Undergraduate Nursing Students' Perspectives on and Experiences with Clinical Practice Preparedness: A Descriptive Qualitative Study

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Abstract

Undergraduate curricula are designed to prepare nursing students for CP courses so that they can demonstrate their knowledge and skills in supportive and supervised learning environments while students. This is particularly important today, given the ever-increasing knowledge in health sciences and the evolving complexity of healthcare environments. However, anecdotal evidence indicates nursing students feel unprepared for CP, and the literature surrounding this phenomenon remains limited. This study, guided by self-efficacy theory, aimed to explore and describe undergraduate nursing students' (UNS) perspectives on and experiences with clinical practice (CP) preparedness (CPP). Following institutional ethical approval, twenty UNS enrolled in years three and four of the undergraduate nursing program participated in semi-structured, video-recorded virtual interviews. Qualitative content analysis was used to analyze narrative data. The findings described the participants' shared views on CPP. Three themes (or types) of preparedness were found: psychological, cognitive, and physical. Two additional themes were found: CP environment and CP sources (including relationships, preclinical learning, and lived experiences). The findings of this study offer novel insight into UNS' views on CPP and contribute to the limited literature on this phenomenon. These insights may help nurse educators facilitate UNS' sense of preparedness and, in turn, success in their clinical practice courses by ensuring adequate support and structure. This guidance will allow the student to focus on attaining course objectives and entry-level competencies.

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Chapter One: Introduction

This research focused on undergraduate nursing students and their views on their preparedness for clinical practice. This chapter presents the main concepts, the phenomenon, and the purpose of this research. Accordingly, this chapter is divided into sections that will briefly discuss the background and context for the phenomenon of clinical practice preparedness, the research purpose, approach, significance, and theoretical framework.

Background and Context

Understanding past influences and current developments in entry-level, undergraduate nursing programs is an initial step toward comprehending the background and context of the phenomenon of undergraduate nursing students' preparedness for clinical practice. There are several elements to consider in relation to nursing students' preparedness for clinical practice. First, I review key influential factors that have worked to propel nursing education. This is important for understanding current challenges in nursing education and the need to adapt programs quickly. Second, reviewing the present program structure provides insight into current practices, which are foundational to the research questions. Third, I review current events that have resulted in the need to modify clinical practice experiences to accommodate the healthcare system's current state. These points lead to the common argument of the need to better prepare students for a practice in an ever-evolving and complex healthcare system. Nursing educators are tasked with providing high-quality education to prepare graduates to practice in the complexities of contemporary healthcare environments (Benner et al., 2010; Canadian Nurses Association [CNA], 2009; Canadian Association for Schools of Nursing [CASN], 2015b).

Advances in health sciences and evolving social influences have increased the complexities of the healthcare system over the past several decades (Benner et al., 2010). This prompted a call for education reform at the beginning of the 21st century, which provoked significant changes to nursing education programs and curricula (Benner, 2015; Benner et al., 2010; CASN, 2012; CNA, 2004, 2008). Nursing

schools were called upon to modify, develop, and implement modernized curricula that meet the current healthcare environment, societal events, and best-practice guidelines (Benner et al., 2010; CNA, 2008, 2015, College of Registered Nurses of Manitoba [CRNM], 2024). Graduates of undergraduate nursing programs need an extensive knowledge base to think critically, perform high-level skills, identify needs and care for individuals and their families, work collaboratively, and communicate effectively as healthcare team members (Benner et al., 2010; Oermann, Shellenbarger, & Gaberson, 2018). They are also expected to promote and protect the public's health and prevent illness within multiple healthcare sectors. Thus, as nursing knowledge continues its extensive growth, nursing curricula must be continuously and appropriately revised to reflect advancements while avoiding simply adding to the already robust list of essential nursing knowledge (Benner et al., 2010; Oermann, De Gagne, & Phillips, 2018; Oermann, Shellenbarger, & Gaberson, 2018). Substantive theoretical knowledge is foundational in the preparation of nursing students for the complexities seen in clinical practice (Benner et al., 2010; Oermann, De Gagne, & Phillips, 2018). While nursing programs worldwide use various pedagogical approaches and curricular models, the overall objective is to prepare nursing students for professional practice (Keating, 2018). Given the rapid evolution of nursing sciences and extenuating factors that continue to influence the content and delivery methods in undergraduate programs, adequately preparing nursing students for experiential learning in the clinical setting is an important issue for nurse educators.

Nursing is a practice discipline; thus, experiential and situated learning continues to be an essential part of nursing education (Benner et al., 2010; Oermann, De Gagne, & Phillips, 2018; Oermann, Shellenbarger, & Gaberson, 2018). Nursing curricula are designed to impart nursing knowledge through theoretical and practical (i.e., laboratories, simulations, clinical practice) courses (Benner et al., 2010; CASN, 2015a). Theoretical courses refer to what is taught in the classroom, including nursing theories, research, leadership, and the specialized care of diverse populations, such as older adults, children and

new parents, and other relevant sciences, including psychology, nutrition, pharmacology, and pathophysiology.

