundation from which a conceptual student learning pathway was created to help understand the student nurse learning process that occurs when they encounter troublesome mental health nursing knowledge. This learning pathway is presented and explained in relation to the forms of troublesome knowledge as well as nursing and educational literature.

6.1 - Multiple forms of Troublesome Knowledge

The items included in the survey tools used in this project came from the literature review, the open questions in the first student survey, and examples provided by the faculty participants during their first focus group. When these items were being organized in the surveys using the existing literature as a guide, there appeared to be some overlap of mental health nursing content and the five different forms of troublesome knowledge identified in the literature, a notion that is not directly explored in the related literature that was reviewed. Meyer and Land (2003), when presenting a
definition of troublesome tacit knowledge, used the example of how teaching western music could prove to be troublesome for students due to the contents alien/foreign and tacit/professional elements. This example shows how a source of troublesomeness might often be the result of a combination or compounding of the different kinds of knowledge (Meyer & Land, 2003). The idea of content being associated with multiple forms of troublesome is an interesting one, for it contributes to the argument that nurses could view specific content as being troublesome for different reasons.

As no method for categorizing or organizing mental health nursing content into its associated troublesome forms exists, a new process and tool was devised. The goal of this process was to align each survey item with its associated forms of troublesome knowledge and to identify the stage of their nursing education/career when each form was viewed as being troublesome. Constructs of knowledge, attitude, self-efficacy, and intent are items that are difficult to measure directly and are referred to as latent items (Pett, Lackey, & Sullivan, 2003). As latent variables cannot be directly measured, researchers need to use other surrogate measures, such as by using an instrument that contains attributes, or items, that can be (Pett, Lackey, & Sullivan, 2003). The decision matrix is the surrogate tool that I created using the definitions of the various forms of troublesome knowledge, learner attributes, and a timeline to create a scale from which a distinction could be made regarding when during the nurses ongoing career education process the content was viewed as being troublesome (Figure 6.1).

This matrix is a representation of the reasoning process used by the researcher to organize and cluster the examples of nursing content from the project data into their associated forms of troublesome knowledge. The matrix also aided in determining when the nursing content was most likely to be experienced as troublesome during a nurse’s career. There were three working assumptions that were used to help guide this process. The first assumption involved the educational stage that a student might first encounter the particular troublesome concept. Options for this assumption included grade school, high school, and post-secondary education. The second assumption involves the social context in which a student may be exposed to the troublesome content. Options for this assumption include the home/family context; the friends/society context; and the nursing education context. The third assumption
regards how specific the potential troublesome concept is to nursing education. Options for this assumption include very specific, specific, and general. The troublesome forms associated with each item are ordered according to the timeline in which they would be experienced in their nursing education. Figure 6.1 uses the item of critical thinking skill development as an example of its design and use.

For example, by using the matrix to guide the reasoning process for critical thinking skill, the form alien/foreign knowledge would be encountered first, early on in their nursing education. Critical thinking skills are viewed by students during their nursing education program as a skillset that is transferable, is encountered early in their nursing career, and is not a natural process for many (Seymour, Kinn, Sutherland, 2003) and being viewed as alien or foreign in nature. However, critical thinking skills could also be associated with the inert form of troublesome knowledge as all students enter into the program come with some ability to make autonomous decisions and thus already have some critical thinking skills. These pre-existing skills can then be further enhanced or developed through the nursing education process (Pitt, Powis, Levett-Jones, Hunter, 2014). Teaching strategies to enhance critical thinking skills include problem-based learning, reflective writing, role-play, concept mapping, and debate (Simpson & Courtney, 2002; Yang & Chou, 2008) which enhance student engagement and fosters existing critical thinking dispositions (Vacek, 2009; Velde, Wittman, & Vos, 2006; Chan, Chan, & Lui, 2012). Critical thinking and decision making in general can also be viewed as a process that follows an established pattern or process of development (L'Eplattenier, 2001, Brookfield, 2012) which is similar in definition to an internalized ritualistic behaviors described by Perkins (1999), and therefore it would fit with the definition on ritual knowledge, but not experience as troublesome until a deeper understanding of the content was achieved.

Using this matrix, each of the items from the project surveys were linked with their associated forms of troublesome knowledge. Table 6.1 presents the closed items and examples provided in the open ended questions from the first student survey and their associated forms of troublesome knowledge.
Figure 6.1 – Decision matrix (example Item – Critical Thinking)

<table>
<thead>
<tr>
<th>Item: Critical Thinking skill development</th>
<th>Nursing Experience Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Novice – Expert</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Troublesome Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alien/Foreign</td>
</tr>
<tr>
<td>X</td>
</tr>
</tbody>
</table>

Working assumptions that underpin the reasoning process:
Education Stage – Grade School/High School/Post-Secondary
Social Context – Home/Family; Friends/Society; Nursing education
Specificity to Nursing – Very specific/Specific/General

Results:
Rooted in family/societal views and foundational education, so inert knowledge may exist. Nursing education introduces critical thinking from a nursing perspective, so it can be viewed as alien/foreign. Would require experience to master and develops through sustained use, challenging and reworking existing ritualistic knowledge. This content is based on existing perspectives, but is greatly influenced by the nursing perspective and is introduced early on in the nursing career.

Associated Troublesome Forms:
Alien/Foreign
Ritual
Inert
The majority of the items and open examples in Table 6.1 were associated primarily with either Alien/foreign knowledge or tacit/professional knowledge. There were no examples of mental health content that were clearly associated with inert knowledge. However, according to the results from the decision matrix and supported by statements made by participants during the focus groups, much of the content identified does involve inert knowledge and ritual knowledge, but only at deeper levels of understanding. This could indicate that students experience different troublesome forms as their understanding of the content deepens, starting with exposure to the content (first viewed as alien/foreign or conceptually difficult), moving towards

<table>
<thead>
<tr>
<th>First Student Survey Item</th>
<th>Associated forms of Troublesome Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restraints</td>
<td>Alien/Foreign, Conceptually Difficult, Inert</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>Alien/Foreign, Inert, Tacit/Professional</td>
</tr>
<tr>
<td>Cultural Competency</td>
<td>Alien//Foreign, Ritual, Inert</td>
</tr>
<tr>
<td>Caring Skills</td>
<td>Alien//Foreign, Ritual, Inert</td>
</tr>
<tr>
<td>Brain Chemistry</td>
<td>Conceptually Difficult, Alien/Foreign</td>
</tr>
<tr>
<td>Nursing Intuition</td>
<td>Tacit/Professional, Alien/Foreign, Inert</td>
</tr>
<tr>
<td>Psychopharmacology</td>
<td>Conceptually Difficult, Alien/Foreign</td>
</tr>
<tr>
<td>Therapeutic Relationships</td>
<td>Tacit/Professional, Alien/Foreign, Inert</td>
</tr>
<tr>
<td>Moral Distress</td>
<td>Tacit/Professional, Inert, Ritual</td>
</tr>
<tr>
<td>Environmental Patient Factors</td>
<td>Alien/Foreign, Conceptually Difficult</td>
</tr>
<tr>
<td>Personality Disorders</td>
<td>Alien/Foreign, Ritual</td>
</tr>
<tr>
<td>Nursing Interventions</td>
<td>Alien/Foreign, Ritual</td>
</tr>
<tr>
<td>Forensic Nursing</td>
<td>Alien/Foreign, Tacit/Professional, Ritual</td>
</tr>
<tr>
<td>Suicide Risk Assessment</td>
<td>Alien/Foreign, Tacit/Professional, Ritual</td>
</tr>
<tr>
<td>Nurse/Patient Boundaries</td>
<td>Alien/Foreign, Tacit/Professional, Ritual</td>
</tr>
<tr>
<td>Counseling Skills</td>
<td>Alien/Foreign, Conceptually Difficult, Alien/Foreign</td>
</tr>
<tr>
<td>Pedophiles</td>
<td>Conceptually Difficult, Alien/Foreign, Tacit/Professional</td>
</tr>
<tr>
<td>Mental Illness Pathophysiology</td>
<td>Tacit/Professional, Alien/Foreign</td>
</tr>
<tr>
<td>Praxis – Theory Application</td>
<td>Tacit/Professional, Alien/Foreign</td>
</tr>
<tr>
<td>Ethical Dilemmas</td>
<td>Ritual, Tacit/Professional</td>
</tr>
<tr>
<td>Related Political Issues</td>
<td>Ritual, Tacit/Professional</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>Tacit/Professional, Inert, Ritual</td>
</tr>
<tr>
<td>Clinical decision making skills</td>
<td></td>
</tr>
</tbody>
</table>
understanding the content, and finally to integration of the content (changing/restructuring existing inert or ritual knowledge). This learning hypothesis is supported by tenets of Benners’ novice to expert skill acquisition model (1982), constructivist learning (Svinicki, 1999), and comments made by faculty participants who have lived this process.

Ritual and inert forms of troublesome knowledge involve having a self-awareness of internal patterns of thinking and of behavior. Self-reflection is a means of uncovering these internal patterns, and is described by Karpa & Chernomas (2013) as the foundation upon which nurses can both demonstrate and evaluate their learning and performance. Self-assessment is reflective method in which students critically evaluate their skills for autonomy in learning and professional practice; skills that encompass critical awareness and reflectivity (Boud, 2001; Dearnly & Meddings, 2006). If students do not have a deep level of self-awareness or have poor self-assessment skills, they may not recognize content that challenges these internal patterns as being troublesome. Bjorkstrom, Athlin, & Johansson (2011) concluded that many new graduate nurses do not feel confident about navigating the personal changes and nursing demands associated with being a professional nurse, stressing the need for additional research to understand this occurrence. Findings from my project suggest that ritual and inert troublesome knowledge related to mental health nursing knowledge may not be experienced during their initial program education; rather it is experienced at a later stage of their professional development.

As with the data from the first student survey, faculty responses from the focus groups identified examples of mental health nursing content that associated with multiple forms of troublesome knowledge. These data were subjected to the same decision matrix classification process as that of the first student survey (Table 6.2).
Table 6.2 – Troublesome forms associated with FFFG

<table>
<thead>
<tr>
<th>First Faculty Focus Group Data</th>
<th>Associated forms of Troublesome Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse/Patient Boundaries</td>
<td>Alien/Foreign, Ritual, Tacit/Professional</td>
</tr>
<tr>
<td>Delusional Disorders</td>
<td>Alien/Foreign, Conceptually Difficult</td>
</tr>
<tr>
<td>Personality Disorder</td>
<td>Alien/Foreign, Conceptually Difficult</td>
</tr>
<tr>
<td>Mindfulness – reflective practice</td>
<td>Alien/Foreign, Conceptually Difficult, Ritual</td>
</tr>
<tr>
<td>Teamwork skills</td>
<td>Alien/Foreign, Ritual, Inert</td>
</tr>
<tr>
<td>Stigma</td>
<td>Alien/Foreign, Tacit Professional</td>
</tr>
<tr>
<td>Member of a Profession</td>
<td>Tacit/Professional, Alien/Foreign</td>
</tr>
<tr>
<td>Therapeutic Relationships</td>
<td>Tacit/Professional, Alien/Foreign</td>
</tr>
<tr>
<td>Praxis – application of skills into clinical</td>
<td>Tacit/Professional, Alien/Foreign</td>
</tr>
<tr>
<td>Safety</td>
<td>Tacit/Professional, Alien/Foreign, Ritual</td>
</tr>
<tr>
<td>Documentation</td>
<td>Tacit/Professional, Alien/Foreign</td>
</tr>
<tr>
<td>Mental Status Exam</td>
<td>Tacit/Professional, Alien/Foreign</td>
</tr>
<tr>
<td>Best Practice Gap</td>
<td>Tacit/Professional, Alien/Foreign</td>
</tr>
<tr>
<td>Recovery</td>
<td>Tacit/Professional, Ritual</td>
</tr>
<tr>
<td>Self-care &amp; Burnout</td>
<td>Tacit/Professional, Alien/Foreign, Ritual</td>
</tr>
<tr>
<td>Flow of Information in healthcare</td>
<td>Tacit/Professional, Alien/Foreign, Ritual</td>
</tr>
<tr>
<td>The value of experience</td>
<td>Tacit/Professional, Alien/Foreign, Ritual</td>
</tr>
<tr>
<td>Morality/Ethical Issues</td>
<td>Tacit/Professional, Alien/Foreign, Ritual</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>Ritual, Tacit/Professional, Inert</td>
</tr>
<tr>
<td>Life Long Learning</td>
<td>Ritual, Inert</td>
</tr>
<tr>
<td>Stigma</td>
<td>Ritual, Tacit/Professional, Conceptually Difficult, Alien/Foreign</td>
</tr>
<tr>
<td>The Science of Nursing</td>
<td>Conceptually Difficult, Alien/Foreign</td>
</tr>
<tr>
<td>Psychopharmacology</td>
<td>Conceptually Difficult, Alien/Foreign</td>
</tr>
<tr>
<td>Neuroanatomy &amp; Brain Chemistry</td>
<td>Conceptually Difficult, Alien/Foreign</td>
</tr>
</tbody>
</table>