In addition, nursing students at all levels are expected to use their newly acquired nursing knowledge and to be prepared for experiential and situated learning experiences within practicums or preceptorships. As theoretical courses impart nursing knowledge, practical courses teach students applied abilities (e.g., skills). Furthermore, practical courses such as practicums or preceptorships provide experiential learning experiences. These experiences are essential in nursing education as they foster the use of theoretical knowledge learned in the classroom and provide the opportunity for nursing students to consolidate their knowledge ("knowing-that") and skills ("knowing-how"; Benner, 1984; Benner et al., 2010). As such, clinical practice enables active learning experiences in developing communication, technical, and critical thinking skills (Benner, 1984; Oermann, Shellenbarger, & Gaberson, 2018). Moreover, the past decade saw a substantial shift in pedagogical approaches toward student-centred learning (Hagler & Morris, 2018). While some theoretical courses continue to be taught using standardized lectures or presentations, there has been an emerging trend to diversify pedagogical approaches and use experiential learning and active learning strategies as valuable tools to actively engage students in the classroom (Benner, 2015; Hagler & Morris, 2018). Examples of these diverse strategies include 'flipped' classrooms, case studies, and simulations (De Gagne et al., 2018; Hagler & Morris, 2018). These new pedagogical approaches are meant to increase student engagement and comprehension of the content and help students use their nursing knowledge in clinical practice (Benner, 2015; Hagler & Morris, 2018). Despite educators' exhaustive efforts to adapt the pedagogy for students' learning and prepare them for practical experiences in clinical settings, anecdotal evidence suggests that students continue to feel unprepared.

Nursing programs rely primarily on acute care clinical sites for students' experiential learning experiences. Understanding how Manitoba's undergraduate nursing programs structure their clinical

education provides the researcher with context for how students are prepared for and engage in clinical practice experiences. Like the Canadian norm, Manitoba nursing schools predominantly use a distributive and group-based approach to delivering clinical education (CNA, 2004). Thus, clinical practice hours are distributed throughout the semester as students attend theory, laboratory, and clinical courses simultaneously. For example, students enrolled in a theory course focusing on geriatrics (i.e., older adults, chronic care challenges, and aging) will also participate in skills practice within the laboratory (i.e., learning how to conduct physical examinations and perform activities of daily living skills on geriatric patients). Also, students may attend a practicum for one to three clinical practice days in a typical week. This linear approach allows the students to use their theoretical knowledge, develop related psychomotor skills, and concurrently apply them in the clinical practice setting. Additionally, cohorts are typically divided into groups of four to eight students and placed at designated clinical sites. Student groups are supervised by experienced Registered Nurses (RNs), typically with a baccalaureate degree, who are employed by the nursing schools and act to facilitate clinical practice experiences.[1]

Finally, the impact of current healthcare issues (i.e., nursing shortages) on clinical practice experiences for nursing students must also be considered (McIntyre & McDonald, 2019). Nursing shortages affect nursing schools' ability to find adequate clinical practice placements, instructors, and resources (Benner et al., 2010; CNA, 2004, 2009; McIntyre & McDonald, 2019; Oermann, Shellenbarger, & Gaberson, 2018). These nursing shortages affect the ability to find qualified and experienced instructors and professors. They also limit student placement and learning opportunities at clinical sites with low staffing levels. When staffing levels are critical, limitations to capacities (i.e., number of schools,

[1] These RNs are called Clinical Instructors, Clinical Education Facilitators, or Clinical Supervisors, and these terms are used interchangeably in the literature. Worldwide, *Clinical Instructor* is a commonly known and understood term and will therefore be used in this paper.

programs, and students on the unit at a time) within clinical areas are also observed (Benner et al., 2010; CNA, 2004, 2009; CASN, 2015b; Oermann, Shellenbarger, & Gaberson, 2018).

Additionally, in 2018, Manitoba began restructuring healthcare services, resulting in the associated move to a specialized hospital service model. This restructuring has caused diminished access to appropriate clinical sites for specialized clinical courses (i.e., surgery and acute care). Also, in December 2021, the province of Manitoba committed to an additional 259 nursing student seats throughout several publicly funded post-secondary undergraduate nursing programs (Province of Manitoba, 2021). Consequently, multiple healthcare programs have increasing placement demands for the same number of clinical areas. Thus, additional strain occurs when various nursing schools and other healthcare programs vie for the same placement (CNA, 2004; CASN, 2015b). With the increasing limitations to adequate clinical placement areas, nursing programs have had to find alternative delivery methods for providing practical learning experiences to meet program objectives and entry-level competencies (Benner et al., 2010; CNA, 2004; CASN, 2012; Oermann, De Gagne, & Phillips, 2018; Oermann, Shellenbarger, & Gaberson, 2018). Consequently, there has been immense pressure to incorporate more experiential and situated learning experiences through simulation-based learning (CNA, 2004; Jeffries et al., 2018). Moreover, the emergence of the novel coronavirus pandemic in 2020 caused a sudden and urgent need for virtual simulations since appropriate clinical placement areas for healthcare students diminished significantly and affected placement capacities (Harder, 2020). Evidence suggests that simulation-based experiences enhance theory courses and can be effectively substituted for clinical practice hours (Harder, 2020; Jeffries et al., 2018; Roberts et al., 2019). In fact, in 2018, the CRNM approved simulations to substitute up to 25% of clinical practice hours (CRNM, 2018).