Similar to the first student survey, no content examples identified by the faculty participants during the first focus groups could be classified initially as inert knowledge. When factoring in the faculty rationale on each example, the majority of the content/concepts identified were associated with Tacit/Professional knowledge. The same conceptually difficult content/concepts were identified by both participant groups as well as content including communication skills, nurse/patient boundaries, and the application of the mental status exam. These commonalities are important for they represent the overlap in the mental health nursing content that was identified by both sets of participants as being troublesome and will be explored later in this chapter.
Faculty participants in the first focus group identified some specific mental health content and concepts that they viewed as being troublesome for students. Examples of mental health nursing content discussed in the focus group were used as the basis of the second student survey (Appendix D). The majority of the content viewed as being troublesome by the faculty participants was classified as either alien/foreign knowledge, tacit/professional knowledge, or conceptually difficult knowledge. However, regarding the rationale for why the content was viewed as being troublesome, the students placed more focus on alien/foreign or conceptually difficulty content, and the faculty put more focus on tacit/professional knowledge. This result was not entirely unexpected as faculty participants are expert nurses and have moved beyond the knowledge comprehension stage associated with their education program and into the integration of knowledge and ongoing personal/professional development stages.

In a comprehensive literature review, Coates & Fraser (2014) concluded that nurse educators should engage with other nurse academics in collaborative supportive networks as a means of expanding their research and academic capacity. These networks are focused on the sharing of ideas, resources, and supports to address issues and concerns such as enhanced role clarity, job dissatisfaction, isolation, mentorship, and professional development (Mathews, 2003; McKinley, 2008; Coates & Fraser, 2014). In essence, nurse educators should encourage and support other nursing educators and reinforce knowledge related to life-long learning and ongoing professional development. This data supports the idea that as students gain clinical and professional experiences, their life-long learning focus will shift from the acquisition of mental health nursing knowledge where alien/foreign troublesome knowledge is encountered towards professional development and evidence-based practice knowledge where tacit/professional troublesome knowledge is encountered.

The data from the second student survey consisted of items identified in the first faculty focus group, organized into content headings that contain specific examples of potential troublesome mental health nursing content. These items were then slightly modified after reviewing the literature associated with these items, searching for support of it being viewed as troublesome. These were subjected to the same classification process as that of the first student survey and faculty focus group (Table 6.3).
<table>
<thead>
<tr>
<th>Second Student Survey Item</th>
<th>Associated forms of Troublesome Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boundary Establishment</td>
<td>Alien/Foreign, Ritual, Inert</td>
</tr>
<tr>
<td>Boundary Maintenance</td>
<td>Alien/Foreign, Inert, Ritual</td>
</tr>
<tr>
<td>Therapeutic Relationships - Trust and Rapport</td>
<td>Tacit, Inert, Ritual</td>
</tr>
<tr>
<td>Therapeutic Relationships - Social vs Professional</td>
<td>Tacit, Inert, Ritual</td>
</tr>
<tr>
<td>Communication Skills - Relationship Building</td>
<td>Alien/Foreign, Ritual, Inert</td>
</tr>
<tr>
<td>Communication Skills - Interviewing and Assessing</td>
<td>Alien/Foreign, Ritual, Inert</td>
</tr>
<tr>
<td>Communication Skills - Nursing Interventions</td>
<td>Alien/Foreign, Tacit</td>
</tr>
<tr>
<td>Stigma - Impact on the Patient</td>
<td>Alien/Foreign, Inert</td>
</tr>
<tr>
<td>Stigma - Impact on the Nurse</td>
<td>Alien/Foreign, Inert</td>
</tr>
<tr>
<td>Delusional disorders - Religious Based</td>
<td>Alien/Foreign, Tacit, Conceptually Difficult</td>
</tr>
<tr>
<td>Delusional disorders - Grandiose</td>
<td>Alien/Foreign, Tacit, Conceptually Difficult</td>
</tr>
<tr>
<td>Delusional disorders - Erotomanic</td>
<td>Alien/Foreign, Tacit, Conceptually Difficult</td>
</tr>
<tr>
<td>Delusional disorders - Persecutory</td>
<td>Alien/Foreign, Tacit, Conceptually Difficult</td>
</tr>
<tr>
<td>Psychopharmacology Antidepressants</td>
<td>Conceptually Difficult, Alien/Foreign</td>
</tr>
<tr>
<td>Psychopharmacology Antipsychotics</td>
<td>Conceptually Difficult, Alien/Foreign</td>
</tr>
<tr>
<td>Psychopharmacology – Anxiolytics</td>
<td>Conceptually Difficult, Alien/Foreign</td>
</tr>
<tr>
<td>Psychopharmacology – Mood Stabilizers</td>
<td>Conceptually Difficult, Alien/Foreign</td>
</tr>
<tr>
<td>Psychopharmacology Stimulants</td>
<td>Conceptually Difficult, Alien/Foreign</td>
</tr>
<tr>
<td>Neuro Anatomy and Brain Chemistry</td>
<td>Alien/Foreign, Inert, Ritual</td>
</tr>
<tr>
<td>Mindfulness and professional practice</td>
<td>Alien/Foreign, Ritual, Inert</td>
</tr>
<tr>
<td>Life-long learning/Nursing best practices</td>
<td>Tacit, Alien/Foreign</td>
</tr>
<tr>
<td>Praxis - Best Practice Gap</td>
<td>Tacit, Alien/Foreign</td>
</tr>
<tr>
<td>Praxis - Role of the Community</td>
<td>Tacit, Alien/Foreign, Inert</td>
</tr>
<tr>
<td>Safety - For the Patient</td>
<td>Tacit, Ritual, Inert</td>
</tr>
<tr>
<td>Safety - For the Nurse</td>
<td>Tacit, Alien/Foreign</td>
</tr>
<tr>
<td>Documentation - What include and What not to</td>
<td>Alien/Foreign, Tacit</td>
</tr>
<tr>
<td>Documentation - Mental Health Vocabulary</td>
<td>Alien/Foreign, Tacit</td>
</tr>
<tr>
<td>Documentation - Nursing Interventions</td>
<td>Alien/Foreign, Tacit</td>
</tr>
<tr>
<td>Documentation - Mental Status Exam</td>
<td>Alien/Foreign, Tacit, Conceptually Difficult</td>
</tr>
<tr>
<td>Mental Status Exam - Suicide Risk Assessment</td>
<td>Alien/Foreign, Tacit, Inert</td>
</tr>
<tr>
<td>Mental Status Exam - Thought Content</td>
<td>Alien/Foreign, Tacit</td>
</tr>
<tr>
<td>Mental Status Exam - Thought Process</td>
<td>Alien/Foreign, Tacit, Inert</td>
</tr>
<tr>
<td>Mental Status Exam - Patient Insight</td>
<td>Alien/Foreign, Tacit, Inert</td>
</tr>
<tr>
<td>Mental Status Exam - Patient Judgement</td>
<td>Alien/Foreign, Tacit, Inert</td>
</tr>
<tr>
<td>Recovery - Measure of Success</td>
<td>Alien/Foreign, Tacit, Inert</td>
</tr>
<tr>
<td>Recovery - Nursing Interventions</td>
<td>Alien/Foreign, Tacit</td>
</tr>
<tr>
<td>Recovery - Acute Care Units</td>
<td>Alien/Foreign, Tacit</td>
</tr>
<tr>
<td>Recovery - Role of the Community</td>
<td>Alien/Foreign, Tacit</td>
</tr>
</tbody>
</table>
In the second student survey, patient recovery: measures of success, all items related to Delusional disorders; all items related to Nursing documentation in the mental health clinical environment had the highest responses of strong agreement and/or agreement. The item recovery was presented as a general term for all of the nurse and patient processes that contribute to patient healing. In a theoretical review of mental health nursing education, Stacey & Stickley (2012) present the concept of recovery in mental health nursing as a potential threshold concept due to its level of complexity and ability to change without any healthcare intervention. Due to this concept's troublesome nature, some students may not go through the transformative learning process associated with the concept of recovery and may respond by constructing conditions of safety, simply mimicking nursing behaviors without having the transformative learning experience (Cousins, 2006). In this project, the lack of ritual or inert forms of troublesome knowledge could indicate that the students superficially understand this content, are stuck in liminal space, and have yet to experience the contents transformative nature.

Documentation in mental health nursing is touched on in the research from the clinical competence assessment perspective by Butler et al. (2011), but no research was found related to its inclusion in nursing education and/or the student learning associated. More articles were found on the assessment and treatment of patients suffering from delusional disorders. Harris (2014) presented a perspective on emotional distance and professional nurse/patient boundaries arguing that emotional distance is a medical model perspective that makes reflective practice in this area more difficult. This article identified the medical model of mental health nursing education as a barrier when trying to apply nursing model interventions. Bassett, Baker, & Cross (2015) conducted an anthropological qualitative study on student understanding of different cultural practices and religious beliefs as they relate to mental health distress and implication for nursing assessment. Bassett et al. (2015) identified the student’s lack of cultural knowledge as the primary barrier to making accurate assessments involving mental illnesses with a cultural or religious aspect such as religious based delusions or psychotic illness. Both articles support the perspective that students view delusional disorders as troublesome to learn.
The faculty survey was made up of items taken from the first student survey data. Though very similar to the second student survey items, these items were again slightly refined and reorganized according to the literature that was reviewed while attempting to establish links with troublesomeness (Table 6.4).

**Table 6.4 - Troublesome forms associated with Faculty Survey**

<table>
<thead>
<tr>
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<td>Recovery - Role of Acute Care Units</td>
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<td>Mental Status Exam - Patient Insight</td>
<td>Alien/Foreign, Tacit, Inert</td>
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<tr>
<td>Mental Status Exam - Patient Judgement</td>
<td>Alien/Foreign, Tacit, Inert</td>
</tr>
<tr>
<td>Communication Skills - Relationship Building</td>
<td>Alien/Foreign, Tacit, Conceptually Difficult</td>
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<td>Communication Skills - Patient Interviewing</td>
<td>Alien/Foreign, Tacit, Conceptually Difficult</td>
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<tr>
<td>Communication Skills - Nursing Interventions</td>
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6.2 – Response to the Research Question

Research Question:
What troublesome forms (if any) and associated mental health nursing content in a Western Canadian undergraduate nursing education program are difficult to learn from the student and faculty perspectives?

The use of the decision matrix provided a means through which the various forms of troublesome knowledge could be linked with the examples of troublesome mental health nursing content provided by the participants in this project. From this linking process, student and faculty participants identified alien/foreign knowledge as the form most often experienced by students as being troublesome. However, students tended to be more concerned with the alien/foreign nature of the troublesome content whereas faculty identified the tacit/professional nature of troublesome content as being most often troublesome for students. The student respondents provided more examples of alien/foreign knowledge than any other troublesome form, possibly indicating that the contents alien/foreign nature is reason why it is viewed as troublesome. The faculty respondents identified more alien/foreign content that any other troublesome form, but tended to view the content as being most troublesome because of its tacit nature. Using Carper's forms of Nursing knowledge (1978) as a lens through which to view these different participant perspectives, ritual and inert forms of troublesome knowledge stand out as they appear to only be recognized as troublesome as the student becomes actively involved in the acquisition of self-knowledge, after the content is no longer viewed as being alien/foreign by the nurse.

This difference in perspective is visible when looking at the student and faculty perspective on professionalism in nursing. Faculty participants stated that professional conduct, behaviors, and views on professional expectation/obligations and leadership differ greatly between students and faculty. Socialization into a profession and the sense of belonging to a community such as the profession of nursing are viewed by some to be mechanisms by which Nursing students acquire their professional identity (Robb, Ferguson, & Brown, 2011; Andrew, Ferguson, Wilkie, Corcoran, & Simpson,
Students engaged in the Nursing socialization process are likely to view the related professional behaviors and knowledge differently that faculty who are already socialized into the profession. These research examples suggest that the student perspective on troublesome mental health knowledge changes after they move beyond the initial troublesome learning associated with alien/foreign knowledge, fitting with Benner’s (1984) novice to expert model and the Dreyfus’s model of skill acquisition (1980). This argument links changing views on troublesome mental health knowledge with established views of nursing professional development.

Student participants are still novice nurses with limited clinical experience at an early stage of building their nursing knowledge base, working to understand all this new information before they can apply it in their practice (Gray, 1997). Faculty participants have the clinical application experience necessary to have mastery level comprehension of the alien/foreign knowledge presented during their nursing education program and no longer view the content as being troublesome to understand. Rather, they expressed the belief that there is a troublesome nature to this content that is only encountered during its clinical application and integration into the student professional self (tacit/professional).

Common ground between the student and faculty perspectives was found on conceptually difficult mental health nursing content. The exact same conceptually difficult mental health nursing content was viewed as being troublesome by all participants, regardless of their level of nursing knowledge or experience. The common examples identified by both participants along with their emerging theme from Chapter 5 are presented in Table 6.5.
Table 6.5 – Shared examples of Troublesome Mental Health Nursing Knowledge

<table>
<thead>
<tr>
<th>Mental Health Nursing Content/Concept</th>
<th>Troublesome Form</th>
<th>Emerging Theme</th>
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<td>Delusional disorders</td>
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<tr>
<td>Mindfulness/reflective practices</td>
<td>Tacit/Professional</td>
<td>Professionalism in Nursing</td>
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<tr>
<td>Therapeutic relationships</td>
<td>Tacit/Professional</td>
<td>Therapeutic Relationships &amp; Boundaries</td>
</tr>
<tr>
<td>Best practice gap</td>
<td>Tacit/Professional</td>
<td>Professionalism in Nursing</td>
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<tr>
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<td>Alien/Foreign</td>
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<td>Mental status exam</td>
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</tr>
<tr>
<td>Ethics in Mental Health Nursing</td>
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</tr>
<tr>
<td>Mental Health related Pharmacology</td>
<td>Conceptually difficult</td>
<td>Brain Chemistry Changes &amp; Management</td>
</tr>
<tr>
<td>Brain Chemistry</td>
<td>Conceptually difficult</td>
<td>Brain Chemistry Changes &amp; Management</td>
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<tr>
<td>Neuro Anatomy</td>
<td>Conceptually difficult</td>
<td>Brain Chemistry Changes &amp; Management</td>
</tr>
<tr>
<td>Communication skills – interviewing/assessment</td>
<td>Alien/Foreign</td>
<td>Praxis</td>
</tr>
<tr>
<td>Impact of stigma on the Nurse</td>
<td>Alien/Foreign</td>
<td>Therapeutic Relationships &amp; Boundaries</td>
</tr>
</tbody>
</table>

The information on why these examples of mental health content are viewed as troublesome presented some interesting rationales and perspectives. Deficits in the classroom, clinical environment, faculty teaching and evaluation, and the local healthcare system as a learning environment were all topics that came up during
discussions with student and faculty participants about contributing factors to troublesome student learning. No examples of ritual or inert forms of knowledge were identified as being troublesome in the student and faculty discussions and no examples of learning problems associated with how troublesome mental health nursing content impacts existing self-knowledge or patterns of behavior were voiced by the participants. There are a number of possible reasons to explain this absence.

One possible explanation could be associated with how intensely the program curriculum challenges the student to integrate new mental health nursing knowledge internally, a necessary aspect of inert or ritual knowledge. As stated previously in Section 2.3.5, medical bias exists in some UK, Australian, US, and Western Canadian nursing education programs, having curriculums that are skewed away from the mental health nursing focus, taking time away from the development of knowledge and skills to self-knowledge. Stickley & Timmons (2007) take this phenomenon further arguing that the students lay beliefs, or those that they bring with them into their nursing education, are deeply rooted in the medical model and that alternative approaches associated with understanding mental illness and the knowledge/skills necessary to provide patient care have a difficult time changing these held perspectives. Another possible reason is related to the difficulties associated with teaching reflective practice to nursing students, as self-knowledge gained from reflection is necessary for existing ritual and inert knowledge to be challenged and changed. Many nursing students fail to see the relevance of integrating reflection into their professional practice (Jindal-Snape & Holmes, 2009; Cleary, Horsfall, Happell, & Hunt, 2013), and many nurse faculty are not adequately prepared to teach reflective practice to students (Nicholl & Higgins, 2004; Dekker-Groen, van der Schaaf, & Stokking, 2011).

From the project data, it was identified by student participants that they viewed mindfulness and reflective practices as being concepts that were easy to learn and understand, but troublesome to actually apply or integrate into their practice. This perspective is supported by Herbig, Bussing, & Ewett (2001) who argue that tacit knowledge, such as reflexive nursing practices, plays a central role in the development of professional practice, but it first needs to be made explicit or applied before it can be fully comprehended by the student. If this is the case, some troublesome learning
would be encountered in the classroom (alien/foreign & conceptually difficult) while others are encountered during the clinical application process (ritual, inert, & tacit). This knowledge is also aligned with the nursing literature that describes the difficulties associated with teaching reflective practice to nursing students (Hatlevik, 2011; Maestre, Szyld, del Moral, Ortiz, & Rudolph, 2014; Rolfe, 2014), but now provides new insights into why and when these difficulties are experienced and a new perspective into how these difficulties can be effectively overcome.

6.3 – Student Learning: Progression through Liminal Space

The process of answering the research question raised some interesting questions regarding how student learning occurs when they encounter troublesome mental health nursing content. At various stages of the data collection and analysis process, I took time to create conceptual models involving the luminal space in an attempt to visualize the student learning process associated with troublesome mental health nursing knowledge. From this process, a conceptualization of the student learning process associated with troublesome mental health nursing knowledge was created (Figure 6.2). This tentative conceptualization represents a learning pathway associated with troublesome mental health nursing knowledge and luminal space, starting at exposure to new content and ending up at comprehension and integration into the student's professional self.

Regarding the time students spend in liminal space, Meyer & Land (2005) stated that it can be protracted over a considerable amount of time and that during this time period, the student may oscillate between states, in this case, between knowing and not knowing. Applied to my project, students could enter into liminal space associated with troublesome mental health nursing content during program or clinical instruction and exit in the early stages of their professional career. Using this line of reasoning, faculty that have already passed through the liminal space associated with an example of troublesome mental health nursing knowledge would view the knowledge differently than a student who is still in liminal space or has yet to even enter.
The learning pathway begins when the student is exposed to troublesome mental health nursing knowledge. From this project, potential examples of troublesome mental health nursing knowledge could be a specific mental health nursing concept, general nursing content, difficulties experiences during the application of mental health knowledge, and/or the affective response associated with the mental health nursing content. These examples expand the existing troublesome knowledge scope established by Perkins (1999) and Meyer & Land (2003), a proposal that will be explored in more detail in Chapter 7.

Regarding the starting point of Figure 6.1, by definition, all nursing knowledge that the student has not been exposed to outside of nursing education can first be classified as alien/foreign as students do not yet have the existing nursing perspective needed for the content to be viewed any other way. However, no mental health nursing
content is solely alien/foreign focused, with all content being associated with one of the other four forms of troublesome knowledge. Once the student overcomes the contents initial alien/foreign nature, then they can move towards the form that it is most closely associated with. If the content is tacit in nature (meaning that it is meant to be incorporated into the student professional practice), before it can effectively applied professionally in the clinical environment, existing student ritualistic or inert knowledge may be challenged and transformed during the path to comprehension and integration.

Using the example of student learning processes associated with reflective practices as described by Herbig et al. (2001), in movement through learning reflection practices, troublesome content is first viewed as alien/foreign knowledge, an aspect of the content that needs to be overcome before the student could encounter its tacit/professional, ritual, inert, or conceptually difficult elements. As the alien/foreign nature of the mental health content is first encountered by the student, it needs to be resolved first before the student can address the contents other associated elements. If the content has a ritualistic element (meaning that it is there is pattern of behavior expectation associated with the content), existing inert knowledge may need to be challenged and changed before the student can move on to application of the content (tacit/professional). If the content is inert in nature (meaning that there is associated subconscious self-knowledge), existing inert knowledge will again need to be clarified and challenged before the student can move on to the application of the new content (tacit/professional).

According to this learning pathway if the content is conceptually difficult in nature and has no direct clinical application potential (tacit/professional), its troublesomeness is resolved once it is understood by the student. After moving through this learning pathway and overcoming the various troublesome natures of the content, students will reflect on their existing practice, finding where the new knowledge fits into their practice, and start making the changes necessary to incorporate the new knowledge. In essence, by this time they will complete the transformational process associated with learning troublesome knowledge. The student will then exit the liminal space with a comprehensive understanding of the mental health nursing content and have it integrated into their professional practice.
It is postulated that this comprehension and integration will be attained within a different timeframe for each student, dependent upon their individual learning characteristics of the student and the program schedule. For example, students in block courses which are short in timeframe, intense in focus, and completed before their clinical experiences, may move through the proposed learning pathway at a different pace than students with a schedule in which lecture and clinical instruction are integrated into a single term or timeframe. If there is a potential for application, existing ritualistic and inert knowledge may need to be challenged and overcome before the student can move on to effective application of this knowledge (tacit/professional).

Program and clinical faculty will also need to be aligned with how theory and mental health content is prioritized, requiring a high level of communication and teamwork for this theory to lead to consistent and quality student learning to occur. All mental health content that is applied in the clinical environment will also have a significant tacit element to its nature, as its successful application in the clinical setting has to adhere to the professional standards and expectations identified by local and/or national nursing profession associations (SRNA, 2015). This means that before the student can progress to comprehension and integration of this content into their professional self, they must first be able to apply it effectively in the clinical environment in accordance with the expectations of the nursing profession, challenging clinical instructors to provide an individualized student learning plan that is still aligned with goals of the program and Nursing’s professional practice standards.

It is this integration of new knowledge with existing knowledge that makes personal and professional transformation in possible, a process in nursing referred to by Schon (1987) as reflective practice. It is during this integration phase, when students are engaging in reflective practice, that forms of knowledge that have inert or ritualistic qualities have the potential to be troublesome for students. These troubles seem to not be experienced until later in their professional development and maturation, emerging as the student’s comprehension and application skills move towards the mastery level, requiring a more longitudinal research approach to investigate further. Once the student comprehends the content, one set of troublesome barriers is overcome and/or replaced with new troublesome barriers associated with application. Students being at
an early stage of their nursing career may not have hit this point of their own professional development yet and therefore would not yet view the ritual and inert natures of the mental health nursing content as being troublesome. This finding can be explained using the theory of student progression through liminal space. This theory and model assert that student comprehension deepens after application of the content during clinical learning experiences, and that the same mental health nursing content could be viewed as being troublesome for different reasons as the novice nurse moved towards becoming an expert clinician with mastery level knowledge comprehension.