To conclude, numerous influential factors lead to the challenges educators must consider and address to prepare students for practice, within a volatile environment. Regardless of the progress and

evolution in nursing education, including progressive pedagogical and student-centred approaches, educators continue to be challenged to effectively prepare nursing students for clinical practice.

The Problem

Students are taught foundational theoretical and practical knowledge prior to clinical practice and have opportunities to enact the nurse's role (i.e., laboratory, simulations) before working with actual clients. However, students continue to have difficulties using nursing knowledge in clinical practice settings (Benner et al., 2010; Scharff et al., 2017). Students also still struggle to meet clinical practice expectations (Benner et al., 2010). As well, students express feelings of stress, anxiety, and lack of confidence in relation to clinical practice (Chernomas & Shapiro, 2013; Levett-Jones et al., 2015). Levett-Jones et al. (2015) reported that nursing students (N = 144) who completed an online questionnaire felt unprepared for their clinical placements; they expressed apprehension towards practicum expectations, namely their lack of confidence in their knowledge and ability to perform skills. Research suggests that emotional preparation (Smith et al., 2009) and additional preparatory or specialized courses and activities are needed to increase students' preparedness for clinical practice (Atherley et al., 2019; Gemuhay et al., 2019; Kelly et al., 2020; McNamara, 2015; Park et al., 2018).

The ever-evolving complexities of the healthcare system are challenging *nursing formation* (i.e., education and experiences that *form* the student into a nurse; Benner et al., 2010) and nursing programs' efficacy in preparing nursing students for clinical practice (Benner et al., 2010; CASN, 2015a, 2015b; Oermann, Shellenbarger, & Gaberson, 2018). These challenges are compounded by the increasing breadth of essential nursing knowledge required within the curriculum, the need for adequate experiential and situated learning experiences (Benner et al., 2010), scarce resources, limited clinical placement capacities, expanding technology, and nursing shortages (Oermann, Shellenbarger, & Gaberson, 2018).

Anecdotal evidence demonstrates that nursing students feel unprepared for clinical practice, and the body of literature surrounding this phenomenon continues to be limited. Therefore, exploring students' perspectives on clinical practice preparedness and what influences their preparedness has the potential to provide insight into this phenomenon to inform educators and support students in their readiness for clinical practice.

Defining Clinical Practice Preparedness

Describing and defining the central concept provides a clear, functional description of the commonly recognized meaning of *clinical practice preparedness* within this study. Comprehension of the concept and its components enabled the researcher to focus the research question and structure the interview questions. Additionally, for the purposes of this research, the semantics of *clinical practice preparedness* and *preparedness for clinical practice* are the same and differ only in word placement; therefore, in this context, they hold the same meaning and are interchangeable.

Clinical Practice

Clinical practice refers to the practical experiences, learning opportunities, and competency development that nursing students engage in during practicum rotations within a clinical environment. Clinical practice settings enable students to care for patients under the supervision of clinical instructors and staff nurses. Within this study, clinical practice does not refer to the transition to professional practice experiences as a novice nurse.

Preparedness

Preparedness is a subjective concept; Sweeny et al. (2006) defined preparedness as "a goal state of readiness to respond to uncertain outcomes" (p. 302). Preparedness enables individuals to modify their outlook in response to new information, prepare for impediments, and take advantage of opportunities (Carroll et al., 2006). Hence, preparedness is a state of mind based on acquired knowledge and the perceived ability to apply that knowledge. Burford and Vance (2014) also explored the term *preparedness* and the potential meanings behind the question, "Are you prepared?"; this question

encompasses individuals' perceived "performance, competence or confidence" (p.49) in their abilities. Thus, questioning preparedness is dependent on the connotation, which could be interpreted in relation to competencies, the belief in one's capability, or self-efficacy, feeling emotionally confident or anxious about the experience, having been prepared for the experience (through formation), or as a prediction in performance (prospectively), or actual perceived performance (retrospectively; Burford & Vance, 2014). Notably, the term *readiness* is often used synonymously with preparedness and is defined as "an individual's ability to learn from what they know, can do and value" (Billett, 2015, p. 368).

Finally, while appreciating the various connotations of such an ambiguous concept, I posit the use of the terms *procedural*, *conceptual*, and *dispositional* capacities as components within the concept of preparedness to clarify intent when posing the research question. Consequently, in regard to preparedness, procedural capacities are elements for which a person can perform, thus the "knowing-how" (as stated by Benner, 1984; Benner et al., 2010). Conceptual capacities affirm whether the person possesses the necessary competencies and knowledge, thus the "knowing-that" (as stated by Benner, 1984; Benner et al., 2010). Finally, dispositional capacities refer to the psychological and physiological capacities ("state-of-being" and "state-of-mind").

Clinical Practice Preparedness

Based on the above discussion, clinical practice preparedness encompasses the student's conceptual/cognition ("knowing-that"/knowledge), procedural ("knowing-how"), and dispositional ("state-of-being" and "state-of-mind") abilities, thus incorporating Benner's (1984) concepts for theoretical and practical knowledge (i.e., knowing-that and knowing-how). Also, as Burford and Vance (2014) plainly observed, a connotation for preparedness is the perception of one's capabilities or self-efficacy. Bandura's definition of self-efficacy provides a guide for the development of this phenomenon's definition. Thus, for the purpose of this study, clinical practice preparedness is the belief in one's capabilities and actual ability, knowledge, and competencies to perform within a clinical practice setting as a student nurse.