This conceptual learning pathway is rooted in Perkins (1999) and Meyer & Lands (2003) definitions of troublesome knowledge, liminality and liminal space (Turner, 1969), the Dreyfus’ model of skill acquisition (1980), Benner’s novice to expert model (1982), constructivist learning theory in mental health nursing education (Hoover, 1996; Lincoln & Guba 2000; DeCoux Hampton, 2012), and the revised Bloom’s taxonomy (Anderson et al.2001). This conceptualization provides a framework from which to view the student learning process associated with troublesome mental health nursing content. The Dreyfus’ model of skill acquisition (1980) in combination with Benner’s model (1982) provides the nursing perspective, linking professional development and novice to expert skill acquisition theory with the progression through the model, moving from exposure to new content towards comprehension and integration of knowledge.

Constructivism is based on the idea that knowledge that is newly-acquired knowledge is built upon that of previous learning that has occurred (Hoover, 1996, Lincoln & Guba, 2000, DeCroux Hampton, 2012), in this case new mental health knowledge or perspectives are built upon foundational mental health nursing content. The original Bloom’s taxonomy (Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956) focused on the assessment of student performance and consists of six major cognitive categories that lie along a continuum from simple to complex. The categories are knowledge, comprehension, application, analysis, synthesis, and evaluation (Bloom et al., 1956). The revised Bloom’s taxonomy focuses more on the assessment of student learning, classifying the cognitive learning objectives not only through the six levels of cognitive processes suggested by the original taxonomy but also through four types of knowledge: factual, conceptual, procedural, and metacognitive (Anderson et al., 2001).
My proposed learning pathway replaces these four types of knowledge with the five forms of troublesome knowledge and presents student learning pathway, moving the nurse from novice to expert level knowledge towards comprehension and integration, with the liminal space being the medium in which this knowledge acquisition and personal/professional transformation occurs. By merging constructivism, Blooms revised taxonomy, and the forms of troublesome knowledge, a method of classifying the example is created. An example of this would be the concept of recovery being viewed as metacognitive type of knowledge (Bloom’s revised taxonomy) that is built upon the understanding of many other concepts (constructivism) that can be troublesome due to its alien/foreign, conceptually difficult, and tacit/professional natures (Troublesome Knowledge Theory).

An example of moving through this learning pathway is something that I experienced during the process of completing this thesis. In this example, the process of writing a thesis is the troublesome knowledge that I was exposed to. Having never written a thesis before, the experienced was first viewed as alien/foreign. This alien/foreign element was addressed early on in the process through education about the process and support from my supervisor. However, this did not end my troublesome learning experience, as troublesome elements of the process such as the quantitative analysis (conceptually difficult), changing self-perception associated with being a doctoral student (ritual, Inert), and the transition towards becoming a nurse researcher and academic (tacit/professional) were all experience during the process. As I am nearing the completion of my program, exiting the liminal space associated with the process of writing a thesis, I see that I have experienced different troublesome elements associated with the process and that I have left liminal space transformed.

6.4 – Chapter 6 Summary

This chapter brings together the findings from the quantitative and qualitative analysis to answer the research question. Students viewed many examples of mental health nursing content as troublesome, citing the contents alien/foreign nature as the primary reason why it is viewed as such. Faculty also identified many examples of mental health nursing content as troublesome, citing the contents tacit/professional
nature as the primary reason why is it viewed as such. In response to the primary research question, common ground between the nursing students and faculty perspective on troublesome mental health nursing knowledge was found in their perspectives on conceptually difficult mental health nursing content. No specific examples of ritual or inert forms of troublesome knowledge were identified by either participant group as being troublesome for students, though many examples of troublesome mental health nursing content have ritualistic or inert elements that it is theorized may become troublesome after their alien/foreign nature is overcome. A conceptual learning pathway created to understand the student learning process described in the project data was presented and linked to the related literature. The next Chapter will present the contributions to new knowledge, the implications of the research, and conclusions.
Chapter 7 – New Knowledge, Implications of Research, and Conclusions

7.0 – Introduction and overview

This chapter will present the contributions to new knowledge that resulted from this research project. The implications of the research findings will also be presented, focusing on the area of mental health nursing education, program quality assurance and enhancement, medical bias in undergraduate nursing education, and future research. The project limitations are presented at the end of the chapter along with closing remarks.

7.1 – Contributions to New Knowledge

7.1.1 – Content with multiple troublesome elements

This project, using troublesome knowledge theory as a lens through which to view mental health nursing content in one university department provided many new insights into how content is viewed by students and nursing faculty. The mental health content viewed by students as troublesome are similar to the examples given by faculty, but their rationale as to why the content was troublesome was very different. An example being the content related to the theme of ‘praxis’, which first was viewed as being troublesome by students in the classroom due to the content’s alien/foreign or conceptually difficult nature. However, the same content was also identified by faculty as being troublesome in the clinical environment during its application, this time focusing on the content’s tacit/professional, ritual, or inert nature. In the descriptions of troublesome knowledge forms provided by Perkins (1999), examples of such as passive vocabulary (inert), names & dates (ritual), gravity (conceptually difficult), and the concept of presentism (alien/foreign), are given when describing each form. Perkins (1999) also stated the other troublesome forms exist, with Meyer & Land (2003) adding tacit/professional knowledge as another troublesome form describing it in reference the works of Polanyi (1958), Giddens (1984), and Wenger (2000), as being ‘mainly personal and implicit’ at a level of ‘practical consciousness’ though its emergent but unexamined understandings are often shared within a specific community (Meyer & Land, 2003, p.9).
Meyer & Land’s (2003) definition of tacit/professional knowledge included an example describing how the concept of music within the Western musical tradition is troublesome to some students. This example of troublesome knowledge is referred to its content (Music) as being both tacit/professional and alien/foreign, providing the possibility that other troublesome content could have multiple troublesome elements or natures. For emerging themes ‘spectrum of mental illness’, ‘therapeutic relationships and boundaries’, and ‘professionalism in nursing’, student and faculty participants voiced that the content related to these themes was first experienced as being troublesome in the classroom due to its alien/foreign or conceptually difficult nature and that they again experienced the same content as being difficult during their clinical learning experienced due to the content tacit/professional, ritual, or inert nature. A relatable example is presented by Meyer & Land (2005) regarding how engineers view reflective practices, first as alien/foreign, then as being inaccessible and unnecessary, and finally as being an expected and accepted part of the professional development process.

This idea is supported by Clouder (2005) who explored ‘caring’ as a potential threshold concept with allied health students. She concluded that the transformational process associated with the application of this concept during practice education presented challenges that the students were unprepared for and that these challenges exist beyond their program education (Clouder, 2005). One example from Clouder’s study presents a reflection by a physiotherapy student who has learned how ‘to be caring’ in clinical (superficial understanding – alien/foreign), but is now struggling to understand how the application of this knowledge can be professionally transformational (deeper understanding – tacit/professional). My research would support this perspective, that troublesomeness is not just experienced by nurses during their program or clinical learning experiences, but also later on at various times during their career as their understanding of particular knowledge deepens, and for different reasons. In a comparison of multiple small pilot studies, Irvine & Carmichael (2009) found that different disciplines conceptualized threshold concepts and there various characteristics differently. My research merges the perspectives of Irvine & Carmichael (2009) with Clouder (2005) and extends the timeline beyond the student’s program
education, combing discipline specific perspectives on troublesome content with the troubledomeness encountered during the application of content in practice throughout their nursing career. When applied to an application intensive discipline such as Nursing, this new perspective entertains the possibility that troublesome mental health nursing content could be viewed as having elements from multiple troublesome forms.

7.1.2 – Content that is equally troublesome for the Novice and Expert Nurse

The theme ‘brain chemistry and its management’ consists of content that elicited a similar perspective from student and faculty participants making it unique amongst all the themes. Also setting this theme apart from the others is that it is made up of content categories that were all viewed by both student and faculty as being conceptually difficult. Regarding conceptually difficult knowledge, Meyer & Land (2005, 2006) state that this form of troublesome knowledge can lead to ‘blocks’ or periods in which the student’s transformative processes become ‘stuck’. They state that the challenge with conceptually difficult troublesome content involves first the recognition of the specific learning obstacles and secondly the redesigning of teaching activities (Meyer & Land, 2005). The learning obstacles associated by this emerging theme are difficult to identify from this project data. However, the students and faculty perspectives on the teaching activities associated with the content would indicate that there are serious doubts about the effectiveness of the current curriculum design regarding the teaching of pharmacology and content related to brain chemistry.

As stated at the end of section 5.1.5, human knowledge of brain chemistry is still limited (Garel, 2013), making its understanding a problem for everyone. Brain chemistry and its management could simply represent concepts that are just plain difficult regardless of past nursing knowledge or experience. The perspectives related to conceptually difficult mental health nursing content as voiced by student and faculty participants were very similar, regardless of their level of experience or level of nursing education. This makes the content unique as student and faculty perspectives were different for every other example of troublesome mental health content. However, another explanation for this result could be found in reference to Benner’s novice to expert model (1981) which includes the stages of novice, advanced beginner,
competent, proficient, and expert. The nurse educators involved in this project, though very knowledgeable in mental health nursing, may only be competent or proficient in this content area, and thus held some similar views on the content to that of the students. In the faculty focus groups, participants stated that this content was not just troublesome for students, but also for more experienced nurses as well, presenting the possibility that conceptually difficult mental health nursing content is associated with expert level mental health nursing knowledge and that many nurses have trouble with the application of this knowledge to practice.

This assertion contradicts Benner’s novice to expert model (1982) which states that at the expert level, the nurse’s experience and clinical knowledge provides them with an intuitive grasp on new content that enhances their ability to learn and integrate knowledge. Nursing research into novice and expert nurse’s ability to make clinical decisions and problem solve also refutes this assumption as well, stating that the knowledge base and clinical experience of expert nurses lead them used more effective problem solving strategies (Sarsfield, 2013) and allows them to make better informed and focused decisions (Hoffman, Aitken, & Duffield, 2009). My research does not provide any insights into the approaches used by student nurses and/or nurses in practice when learning this content, but it does indicate the possibility that regarding conceptually difficult mental health content such as brain chemistry and pharmacology, nurses that range from novice to proficient in Benner’s model may both view the same content as being troublesome.

One explanation for this inconsistency is that the conceptually difficult knowledge identified by the faculty participants in my project may represent unresolved troublesomeness. Though all participants share the perspective on this troublesome content, student participants have only recently been exposed this knowledge and thus only in liminal space for a short time, whereas faculty participants may have entered into liminal space a long time ago and have yet to exit. Faculty participants that struggle with mental health nursing content such as brain chemistry may have still not overcome its various troublesome natures and are still in its associated liminal space. Students just entering into the liminal space are encountering the same ‘stuck’ place as that of the faculty participant, a place where time varies depending on the individual learner.
As stated by Meyer & Land (2005), students can spend a considerable amount of time in liminal space and that during this time period, the student may oscillate between states of knowing and/or not knowing. My project may have identified examples of unresolved troublesomeness that is associated with content that the nurse was exposed to earlier in their career, but never fully overcame.