Purpose of the Study

The purpose of this research was to explore and describe undergraduate nursing students' perspectives on and experiences with clinical practice preparedness. Moreover, this study will identify what student's perceive influences and affects their preparedness for clinical practice. While a retrospective lens is applied to this study, the focus is not on the students' performance outcomes but on how they perceive and experience the phenomenon and what influences their preparedness for clinical practice.

Research Questions

The primary research question is:

1. How do undergraduate nursing students perceive and experience their clinical practice preparedness?

Secondary questions are:

1. What does being prepared for clinical practice mean to undergraduate nursing students?
2. How do undergraduate nursing students perceive they prepare and are prepared for clinical practice?
3. What influences or affects students' perceived preparedness for clinical practice?

Research Design

This study uses a qualitative descriptive approach. Qualitative descriptive research explores a poorly understood or ill-defined phenomenon or when the literature provides little information about the problem (Creswell, 2013; Polit & Beck, 2017). The current literature provides a limited understanding of what affects nursing students' preparedness for clinical practice and their experiences related to the phenomenon. True to the nature of qualitative descriptive research designs, the researcher seeks to describe the perspectives and experiences of the participants (Davies & Logan, 2018; Polit & Beck, 2017; Sandelowski, 2000, 2010; Willis et al., 2016). As such, a qualitative descriptive study, as described by Sandelowski (2000, 2010) and Willis et al. (2016), was employed to retrospectively explore the

perceptions and experiences of preparedness for clinical practice in undergraduate nursing student participants prior to their last clinical course.

Theoretical Framework

Theories inform researchers on how to structure and organize a study; they also provide insight into the meaning of the key concepts and help focus the research perspective and the interview questions (Polit & Beck, 2017). The theoretical framework used to inform this study is Bandura's Self-efficacy Theory (1997). Self-efficacy theory is well known and frequently utilized in nursing education and healthcare research concerning performance and behaviour (Polit & Beck, 2019; Resnick, 2018).

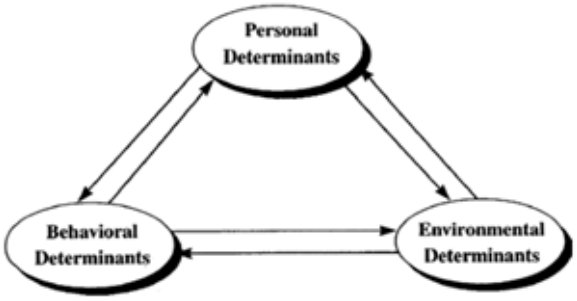
The interrelated concepts within Bandura's theory on self-efficacy (1997) focus on individuals' beliefs in their ability to achieve an expected outcome through behaviour. Thus, self-efficacy theory informed this study as many potential influencing factors may affect student behaviour regarding preparedness for clinical practice and, in turn, how perceived preparedness influences student behaviour. Based on the assumption that students' perceived ability to perform as required in clinical practice influences behaviour, self-efficacy theory is the ideal guiding framework to explore students' perceptions and experiences regarding their preparation for clinical practice. Moreover, self-efficacy provided a framework for the study's definition of the phenomenon.

Theory Description

Self-efficacy theory originates from Social Cognitive Theory (SCT; Bandura, 1986), which proposes that personal factors (i.e., cognitive, affective, and biological), behaviour, and environmental events are in constant interaction in a reciprocal relationship of causation (see Figure 1). Therefore, the person (e.g., nursing students, as an ensemble of cognitive, affective, and biological factors) and environmental events impact behaviour, and their behaviour equally influences personal factors and their environment. Thus, SCT explains how these reciprocal relationships work together and provides insight into one's sense of self (Bandura, 1986). Accordingly, SCT's concepts of person, behaviour, and environment and their reciprocal relationship provide the basic assumptions for self-efficacy theory.

Figure 1

Triadic Reciprocal Relationship Between Personal Factors, Behaviour, and Environmental Events



*Note. From "*On the functional properties of perceived self-efficacy," by A. Bandura, 2012, *Journal of Management, 38*(1), p. 12. DOI: 10.1177/0149206311410606. Copyright 2012 by Journal of Management. Reprinted per copyright permissions.

Self-efficacy is defined as the "belief in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). It emphasizes the belief in self-capabilities, explaining the effect of self-efficacy on behaviour and outcomes (Bandura, 1997). Therefore, belief in one's abilities affects behaviour and outcomes, such as learning, developing, and applying nursing competencies in clinical practice.

Sources of Self-efficacy. Bandura (1986, 1997) identifies four sources of self-efficacy: enactive mastery experiences (i.e., learned behaviour), vicarious experiences (i.e., beliefs transmitted through the achievements or failures of others with whom one identifies), verbal persuasion (i.e., social influences or encouragement), and physiological and affective states (i.e., judging one's own capabilities through one's physiological state).

Enactive Mastery Experiences. Bandura (1997) identifies enactive mastery experiences as the most influential source of efficacy. These experiences engage individuals in learned behaviour and inform them of their capabilities, thus defined as "personal experiences of managing efforts toward performance accomplishments" (Lippke, 2017, Definition section, para. 1). Authentic experiences influence a person's

perceived ability to perform the same or similar behaviour in future experiences and similar circumstances. For nursing students, the ability to perform is based on the behaviours learned through actual experiences in laboratory practice, simulations, past clinical experiences, and other similar life circumstances. Thus, these mastery experiences inform their ability to perform efficaciously during clinical practice.