7.1.3 – Amended definition of troublesome knowledge

If different disciplines conceptualize troublesome knowledge in their own unique way as proposed by Irvine and Carmichael (2009), a question that needs to be asked arises when identified troublesome content that is not described within the existing definitions. With nursing being a cognitive, emotional, and care driven profession, nursing knowledge as described by foundational nursing theorists (Benner, 1982; Carper, 1978; Peplau, 1952/1998) have significant cognitive, affective and behavioral components. During this project, many examples of troublesome mental health nursing content that are deeply rooted in the affective were identified. However, the existing definition of troublesome knowledge only focuses on cognitive difficulties associated with learning, but examples from this project challenge this definition, especially those associated with troublesomeness experienced during knowledge application and the impact of the negative student attitude on their ability to learn. Kiley & Wisker (2009) present a relatable argument regarding the impact of motivation on students who are ‘stuck’ in liminal space, stating that the longer they stay in liminal space, the lower their motivation can become increasing their risk to withdraw from the learning process when it has become ‘too troublesome’ for them to handle. I view this perspective a little differently, presenting the idea that when the student enters into liminal space with affective domain issues such as low motivation or a negative attitude towards the content they are learning, it poses a significant barrier for them to overcome, one that equates with the content being viewed as troublesome and causing the student learning to become ‘stuck’.

Using this perspective, almost any content could be classified as being troublesome for an individual student, as its determination would be based on the individuals own unique perspective. The existing forms of troublesome knowledge as
defined by Perkins (1999) and Meyer & Land (2003) may represent only the common examples of content and/or concepts that most students find difficult to learn. By adding an affective context to the definition of troublesome knowledge, it takes into account the individual student perspective, explaining the wide range of examples of troublesome content presented by participants in this research. Clouder (2005) identified some parallels between affective and cognitive domain with regards to the time students spend in liminal space and argues that the importance of the affective domain development within professional education needs to be viewed fundamental rather than incidental. Walker (2014) offers a cognitive explanation of troublesome knowledge stating that as content become more difficult, new cognitive patterns or schema will need to be created causing tension with existing schema and acknowledges that this process is not just cognitive, but affective as well. In a discipline such as mental health nursing where so much of the cognitive knowledge also has affective and application components, a nursing specific definition of troublesome knowledge would need to reflect that. It is from this perspective that I would offer a new, mental health nursing specific definition of troublesome knowledge, as any example of mental health nursing knowledge experienced during the course of their career that appears counter intuitive and/or incoherent, is contradictory to existing emotional states, and/or causes distress during its application in the clinical setting.

7.2 - Implications of Research Findings

7.2.1 - Mental Health curriculum in generalist nursing education

The themes and specific examples of troublesome mental health nursing content identified from this project need be focused upon and reinforced in the classroom if the students are to have a solid mental health nursing knowledge base before entering into the clinical setting. This project identified five themes in mental health nursing content and around ten specific concepts that are viewed as troublesome by both students and faculty (Table 7.1).
Table 7.1 – Project themes and troublesome mental health nursing content

<table>
<thead>
<tr>
<th>Project Theme</th>
<th>Therapeutic relationships and Boundaries</th>
<th>Spectrum of Mental Illness</th>
<th>Professionalism in Nursing</th>
<th>Brain Chemistry Changes and Management</th>
<th>Praxis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Troublesome Mental health Nursing Content</td>
<td>Nurse/Patient boundaries</td>
<td>Delusional disorders</td>
<td>Mindfulness/reflexive practices</td>
<td>Mental Health Pharmacology</td>
<td>Documentation in Mental Health Nursing</td>
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<tr>
<td></td>
<td>Therapeutic relationships</td>
<td></td>
<td>Best practice gap</td>
<td>Brain Chemistry</td>
<td>Mental status exam</td>
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<td></td>
<td>Impact of stigma on the Nurse</td>
<td></td>
<td>Ethics in Mental Health Nursing</td>
<td>Neuro Anatomy</td>
<td>Interviewing/assessment Skills</td>
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</tbody>
</table>

From a student perspective, the five themes represent mental health nursing content that are viewed by the students as troublesome. From a faculty perspective, the five themes represent mental health nursing content that they believe are viewed as troublesome by the students as well as content that can be difficult to teach. From a program perspective, the five themes represent areas where the program is failing the students. The mental health nursing curriculum in the program involved with this research is out of touch with the local and national context of mental health and needs to provide a more relevant and dynamic mental health nursing curriculum. It has failed to draw on educational developments in mental health nursing education from around the world, and leaves the generalist nursing graduate with many gaps in their mental health nursing knowledge.

To address these program deficits, classroom and clinical teaching methods targeted at this troublesome content needs to be carefully determined and actively incorporated into the teaching and evaluation structures to enhance overall student mental health nursing knowledge (Kidd, Knisley, & Morgan, 2012; Rigby, Wilson, & Baker, 2012) and nullify or minimize the troublesome nature of this project’s content themes. This can be achieved by incorporating ongoing and regular communication practices between faculty, students, clinical coordinators, and clinical instructor’s associated with the mental health nursing curriculum. This regular communication
provides a means through which troublesome content can be addressed as it is identified and not overlooked in the classroom, also allowing for student learning to be enhanced and for faculty to encourage and support the teaching efforts of their peers. The inter-faculty communication could also support the teaching strategies of nursing faculty responsible for teaching the medical/surgical nursing curriculum, thus utilizing a team teaching approach to create a more seamless, truly holistic nursing education program.

Involving more service-users into the student education process would greatly help to create a more dynamic curriculum. The curriculum already uses standardized patients in patient communications focused courses, but there is much room for expansion in this regard. Benefits from service user involvement in nursing education have been found to include greater empathy with clients’ experiences (Wood, Wilson-Barnett, 1999), positive changes in student attitudes (Livingston, Cooper, 2004), greater understanding of user perspectives and more holistic, patient-focused approaches to care (Barnes, Carpenter, Bailey, 2000). There is also great potential to involve service users in the student evaluation process, though a limited body of research exists to help guide this process (Stickley, Stacey, Pollock, Smith, Betinis, Fairbank, 2010). Students involved in service user mental health nursing education recognize its value, especially regarding the need to protect vulnerable users, its impact on both personal and service development, and its ability to lead to increased engagement with service users (O'Donnell, Gormley, 2013). Many of these student benefits match up with examples in this research that student and faculty participants identified as being troublesome, making it worth serious consideration and expansion within the curriculum.

Another way of addressing the impact of troublesome knowledge and deficits in the program would be to increase the number of hours this content is addressed in the nursing curriculum. Research from McCann, Moxham, Usher, & Crookes (2010) and Henderson, Happell, & Martin (2007) indicate that nursing students had higher levels of confidence in their mental health nursing knowledge after additional curriculum hours were added to their programs; another option for this program to enhance student learning. A recurring theme throughout this project has been the importance of the clinical experience and professional development processes with regards to the
students’ ability to comprehend and apply mental health nursing knowledge. Other researchers have identified the community based clinical experience as the optimal mental health student learning environment (Wynaden, Orb, McGowan, & Downie, 2000; McAllister, 2007; Happell, 2008), however, there are currently no community based mental health placements in the program associated with this project. As community provision of care and integration is a significant part of Canada mental health strategy (Mental Health Commission of Canada, 2012), it makes a lot sense to move students into this area as well.

The mental health clinical experience consists of a single rotation (140 hours) in the third year of the nursing education program that utilizes a variety of mental health clinical environments including acute care, forensics, long-term mental health rehab, and long-term care. However, each clinical group is only placed into a single mental health environment meaning that the student only experiences a small section of the greater mental health services whole. This practice results from high levels of competition for clinical placements with other nursing education programs as well as a limited number of mental health services being available in the relatively small local healthcare system, making the utilization of existing clinical placements even more important.

Ensuring student exposure to quality mental health clinical environments is an integral part of the mental health nursing education process and needs to be carefully crafted and coordinated for the students to gain confidence and competence with their mental health nursing knowledge (Ross, Mahal, Chinnapen, & Rana, 2013). The program associated with this project could greatly enhance the students’ learning experience with mental health nursing content if clinical placements were expanded into the community. An example of a community base care model that would provide a suitable clinical learning experience can be found in ‘hub and spoke’ models that though they are already being used in other Canadian provinces (Ontario Hospital Association, 2012) as well as in other countries such as Scotland (Watt, 2012), are not currently used in the local health region.
7.2.2 - Program quality assurance and enhancement

The increase in knowledge specialization within nursing practice continues to challenge nursing education programs to adapt in order to prepare their graduate nurses for entry to practice (Ross-Kerr, Wood, 2003; Chapman & Kirby, 2008). Institutions partnered with local healthcare systems, such as universities that train healthcare professionals, have a responsibility for ensuring continual improvement in the quality of student education and ultimately the care delivered to patients (Jones, Williams, Carson-Stevens, 2013). The current practice in Canadian nursing education is to prepare undergraduate nurses as generalists who can function at the foundational nursing level in multiple healthcare settings, including mental health (McIntyre & Tomlinson, 2003; Fuller et al., 2011). Therefore, to ensure nursing education programs are adequately preparing undergraduate nurses to enter into mental health clinical practice, ongoing program quality assurance and enhancement actions related to the teaching practices and learning associated with mental health nursing content have to take place.

Curriculum review and revision is often referred to as quality assurance (QA) whereas quality enhancement (QE) refers to the actions taken at the institutional level to improve the quality of learning opportunities (Filippakou, Tapper, 2008). Quality assurance is one of the mechanisms developed by educational institutions to ensure that graduates attain adequate standards of education and training (van de Mortel, Bird, Holt & Walo, 2012) in line with professional body expectations. It may consist of internal and external QA. Internal QA refers to the audit and assessment done by a team from within the organization and external QA when this process is performed by a team from outside the organization (i.e. Professional Nursing Body), with the purpose of making the evaluation more objective.

Land (2011) argues for the use of threshold concepts as an analysis tool for higher education program design and delivery stating that by identifying the source and nature of the conceptual or other difficulties experienced by students, the program can help them move on from their ‘stuck places’, thus enhancing their learning and overall program learning experience. My project is an example of this in practice and has contributed knowledge that impacts upon undergraduate nursing QA and QE.
Program enhancements and higher student satisfaction levels are primary goals of these new quality assurance measures, an approach commonly used in other healthcare education programs (Begg, Galea, Bayer, Walker, & Fried, 2014). However, these QA measures are being utilized, often by nursing professionals with limited mental health nursing knowledge and experience in quality assurance in higher education, which increases the risk for poor quality assurance assessment being made and for problems to be misidentified or overlooked. My mental health curriculum model is an example of relatively direct, student learning centered, curriculum assessment process that has the potential to positively contribute to program’s enhancement and goals and student satisfaction levels.

Quality enhancement aims to improve the quality of teaching delivery and curriculum through a collaborative, capacity-building approach (van de Mortel et al. 2012). These are the actions taken to address the program areas of concern as identified during the quality assurance process. The findings from this project have the potential to impact upon the quality assurance process as well as a quality enhancement practices. By exploring student and faculty perspectives on mental health focused nursing content and concepts, curriculum and course problems are identified and the discussion on how they can be addressed is started. These discussions have the potential to lead to positive changes in teaching approaches meant to enhance the student learning experience.

7.2.3 - Medical bias in undergraduate nursing education

There are numerous examples of medical bias in undergraduate nursing educations programs and its impact on student mental health skill development (Holmes, 2001; Cutcliffe, McKenna, 2006; Hazelton, Rossiter, Sinclair, & Morrall, 2011; Sabella & Fay-Hillier, 2014). Medical bias from health care professions and the public also exists and negatively impacts both students and nurses working in mental health clinical environment (Sabella & Fay-Hillier, 2014). In a study by Arvanti, Samakouri, Kalamura, Bochtsou, Bikos, & Livaditis, (2009) which used a scale to measure social discrimination and social restriction towards patients’ with a mental illness, nurses were found to be more discriminating than doctors and/or pharmacists. I argue that a similar
change in perspective is required within a nursing education programs, shifting towards a more holistic approach to nursing education and moving away from a medically biased, acute care approach to nursing education.

Research into nursing attitudes in western Canada has identified that while the public expects health professionals to be accepting of patients concerns related to mental health, they too hold stigma towards people with mental health issues (Gawley, Einarson, Bowen, 2010). Currently, around 5.7% (n= 15,219) of all nurses in Canada (including Registered Nurses, Registered Psychiatric Nurses, Nurse practitioners, and Licensed practical nurses) work in the Canadian healthcare system work in mental health (Canadian Institute for Health Information, 2012). This low percentage of nurses working in mental health may reflect the fact that up to 20% (n=93) of accredited nursing education programs in Canada do not offer a standalone primary mental health nursing course or provide their students with mental health clinical experience (Tognazzini, Davis, Kean, Osborne, & Wong, 2009). Amongst the nursing education programs that do have mental health curriculums, there are significant differences in course length, format, and intensity resulting in a mental health nursing knowledge base that varies greatly within the nursing profession (Cavanaugh, 2014). These trends in professional practice and nursing education in Canada has resulted in the creation of a large group of practising registered nurses that are not fully prepared to support the mental health needs of patients with mental illnesses or mental health concerns (Cavanaugh, 2014). Canada is not the only country to experience this trend in nursing practice and education with studies showing similar results in registered nurses in Australia (Roberts 1998, Brinn, 2000, Reed & Fitzgerald, 2005, Happell, 2009) and the UK (Thornicroft, Rose, & Kassam, 2007; Goalder, Schultz, 2008; McNicoll, 2013).

These biases against mental health nursing education and towards medical/surgical nursing education are significant barriers that make it very difficult for improvements to be made in the mental health curriculum of any nursing education program. However, change is not impossible, with the first step being the identification of these biases to gain an understanding of their root causes and contributing factors. Then strategic planning on how they can be addressed can begin and plans made to help guide change. This project identified some specific content and more general
content themes that are related to troublesome mental health knowledge and ultimately learning problems for the student, some of which may be rooted in program medical bias. I believe that the troublesome impact of this content on student nurses learning can be reduced through enhanced student and faculty awareness and careful curriculum planning, utilizing the learning pathway conceptualized during this project to help student and faculty navigate the liminal spaces associated with mental health nursing knowledge. Findings from this project can be used as a stepping stone towards the creation of a truly holistic undergraduate nursing curriculum that addresses program, student, and societal biases against mental health and lead to the preparation of future generations of registered nurses that exceed the highest possible standards.

In this regard, a major shift in educational perspective and/or the goals of the program is necessary. Although some nurse educator’s advocate for a more holistic curriculum and utilization of a values/morality based constructivist approach to mental health nursing education, there is increasing pressure to give students practical skills for the acute care environment and to use lecture-based content delivery methods that take away from student engagement (Hewitt, 2009). This same pressure can result in the return to behaviorist teaching methods in mental health nursing that focus on skill acquisition rather that the therapeutic relationships or values and morality (Hewitt, 2009), and not on the affective component of mental health nursing. If this trend is to be avoided, changes in educational perspective at the leadership and educator levels would need to occur in addition to changes in curriculum organization and delivery. The findings of this research encourage a review of the program and educator perspectives associated with mental health nursing and advocates for mental health nursing content to have a higher profile in nursing education.

7.2.4 – Future research

This project provides an answer to the research question and insights into the student learning and program educational processes regarding the mental health nursing curriculum. However, as existing questions are answered, new ones are generated, each with implications for future practice and research. During this project, many new potential research questions were identified, each with their own implications
to future practice and research. A major theme of this project was the student learning process associated with mental health nursing knowledge. Some examples of troublesome mental health nursing knowledge have been identified along with rationale as to why students and faculty view it this way. The next logical step in this process involves understanding the process associated with overcoming these troublesome aspects. A longitudinal investigation into what teaching methods and/or combination of course and clinical instruction is best suited to start nursing students on the path to mental health knowledge and skill mastery, using the following research question as a starting place: What teaching methods are best suited to help students learn troublesome mental health nursing content/concepts and skills?

Gould, Brodie, Carver, & Logan (2015) conducted a systematic analysis of evaluations from a course that utilized problem based learning (PBL) to teaching mental health content. They concluded that PBL is an effective approach for teaching the skills and attributes necessary to enter into a wellness focused clinical environment (Gould et al. 2015). Terry, Raithby, Cutter, & Murphy (2015) argue that inter-professional learning (IPL) initiatives, specifically the World Cafe approach, can successfully prepare student nurses with the interpersonal communication and cultural awareness knowledge necessary to work effectively in mental health treatment teams. These articles though promising, are generally focused on mental health content and do not address specifically the content that is difficult for student to learn. Stacey, Oxley, & Aubeeluck (2015) argue for the use of combination of educational approaches to create a student learning framework from a threshold concepts perspective that encourage transformational learning. This article is very relatable to this research project, concluding that their proposed framework structure supports and encourages transformational learning in students (Stacey et al. 2015). However, it also stated that much support and preparation is necessary for student and faculty for this framework to be successful (Stacey et al. 2015), making its implementation into any program difficult. This research shows that there are educational frameworks available that can be tailored to address troublesome mental health nursing content, but more research is still necessary.
Closely associated with the mastery of knowledge and skills are the bumps that student experience during the learning process. If the previous future research question focused on what teaching approaches help students learn troublesome mental health nursing content, the next question would focus on what factors that impair or make the learning process more difficult for students. This process could be investigated with another longitudinal study with a research question such as: What are the learning barriers associated with troublesome mental health content encountered during program lecture and clinical learning? In a study from Kidd, Morgan, & Savery (2012), competition for mental health clinical placements is identified as a potential barrier to students learning of mental health nursing content while presenting the challenges associated with establishing high fidelity mental health simulations. Spinner-Gelfars (2013) argues that the language and cultural barriers that exist between nurses and patients prevent therapeutics from occurring and this lack of knowledge in student can be addressed using high fidelity simulation teaching scenarios. Both of these articles identify barriers to student learning and offer simulation as a means of addressing them, but focus more on knowledge, skills or learning opportunity that the students do not have, rather than approaches specifically targeted at learning barriers linked to troublesome mental health nursing content. High fidelity patient simulation or even the use of lower fidelity simulations using actors has the potential to create safe, secure, and controlled learning environments in which students can practice mental health nursing skills that have troublesome elements, warranting more research into its potential.

Exploration of the impact of the demographical information on participants on the projects findings is another area identified for possible future research. Demographical information could have provided some insights into the learning similarities and/or differences between age groups and the genders. These insights could be used to further modify the theory of progression, testing if it fits with the learning preferences and styles of a diverse nursing student group. Future research into any possible differences within the student participant group is needed to answer the question: What is the impact of gender and/or age on the student perspective on troublesome mental health nursing knowledge? In an article from Keogh, O’Brien, & Neenan (2009), state
that mature nursing students identified that their age and lived experiences occasionally lead to them being given roles and responsibilities beyond their student scope of practice but that overall, their mature background set them apart for their peers regarding the variety of learning opportunities given them in the program and clinical setting. This article presents the possibility that mature students would view troublesome mental health content differently because of their lived experiences and enhanced learning opportunities. Gough & Happell (2009) concluded that specific demographic characteristics of the students influenced student attitudes towards mental health nursing, identifying a higher number of male and mature students entering into mental health nursing. These articles open the door for further research into how demographical are associated with views of troublesome mental health nursing knowledge by providing possible evidence that mature students have less affective related learning difficulties.

7.3 – Project Limitations

There were some limitations regarding the structure of the student surveys. They could have been designed taking into mind the quantitative analysis methods, allowing for clearer conclusions to be drawn from the quantitative analysis tests, and provide a stronger overall research project. Surveys were focused on the content only, no demographical data were collected. It would have been beneficial to have some demographical information on the student as it would have allowed for additional analysis depth such as insights into possible connections between student level of life experience and views on troublesome knowledge. No evidence was collected to identity a gender balance, asking if there is a difference between how male and female students view troublesome content. No demographic data were collected from the faculty participants due to the small number of participants involved. In this case, age and gender may be significant participant identifiers. Data collection from the student participants could also have been planned for the end of their nursing education, possibly a better time to collect the data needed to answer the research questions.
Despite a pilot test with five nursing students, a limitation specific to the first student survey was that the item descriptions may have been too vague and assumed that the student participant had a certain level of existing nursing knowledge to understand clearly the purpose of the survey and what data it intended to collect. This lack of clarity possibly caused a misunderstanding of how to respond to the item. If these general categories had been expanded in the first survey as they were in the second survey, it may have improved the project’s ability to clearly identify troublesome mental health nursing. In hindsight, a pilot test for each survey and a more comprehensive set of survey instructions build into the surveys could have led to higher completion rates and more accurate survey findings.

The small size of the student focused group sample was a potential limitation of the project, bringing into question how common were the perspectives within the group with those of the greater student population. The exclusion criteria removed many possible student participants from the student focus group. It also closed the possibility of exploring the perspective of students in the early stages of learning mental health nursing content, a perspective that could have contributed to the development of the conceptual learning pathway. The same limitation could also apply to faculty participant pool. If the project had not excluded nursing faculty from outside of those teaching mental health nursing content or from other local nursing education programs, the faculty participant pool could have more than tripled and a more complete faculty perspective on troublesome mental health nursing knowledge could have been gained.

Perhaps the most significant limitation for the research was the lack of one-on-one interviews with the student and faculty participants. Regarding the faculty participants, individual interviews could have been utilized as a means of following up on discussion that took place during the focus groups. Regarding the student participants, individual interviews could have been utilized to expand the data collected from the student perspective as well as a means of following up on discussion that took place in the focus group. In general, it would have greatly beneficial to this project if the student perspective had been explored in more detail and if more student were directly involved in the data collection processes.
7.4 – Final Conclusions

This project has shown that there is troublesome mental health nursing content that matches up with the forms identified by Perkins (1999) and Meyer & Land (2003). However, the mental health curriculum itself contributed to some of the student learning difficulties, so the troublesome examples identified may only be relevant to a local program context. It has also shown that there is a difference between the faculty and student perspective on troublesome mental health nursing content and that with the exception of conceptually difficult mental health knowledge, this seems to be related to their difference in level of nursing experience and professional development. Liminality was utilized to help understand why this content is viewed as being troublesome and the implications of the project findings have the potential to lead to enhancements in undergraduate nursing education, program quality assurance, and ultimately the level of care received by patients with mental health concerns. New perspectives on troublesome knowledge have been presented along with arguments that challenge aspects of nursing skills and knowledge acquisition theory. This research questioned the existing definition of troublesome knowledge from a mental health nursing perspective and identified many areas for future research.

Also of significant importance is the student learning process associated with overcoming troublesome mental health nursing content. The identification of the troublesome mental health nursing knowledge is only one side of the coin, with the other side being the student learning process associated with the overcoming the troublesome hurdle. This research project resulted in a new conceptualization of student learning based on liminality and troublesome knowledge theory, presenting a framework that has the potential to help nurse educators understand the student learning process that occurs with troublesome mental health knowledge and why students become ‘stuck’. With some examples of troublesome mental health nursing knowledge being identified, and the associated student learning process being conceptualized, curriculum, classroom, and clinical instruction changes can be made in the hope of enhancing the overall preparedness level of undergraduate nurses to enter into mental health clinical practice.
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Watt, G. (2012). *General Practitioners at the deep end: The experience and views of general practitioners working in the most severely deprived areas of Scotland*. The Royal College of General Practitioners.