Vicarious Experiences. According to Bandura (1997), vicarious experiences contribute to self-efficacy beliefs because individuals perceive their own capabilities by observing others. Accordingly, vicarious experiences have the most significant influence on people when they have little experience and are uncertain about performance guidelines (Bandura, 1997). For example, when students observe other students or healthcare professionals successfully performing a skill or task, these vicarious experiences or observations inform and influence their belief in their ability to perform the same skill or task.

Verbal Persuasion. Individuals also rely on social persuasion as a source of self-efficacy (Bandura, 1997). For example, students use verbal persuasion to inform their judgments about their capabilities for accomplishment. While nursing students who receive positive feedback and encouragement are more likely to be persuaded of their capabilities to perform, students receiving negative or harsh criticism are likely to be dissuaded, informing them of their inabilities. Therefore, verbal persuasion of peers, mentors, and clinical instructors influences the student's self-efficacy.

Physiological and Affective State. Individual interpretations of one's physiological and emotional reactions (i.e., physiological feedback or somatic information) influence and are used to judge personal capabilities (Bandura, 1997). Increased emotional arousal is perpetuated by physiological responses when individuals are ineffective at controlling their stress reaction (Bandura, 1986; 1997). For example, nursing students who associate an accelerated heart rate with excitement will perceive their capabilities differently than students who associate the same physiological reaction with anxiety and will perceive decreased self-efficacy beliefs.

Relationships and Structure. As previously noted, self-efficacy theory is grounded in the concepts of person, behaviour, and environment and their reciprocal relationships (see Figure 1). However, as self-efficacy theory proposes that a person's belief in their capabilities results in behaviour and expected performances, the relationship between self-efficacy, behaviour, and outcomes is linear (Bandura, 1997; see Figure 2).

Figure 2

Structure of Self-Efficacy Theory: Linear Relationship of the Person, Behaviour, and Outcome

Note. As described in "Self-efficacy: The exercise in control" by A. Bandura, 1997, New York: W.H. Freeman.

Additionally, it is necessary to consider the informational sources that influence self-efficacy (i.e., enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states). Therefore, while considering the structure of reciprocal causation in human agency, the sources of self-efficacy, behaviours, and performance outcomes, Resnick (2018) developed a more accurate illustration of self-efficacy theory (see Figure 3). Finally, I present Figure 4, an original and somewhat simplified illustration of the structure and relationships between the concepts of self-efficacy theory as it is understood and used to guide this study.

Assumptions

According to Chinn and Kramer (2018), "assumptions are the basic givens or accepted truths that are fundamental to theoretic reasoning" (p. 199). Self-efficacy theory presents assumptions in line with human agency. Bandura explains that people "people have greater knowledge, means, and social entitlements to exercise increased control, both individually and collectively, over their own development and the conditions that affect their lives" (p. vii). The primary assumption is that preparedness influences and impacts the student's clinical experience outcomes.

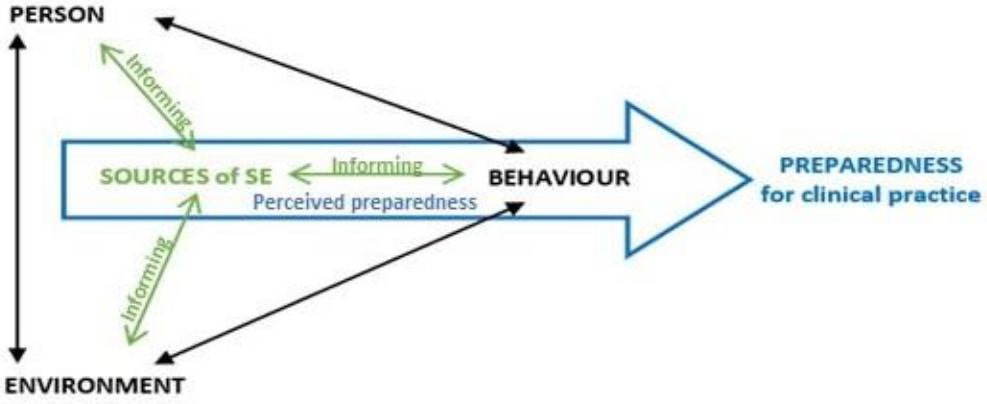
Figure 3

Self-Efficacy Theory: Concepts and Complex Structure

Note. Figure 10.1 - Self-Efficacy. From "The Theory of Self-Efficacy" (pp. 221) by Barbara Resnick, 2018, In M. J. Smith and P. R. Liehr (Eds.), *Middle range theory for nursing* (4th ed.). Copyright 2018 by Springer Publishing Company. Reprinted with permission (licence ID 1105963-1).

Figure 4

Self-efficacy Theory Concepts and Structure with Perceived Clinical Practice Preparedness



Note. Original adaptation, inspired by descriptions in "Self-efficacy: The exercise of control" by Bandura, 1997, New York: W.H. Freeman, and "Figure 10.1 – Self-Efficacy". From "The Theory of Self-efficacy" by Barbara Resnick, 2018. In M. J. Smith & P.R. Liehr (Eds.) *Middle range theory for nursing* (4th ed.), pp. 221. Adapted per copyright permissions.

Accordingly, within the context of this study, assumptions include:

- Nursing students have control over their own educational and professional development.
- Students can control and shape outcomes through their behaviour, including how and what they do to prepare for clinical practice.
- Students have control and influence their social environments. Thus, students may be contributors to and products of their perceived clinical practice preparedness.
- Perceived self-efficacy and preparedness are influenced by a person's motivations, behaviours, and the events that influence their perception of self, perceived abilities, and expected outcomes.

To clarify, we assume that preparedness directly impacts outcomes. For example, students who perceive greater preparedness will perform more effectively, practice safely, and learn more readily from the clinical practice experience.

Study Significance

Given the limited knowledge about the phenomenon of clinical practice preparedness, the research findings will describe and inform an underexplored nursing education issue. This study provides insight into students' views on clinical practice preparedness and contributes to the limited literature in this area. The study findings will ideally enhance educators' knowledge and ability to better prepare and support students in clinical learning and improve undergraduate nursing education. Finally, this study will inform educators and researchers, add to nursing literature, and posit future avenues of exploration.

Chapter Summary

Chapter One presented the background and context related to nursing education and clinical practice preparedness, adding to the overall understanding of the problem and the need for further study in this critical area of nursing education. A brief overview of the progress and evolution in nursing curricula revealed that while nursing education programs have seen dramatic changes over the past

decade, they continue to progress, adapt, and meet ever-evolving societal and healthcare system challenges. Yet, despite foundational theoretical and practical courses that incorporate progressive pedagogy and focus on student-centred approaches, educators continue to be challenged by concerns about their students' preparedness for clinical practice. Furthermore, with ongoing evidence of emotional and psychological issues, feelings of unpreparedness for clinical practice, and limited research from nursing students' perspectives, this introductory chapter lends substantive support for this study.

I conceptualized the phenomenon by examining the various connotations and components of the preparedness concept, and by using Bandura's (1997) self-efficacy theory as a guide. This step was crucial in defining the research questions and informing the interview questions. The three key meanings are identified as procedural ("knowing-how"), conceptual ("knowing-that") and dispositional ("state of being" and "state of mind") capacities. Thus, clinical practice preparedness is the belief in one's capabilities and actual ability, knowledge, and competencies to perform adequately within clinical practice.

The purpose of this research was to explore and describe undergraduate nursing students' perspectives on and experiences with clinical practice preparedness. Moreover, guided by self-efficacy theory (Bandura, 1997), this study aimed to identify what influences students' preparedness for clinical practice by questioning what affects their perceptions of clinical practice preparedness, how they prepare and know they are prepared for clinical practice. Self-efficacy theory (Bandura, 1997) offered a deeper understanding of the phenomenon and thus provided a guiding framework for the study. Finally, the research findings may provide insights for educators to better prepare students for clinical practice and contribute to the literature in this area.

Chapter Two: Literature Review

This review aims to explore the theoretical and empirical literature to examine what is known about the phenomenon in question. This chapter will inform and present the findings of a narrative review, offer a synthesis of the existing nursing literature on clinical practice (CP) preparedness (CPP) for undergraduate nursing students, and provide a summary of the literature from other health professional disciplines.

Reviewing the literature provides the researcher with context and confidence that the issue exists and that further research in the domain is required (Creswell, 2013; Polit & Beck, 2017). Literature reviews also facilitate the interpretation of analyzed data during the research process (Polit & Beck, 2017). Moreover, a narrative review synthesizes published information and offers "objective conclusions based upon the literature reviewed" (Green et al., 2006, p. 103). Green et al.'s (2006) recommendations for performing a narrative review guided the process presented in this chapter. The following steps were followed: preliminary search, pose the question, identify appropriate keywords, identify appropriate databases, complete an initial search, perform a more thorough second search, critically appraise each article that meets inclusion criteria, and conduct a complete examination of the findings in the literature.

In addition, Bandura's (1997) self-efficacy theory was initially used to guide the review questions. Thus, the initial question of "what is known" is now accompanied by "how is the phenomenon presented in the literature," and "what are its sources or influences." Furthermore, self-efficacy theory offered insight and guidance in reviewing the data and helped identify patterns in the literature.

Search Strategy

The preliminary literature search validated the phenomenon's presence in various healthcare professional disciplines and helped identify keywords and any nursing-focused reviews. Furthermore, a librarian helped identify other potential keywords and databases to search. Accordingly, a variation of the following keywords was utilized: *clinical education/training/learning, clinical placement/practicum,*

preparedness/readiness, and student nurse. Next, a comprehensive search of several electronic databases was performed, including *the Cumulative Index to Nursing and Allied Health Literature (CINAHL), MEDLINE (PubMed), Scopus, and the Cochrane Library*. A snowball approach was also utilized by reviewing reference lists from various relevant publications; this approach also contributed to discovering other key words for the comprehensive search of identified databases. The snowball approach was especially helpful given the ill-defined, inconsistent nature of the language surrounding the phenomenon's representation in the literature.