Appendixes

Appendix A – University of Liverpool Ethics Approval

Dear Don,

I am pleased to inform you that the EdD. Virtual Programme Research Ethics Committee (VPREC) has approved your application for ethical approval for your study. Details and conditions of the approval can be found below:

Sub-Committee: EdD. Virtual Programme Research Ethics Committee (VPREC)
Review Type: Expedited
PI:
School: Lifelong Learning
Title:
First Reviewer: Dr. Michael Watts
Second Reviewer: Dr. Ian Willis
Other members of the Committee: Dr. Baaska Anderson

Date of Approval: 11th September 2014

The application was APPROVED subject to the following conditions:

1. Mandatory

M: All serious adverse events must be reported to the VPREC within 24 hours of their occurrence, via the EdD Thesis Primary Supervisor.
This approval applies for the duration of the research. If it is proposed to extend the duration of the study as specified in the application form, the Sub-Committee should be notified. If it is proposed to make any amendment to the research, you should notify the Sub-Committee by following the Notice of Amendment procedure outlined at http://www.liv.ac.uk/media/liv.ac.uk/researchethics/notice%20of%20amendment.doc.

Where your research includes elements that are not conducted in the UK, approval to proceed is further conditional upon a thorough risk assessment of the site and local permission to carry out the research, including, where such a body exists, local research ethics committee approval. No documentation of local permission is required (a) if the researcher will simply be asking organizations to distribute research invitations on the researcher's behalf, or (b) if the researcher is using only public means to identify/contact participants. When medical, educational, or business records are analysed or used to identify potential research participants, the site needs to explicitly approve access to data for research purposes (even if the researcher normally has access to that data to perform his or her job).

Please note that the approval to proceed depends also on research proposal approval.

Kind regards,

Morag Gray

on behalf of EdD. VPREC
Appendix B – University of Saskatchewan Ethics Approval

**Certificate of Approval**

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**INSTITUTION(S) WHERE RESEARCH WILL BE CONDUCTED**
University of Saskatchewan

**FUNDER(S)**
Internally Funded

**TITLE**
Troublesome Knowledge in the Mental Health Content of an Undergraduate Nursing Education Program: Student and Faculty Perspectives

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**CERTIFICATION**
The University of Saskatchewan Behavioural Research Ethics Board has reviewed the above-named research project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this research project, and for ensuring that the authorized research is carried out according to the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol or consent process or documents.

Any significant changes to your proposed method, or your consent and recruitment procedures should be reported to the Chair for Research Ethics Board consideration in advance of its implementation.

**ONGOING REVIEW REQUIREMENTS**
In order to receive annual renewal, a status report must be submitted to the REB Chair for Board consideration within one month of the current expiry date each year the study remains open, and upon study completion. Please refer to the following website for further instructions: [http://www.usask.ca/research/ethics_review/](http://www.usask.ca/research/ethics_review/)

Beth Bilson, Chair
University of Saskatchewan
Behavioural Research Ethics Board

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Please send all correspondence to:
Research Ethics Office
University of Saskatchewan
Box 5000 RPO University, 1602-110 Gymnasium Place
Saskatoon SK S7N 4J8
Telephone: (306) 966-2075 Fax: (306) 966-2059
Appendix C – First Student Survey

Project Title: Troublesome knowledge in the Mental Health content of an undergraduate Nursing education program: Student and Faculty Perspectives

Researcher: Don M. Leidl RN MN EdD(c), Lecturer, University of Saskatchewan, College of Nursing. (306) 966 8279. don.leidl@usask.ca or don.leidl@online.liverpool.ac.uk

Supervisor: Dr. Morag Gray, University of Liverpool with Laureate Online Education. morag.gray@online.liverpool.ac.uk

By completing and submitting this survey, your free and informed consent is implied and indicates that you understand the above conditions of participation in this study.

If you would like to participate in the student focus group aspect of this project, please indicate your approval by providing an email address at which you can be contacted.

Troublesome knowledge by definition is content that students find difficult to learn and/or understand, a step that is necessary for student nurses before new knowledge can be applied and incorporated into their nursing practice. On the following forms of Troublesome Knowledge that are identified from the Literature, please indicate your level of agreement or disagreement of them proving to be troublesome for students.

The Concept of recovery in mental health Nursing

_____ Strongly Agree   _____ Agree   _____ Disagree   _____ Strongly Disagree

The development and use of Critical Thinking skills in mental health nursing

_____ Strongly Agree   _____ Agree   _____ Disagree   _____ Strongly Disagree

Cultural competency and mental health Nursing

_____ Strongly Agree   _____ Agree   _____ Disagree   _____ Strongly Disagree

The Application of Caring skills in mental health nursing

_____ Strongly Agree   _____ Agree   _____ Disagree   _____ Strongly Disagree
Classroom conditions, teaching style, and curriculum design can all impact the quality of the student learning. On the following forms of conceptually difficult and foreign knowledge that were introduced in program courses, please indicate your level of agreement or disagreement.

**Changes in brain chemistry associated with various mental health diagnoses**

- [ ] Strongly Agree
- [ ] Agree
- [ ] Disagree
- [ ] Strongly Disagree

**Nursing intuition development and its role in clinical decision making in mental health nursing**

- [ ] Strongly Agree
- [ ] Agree
- [ ] Disagree
- [ ] Strongly Disagree

**Pharmacokinetics of psychotropic drugs used in mental health nursing**

- [ ] Strongly Agree
- [ ] Agree
- [ ] Disagree
- [ ] Strongly Disagree

Please list any mental health concepts or content introduced during program courses (lecture) not listed above that you viewed as troublesome.

_____________________________________________________________________________________________

_____________________________________________________________________________________________

The application of Nursing knowledge presented in the program and applied in the clinical setting is known as praxis. Information presented in the classroom or via textbook is often viewed differently when encountered in the clinical environment. Of the following content/concepts that were introduced in the classroom and encountered during your clinical experiences, please indicate your level of agreement or disagreement that they are troublesome for students.

**Decisions related to the use of restraints (physical, chemical, and environmental) in mental health nursing**

- [ ] Strongly Agree
- [ ] Agree
- [ ] Disagree
- [ ] Strongly Disagree

**Therapeutic relationship building with acutely ill mental health patients**

- [ ] Strongly Agree
- [ ] Agree
- [ ] Disagree
- [ ] Strongly Disagree

**Skills associated with recognizing and addressing Moral distress in mental health nursing (Nurses experience moral distress when they know the ethically correct action to take but feel powerless to take that action)**

- [ ] Strongly Agree
- [ ] Agree
- [ ] Disagree
- [ ] Strongly Disagree

Please list any mental health concepts or content introduced during program courses (lecture) not listed above that you viewed as troublesome.

_____________________________________________________________________________________________

_____________________________________________________________________________________________
Appendix D – First Faculty Focus Group Questions

First Faculty Focus Group Questions

1. What mental health nursing content have you experienced to be troublesome for students from your past program or clinical teaching experiences?

2. What mental health nursing content have you experienced to be troublesome (if any) for yourself in your past learning experiences?

3. Do you think views on troublesome knowledge mental health nursing content differ between student and faculty perspectives?

4. Do you think views on troublesome knowledge mental health nursing content are similar between student and faculty perspectives?
Appendix E – Second Student Survey

Listed below are 13 content themes including specific concepts/content (focus areas) that were identified by Nursing faculty as being troublesome for students to learn. Review the list and check the answer that best represents your level of agreement with whether this content is indeed troublesome for students to learn.

---

**Project Title:** Troublesome knowledge in the Mental Health content of an undergraduate Nursing education program: Student and Faculty Perspectives

**Researcher:** Don M. Leidl RN MN EdD(c), Lecturer, University of Saskatchewan, College of Nursing. (306) 966 8279. don.leidl@usask.ca or don.leidl@online.liverpool.ac.uk

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By completing and submitting this survey, your free and informed consent is implied and indicates that you understand the conditions of participation in this study.

Several mental health concepts and content that are potentially troublesome for students were identified from the student survey conducted during this research project. Please review the concepts and content listed below and check the answer that best represents your level of agreement with whether this content is indeed troublesome for students to learn. Many of the questions include suggestions called focus areas that can be used to identify specific areas or skills associated with the troublesome content, check any or all that apply to your response.

---

**Nurse/Patient boundaries in Mental Health Nursing.**

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<thead>
<tr>
<th>Focus Areas:</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Boundary establishment</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>b) Boundary Maintenance</td>
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</table>

**The Development of Therapeutic Relationships with acutely ill mental health patients.**

<table>
<thead>
<tr>
<th>Focus Areas:</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<tbody>
<tr>
<td>c) Trust and Rapport Building</td>
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<td>d) Social Vs Professional relationships</td>
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**The application of communication skills when caring for acutely ill mental health patients.**

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<thead>
<tr>
<th>Focus Areas:</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>e) Relationship Building</td>
<td></td>
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<tr>
<td>f) Interviewing/Assessing</td>
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<tr>
<td>g) Interventions</td>
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</table>
Stigma associated with mental illness.

<table>
<thead>
<tr>
<th>Focus Areas:</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>h) Impact on Patients</td>
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<tr>
<td>i) Impact on the Nurse</td>
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The disease pathology of patients suffering from delusional disorders.

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<thead>
<tr>
<th>Focus Areas:</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>j) Religious Based</td>
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<tr>
<td>k) Grandiose</td>
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<td>l) Erotomanic</td>
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<tr>
<td>m) Persecutory</td>
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Psychopharmacology and how psychotropic medications are selected to treat mentally ill patients.

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<thead>
<tr>
<th>Focus Areas:</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>n) Antidepressants</td>
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<tr>
<td>o) Antipsychotics</td>
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<tr>
<td>p) Axiolytics</td>
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<tr>
<td>q) Stimulants</td>
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</table>

Neuro Anatomy and Brain Chemistry associated with Mental Illness.

____ Strongly Agree ____ Agree ____ Disagree ____ Strongly Disagree

Incorporation on mindfulness (self-awareness) and self-reflection into professional practice.

____ Strongly Agree ____ Agree ____ Disagree ____ Strongly Disagree

Life-long learning and its importance in the awareness and application of Nursing best practices.

____ Strongly Agree ____ Agree ____ Disagree ____ Strongly Disagree

Praxis, in particular the application of mental health nursing practices into clinical experiences.

<table>
<thead>
<tr>
<th>Focus Areas:</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>r) Mental Health Care Planning</td>
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<tr>
<td>s) Best Practice Gap</td>
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<tr>
<td>t) Role of Community</td>
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Safety concerns associated with the mental health clinical environment.

<table>
<thead>
<tr>
<th>Focus Areas:</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>u) For the Patient</td>
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<tr>
<td>v) For the Nurse</td>
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</tbody>
</table>
Nursing documentation in the mental health clinical environment.

<table>
<thead>
<tr>
<th>Focus Areas</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>w) What to include and what not to</td>
<td></td>
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<tr>
<td>x) Mental Health Vocabulary</td>
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<tr>
<td>y) Interventions</td>
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<tr>
<td>z) Mental Status exam</td>
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The application of the Mental Status Exam.

<table>
<thead>
<tr>
<th>Focus Areas</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>aa) Suicide Risk Assessment</td>
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<tr>
<td>bb) Thought Content</td>
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<tr>
<td>cc) Thought Process</td>
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<td>dd) Patient Insight</td>
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<td>ee) Patient Judgement</td>
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The concept of patient recovery and chronic mental illness.

<table>
<thead>
<tr>
<th>Focus Areas</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<tbody>
<tr>
<td>ff) Measures of success</td>
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<tr>
<td>gg) Selection of nursing interventions</td>
<td></td>
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<tr>
<td>hh) Role of Acute Care Units</td>
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<tr>
<td>ii) Role of Community</td>
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</table>

Please leave your email address if you are willing to participate in a focus group on Dec. 4th 2015 at 1pm.
Appendix F - Faculty Survey

Project Title: Troublesome knowledge in the Mental Health content of an undergraduate Nursing education program: Student and Faculty Perspectives

Researcher: Don M. Leidl RN MN EdD(c), Lecturer, University of Saskatchewan, College of Nursing. (306) 966 8279. don.leidl@usask.ca or don.leidl@online.liverpool.ac.uk

Supervisor: Dr. Morag Gray, University of Liverpool with Laureate Online Education. morag.gray@online.liverpool.ac.uk

By completing and submitting this survey, your free and informed consent is implied and indicates that you understand the conditions of participation in this study.