This review includes publications from peer-reviewed research, non-research articles and books. Furthermore, I did not restrict the search date to conduct a more comprehensive literature search. This review includes articles written in English and related information on nursing student preparedness for CP. Published papers from other health or allied health disciplines (e.g., medicine, physiotherapy, dental, social work) were also included. Finally, inclusion criteria included publications pertaining to CPP or that presented findings that informed CPP. Furthermore, publications that reported on the transition to professional practice were excluded.

Finally, Green et al. (2006) suggests using a critical appraisal tool for narrative reviews; thus, the Critical Appraisal Skills Program (CASP) was used as a guide. Using the CASP allowed me to be critical and question the validity, results, and transferability of the information presented in the literature (CASP, 2018).

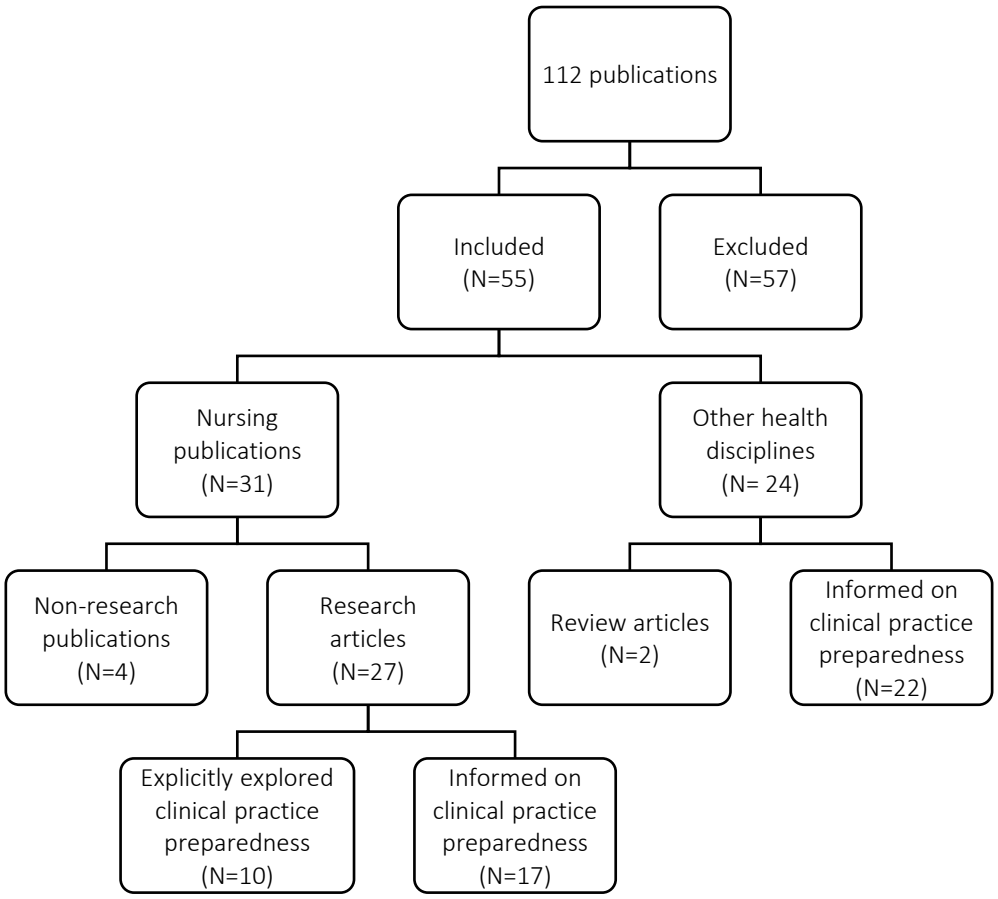
Exploring the Literature

A total of 112 publications (see Figure 5) were initially identified and reviewed based on their title and abstract. While reviewing these publications, several were excluded for not meeting the original inclusion criteria. For example, while the literature suggests a consensus on adequately preparing students for CP, many excluded articles offered statements, assumptions, and conclusions referring to student preparation without contributing to knowledge about the phenomenon (e.g., Compton et al.,

2013). Additionally, terms and concepts were often used inconsistently with various meanings, which resulted in the exclusion of many publications for their focus on preparedness for the transition to professional practice and other similar studies (e.g., Hatzenbuhler & Klein, 2019; Milton-Wildey et al., 2014; Shahsavari et al., 2017; Sharma et al., 2020; Woods et al., 2015).

Figure 5

Review Results



Subsequently, a total of 55 papers met the criteria for this review, including 31 nursing publications and 24 articles from medicine or allied health disciplines. The publication dates ranged from 1987 to 2020. A lack of access to older articles and one journal may have resulted in missed publications. These results included qualitative (N = 16), quantitative (N = 15), mixed-method (N = 18) studies from various disciplines and two reviews from medical journals (Atherley et al., 2019; Blackmore et al., 2014),

as well as four non-research nursing publications (Harvey & Lehman, 2020; Oermann, Shellenbarger, & Gaberson, 2018; Phillips, 2017; Vogelsang & Besse, 2019). In addition, two descriptive articles were included explaining the implementation of preparation tools for nursing students in CP (Harvey & Lehman, 2020; Vogelsang & Besse, 2019), and an article describing the benefits of clinical excursion in preparing students for CP (Phillips, 2017). Finally, one book on clinical nursing education revealed relevant information about the phenomenon (Oermann, Shellenbarger, & Gaberson, 2018).