Several mental health concepts and content that are potentially troublesome for students were identified from the student survey conducted during this research project. Please review the concepts and content listed below and check the answer that best represents your level of agreement with whether this content is indeed troublesome for students to learn. Most of the questions include suggestions called focus areas that can be uses to identify specific areas or skills associated with the troublesome content, check any or all that apply to your response. Please use the Additional comments section in each question to include additional thoughts.

1. The concept of patient recovery and chronic mental illness

<table>
<thead>
<tr>
<th>Focus Areas</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>jj) Measures of success</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>kk) Selection of nursing interventions</td>
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<td></td>
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<tr>
<td>ll) Role of Acute Care Units</td>
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<tr>
<td>mm) Role of Community</td>
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Additional Comments:

2. Mental health oriented critical thinking skill development

<table>
<thead>
<tr>
<th>Focus Areas</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Focus Areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Assessment,</td>
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<tr>
<td>c) Nursing Diagnoses</td>
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<td></td>
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<tr>
<td>d) Nursing Interventions</td>
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<tr>
<td>e) Reflection</td>
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Additional Comments:
3. Neuro Anatomy and Brain Chemistry associated with Mental Illness.
   ____ Strongly Agree                     ____ Agree                     ____ Disagree                     ____ Strongly Disagree

   Additional Comments:

4. Nursing intuition development and its role in clinical decision making in mental health nursing
   ____ Strongly Agree                     ____ Agree                     ____ Disagree                     ____ Strongly Disagree

   Additional Comments:

5. Psychopharmacology and how psychotropic medications are selected to treat mentally ill patients.

   **Focus Areas:**
   - a) Antidepressants
   - b) Antipsychotics
   - c) Anxiolytics
   - d) Mood Stabilizers
   - e) Stimulants

   Additional Comments:

6. Ethical decision making in mental health clinical environments.

   **Focus Areas:**
   - a) Use of Physical Restraints
   - b) Use of PRN Medications
   - c) Moral Distress

   Additional Comments:

7. The Development of Therapeutic Relationships with acutely ill mental health patients.

   **Focus Areas:**
   - a) Trust and Rapport building
   - b) Social Vs. Professional relationships

   Additional Comments:

8. Nurse/Patient boundaries in Mental Health Nursing.

   **Focus Areas:**
   - a) Development
   - b) Maintenance

   Additional Comments:

9. Content related to Personality Disorders.

   **Focus Areas:**
   - a) Etiology and Diagnosis
   - b) Nursing Interventions
   - c) Recovery
   - d) Borderline Personality Disorder
   - e) Manipulative behaviors

   Additional Comments
10. Safety concerns associated with the clinical environment.

<table>
<thead>
<tr>
<th>Focus Areas:</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>a) For the patient</td>
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<tr>
<td>b) For the nurse</td>
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</table>

Additional Comments:

11. Praxis, the application of mental health nursing practices into mental health clinical experiences.

<table>
<thead>
<tr>
<th>Focus Areas:</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>Mental Status Exam</td>
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<tr>
<td>Care Planning</td>
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<tr>
<td>Best Practice Gap</td>
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Additional Comments:

12. The application of the Mental Status Exam.

<table>
<thead>
<tr>
<th>Focus Areas:</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Suicide risk assessment</td>
<td></td>
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<tr>
<td>b) Thought content</td>
<td></td>
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<tr>
<td>c) Thought process</td>
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<tr>
<td>d) Patient Insight</td>
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<tr>
<td>e) Patient Judgement</td>
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Additional Comments:

13. The application of communication skills when caring for acutely ill mental health patients.

<table>
<thead>
<tr>
<th>Focus Areas:</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Relationship building</td>
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<tr>
<td>b) Interviewing/Assessment</td>
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<td>c) Interventions</td>
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Additional Comment
Appendix G – Participant Information Sheet

Faculty/Student Participant Information Sheet

08/October, 2014

Title of Study:
Troublesome knowledge in the Mental Health content of an undergraduate Nursing education program: Student and Faculty Perspectives

Invitation
You are being invited to participate in a research study. Before you decide whether to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and feel free to ask if you would like more information or if there is anything that you do not understand. It is important to understand that you do not have to accept this invitation and should only agree to take part if you want to.

Thank you for reading this.

Purpose
Nursing education has the responsibility to adequately prepare undergraduate nurses to enter in mental health clinical environments after graduation. However, there are numerous examples from different nursing education perspectives that indicate that there is room for and a need for improvement. Nursing education decisions related to mental health curriculum design, student learning experiences, faculty development, and the application of nursing knowledge in clinical settings need to be made very carefully if undergraduate nurses are to be adequately prepared to enter into mental health nursing. Student understanding of mental health nursing content is necessary if it is to be applied effectively and efficiently in a mental health clinical environment, so issues related to student understanding need to be identified and taken into consideration when planning future student learning experiences. Troublesome knowledge by definition is content that students find difficult to learn and/or understand, a step that is necessary for student nurses before new knowledge can be applied and incorporated into their nursing practice. This research project focuses on the identification of troublesome knowledge in the mental health curriculum of an undergraduate nursing education program at the University of Saskatchewan (UoS) from both nursing student and Faculty perspectives. This project has the potential to lead to primary outcomes such as a more inclusive and organized mental health curriculum, enhanced student learning, enhanced application of mental health nursing skills, and an easier transition for graduates into mental health clinical environments. Insights gained from this project can also hopefully lead to secondary outcomes such as students engaging more easily with mental health content, enhanced recruitment and retention of new graduates into mental health clinical environments, and ultimately an improved quality of care for mental health patients.
Rationale for Your Participation
The Nursing faculty involved in the focus groups would be those who are involved with or have recently been involved with teaching the mental health content/curriculum in the classroom, lab, and clinical settings. Nursing faculty with limited or no mental health nursing experience either as a practitioner or as an educator are not appropriate for this project and will not be included. This translates into approximately 15 Nursing Faculty members who are eligible to participate.

Do I have to take part?
No, participation in this research study is completely voluntary. If you decide to participate and then later on change your mind, you may withdraw at any time without any fear of consequence or penalty.

What will happen if I take part?
Faculty participants will consent to participate in two 1 hour focus groups followed by a short online survey. The initial focus group conducted with the Nursing Faculty members will focus on observances of past student learning and personal teaching experiences related to mental health content/curriculum that involved potential forms troublesome knowledge. A follow-up Faculty focus group will also take place 2 weeks after the first during which I plan on offering up the troublesome knowledge themes identified in the first focus group and those identified from the student survey for further discussion and clarification. A short questionnaire taking approximately 5 minute to complete and offer the emerging themes for your review and use a Likert like scale to indicate your level of agreement or disagreement will be handed out at the beginning of the group. Both faculty focus groups will be in private meeting rooms where outside observing is not possible to ensure privacy and confidentiality. All data will be gathered prior to the end of November, 2014, after which time your participation in the study will end and no further data will be gathered.

Benefits
Areas such as the level of preparedness of new graduate nurses for the workplace, the professional teaching practice of my peers, and the recruitment and retention of new graduates into mental health clinical areas could all be positively influenced by findings from this project. New nursing graduates are often discouraged from working in psychiatry immediately after graduation by nurses and Nursing Faculty who believe that new graduates need more nursing experience before working in acute psychiatry, and that current undergraduate programs do not adequately prepare them for this clinical area (Shattell, 2009; Stevens, Browne, & Graham, 2013). There is also a significant body of research that indicates that undergraduate nursing programs are failing to adequately prepare students to provide care to clients with mental illness, or stimulate interest in mental health as an interesting, worthwhile career option (Happell, Platania-Phung, 2005; Kenny, McConnachie, Petrie, Farrell, 2009, Morrow, 2009; Shattell, 2009). This project will address these issues and hopefully lead to enhancements in the quality of student learning experiences and ultimately lead to better prepared undergraduate nurses.
The purpose of Faculty development is to assist faculty in becoming better educators to enhance their professional practices. Educational peer review (EPR) is one method of faculty development that can be used to targeted faculty educational practices (Toth, McKey, 2010). EPR can be defined as a purposeful interaction in which faculty members engage with each other in a scholarly discussion about education, involving the sharing of educational knowledge, rather than being limited to a simple judgment of others’ performance, leading to enhanced student learning and program outcomes (Quinlan, Akerlind, 2000). Knowledge gained from faculty interactions that occur during this research could stimulate further discussion within the faculty on areas in which their students struggle and which they themselves have observed as being difficult to teach, leading to enhanced faculty outcomes. (This paragraph is only included in faculty participant information sheet)

The identification of troublesome knowledge within the mental health related content could also provide insights into how to improve the new Nursing curriculum being implemented within our institution. Improvements to how and when mental health content is introduced and reinforced has the potential to improve the level of student understanding, translating into an higher level of preparedness to enter into mental health focused clinical environments after graduation. Better prepared, confident and competent undergraduate nurses have the potential to positively impact the recruitment and retention concerns associated with mental health nursing, and ultimately translate into higher quality care for the mentally ill. New methods are needed to address recruitment and retention problems in mental health nursing as existing approaches are not having the desired effect (Stevens, Browne, Graham, 2013). This project is an example of a new approach that may solve this problem.

Thank you for your consideration to participate.
What if I have a problem/complaint?
If you are unhappy, or if there is a problem, please feel free to let me know immediately at (306) 966-8279 or don.leidl@my.ohecampus.com. If you remain unhappy or have a complaint which you feel you cannot come to me with then you should contact either my supervisor, Prof. Morag Gray by email – moraggray@online.liverpool.ac.uk or the Research Governance Officer at ethics@liverpool.ac.uk. When contacting the Research Governance Officer, please provide details of the name or description of the study (so that it can be identified), the researcher involved, and the details of the complaint you wish to make.

This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office ethics.office@usask.ca (306) 966-2975. Out of town participants may call toll free (888) 966-2975.

Will my participation be kept confidential?
Yes. Canadian Nursing Association code of ethics (2013) and the student code of conduct from the UofS Student Nursing handbook (2014) are also being used to guide research decisions related to privacy and confidentiality. The researcher will also undertake measures to safeguard the confidentiality of the focus group discussion, but cannot guarantee that other members of the group will do so. Please respect the confidentiality of the other members of the group by not disclosing the contents of this discussion outside the group, and be aware that others may not respect your confidentiality. Only I as the researcher will be aware of your identity (which I will keep confidential) as all data gathered will be anonymised. All data gathered from the project will be stored on password protected and encrypted external hard drives that will be kept by the researcher for 5 years after the project concludes.

What will happen to the results of the study?
The study will be submitted to the University of Liverpool as evidence of the completion of my Education doctoral thesis. I also plan on submitting write-ups of this project for submission to Nursing Education and Higher Education related academic journals.

What if I stop taking part?
Nothing. You can stop your participation at any time during the research project without question or incurring any penalty.

Who can I contact if I have further questions?
You have the right to ask further questions and you will be provided with details on where to find further appropriate information.

- **My contact details are:**
  Don M. Leidl, Principal Investigator | don.leidl@online.liverpool.ac.uk or don.leidl@usask.ca |
  Telephone : (306) 966-8279

Please keep/print a copy of the Participant Information Sheet for your reference. Please contact me with any question or concerns you may have.

If you wish, you may also contact my Thesis Supervisor, Prof. Morag Gray, at moraggray@online.liverpool.ac.uk

Date: October 8/2014

Signature: ________________________
References:


University of Saskatchewan, College of Nursing (2012). The student nursing handbook. University of Saskatchewan Press. Saskatoon, SK, Canada.

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