No nursing-focused reviews synthesized the literature on nursing students' preparedness for CP. The majority of nursing research articles did not explicitly explore nursing student CPP (n = 17; 63%); however, they did include insights regarding the presence and potential influencing factors of CPP within their findings. These studies examined nursing students' anxiety (Alshahrani et al., 2018; Baksi et al., 2017; Chernomas & Shapiro, 2013), stress (Chernomas & Shapiro, 2013), and preparedness characteristics (Banneheke et al., 2017). Also, many of the nursing studies (n = 15; 55%) investigated the effectiveness of pre-clinical activities for preparing students for CP experiences (Aggar & Dawson, 2014; Baksi et al., 2017; Beavers et al., 2020; Briscoe et al., 2017; Curtis, 2007; Dearmon et al., 2013; Donovan & Mullen, 2019; Kelly et al., 2020; Kermode, 1987; McNamara, 2015; Mitchell et al., 2015; O'Connell et al., 2020; Parker & Grech, 2018; Turner & Keeler, 2015; Venkatasalu et al., 2015). Nine nursing-focused studies included in this review explored nursing students' experiences and perceptions of CP experiences (Beavers et al., 2020; Cowen et al., 2016; Cowen et al., 2018; Dale et al., 2013; Dearmon et al., 2013; Joolaee et al., 2015; Leh, 2011; Levett-Jones et al., 2015; Morrell & Ridgway, 2014). Two studies elicited instructors' perceptions (Banneheke et al., 2017; Kirkbakk-Fjaer et al., 2015). Figure 5 illustrates an overview of the review's basic process and findings.

The literature revealed that nursing research was conducted within numerous countries, with Australia as the leader in related nursing research with eight published peer-reviewed research articles (Aggar & Dawson, 2014; Alshahrani et al., 2018; Curtis, 2007; Kelly et al., 2020; Kermode, 1987; Levett-

Jones et al., 2015; Mitchell et al., 2015; Parker & Grech, 2018). The United States of America (USA) had five published research articles (Cowen et al., 2016; Cowen et al., 2018; Dearmon et al., 2013; Leh, 2011; Turner & Keeler, 2015), whereas Canada had three (Beavers & al., 2020; Chernomas & Shapiro, 2013; O'Connell et al., 2020), and the United Kingdom (UK; Morrell & Ridgway, 2014; Venkatasalu et al., 2015), New Zealand (Briscoe et al., 2017; McNamara, 2015), and Norway (Dale et al., 2013; Kirkbakk-Fjaer et al., 2015) each had two. Finally, one research-based article from each of Turkey (Baksi et al., 2017), Malaysia (Banneheke et al., 2017), Israel (Admi et al., 2018), and Iran (Joolaee et al., 2015) were identified. Lastly, the 24 other health professional publications originated from the USA (N=7; medicine, radiology, dietetic, social work, physiotherapy), Canada (N=3; medicine, social work), Australia (N=6; multi-disciplinary, occupational health, physiotherapy, dentistry, paramedicine) and the UK (N=3; medicine, multi-disciplinary), which included another six articles from the Netherlands (N=2; medicine); Germany (N=1; medicine), Israel (N=1; Occupational health), Indonesia (N=1, medicine).

Finally, while exploring the literature, the majority of the research articles focused on other phenomena when information on preparedness for CP was described. Also, of all the research articles, no Canadian study was found that explicitly explored undergraduate nursing students' perspectives on and experiences with CPP. Thus, exploring CPP from the perspective of undergraduate nursing students will add to the notable lack of Canadian research articles on this topic. Also, such a study will ideally provide nursing educators with an understanding of students' needs, informing clinical nursing education and future avenues of exploration.

The Concept

The literature search did not produce explicit evidence that nurse-led publications have conceptualized the phenomenon of CPP for undergraduate nursing students. However, Oermann, Shellenbarger, and Gaberson (2018) dedicated a small section of their book to presenting components of preparing nursing students for CP, and other publications have added to the growing body of knowledge

regarding this phenomenon. Additionally, the concepts of *preparedness* and *practice preparedness* are present in the literature and investigated by various other health sciences disciplines.

Additionally, it became evident that the terms and concepts surrounding the phenomenon were sometimes vaguely or not at all defined. A comprehensive examination of the publications revealed that researchers utilized the same language (e.g., *prepared for clinical practice* and *prepared for practice*) to define two different concepts, which were used by researchers to describe student readiness for professional practice and, at the same time, for clinical education experiences (e.g., Hatzenbuhler & Klein, 2019; Sharma et al., 2020; Woods et al., 2015).

In Chapter 1, I presented and defined the phenomenon of preparedness by identifying three critical constructs within the concept: procedural, conceptual, and dispositional capacities. These three components appear to support Oermann, Shellenbarger, and Gaberson's (2018) stated cognitive, psychomotor, and affective elements for student preparation, a view which is shared by Kermode (1987): "Pre-clinical preparation must be addressed in the affective, cognitive and psychomotor domains" (p. 6). Likewise, Burford and Vance (2014) noted the presence of three similar constructs within their exploration of the concept of preparedness: performance, competence, and confidence.

Theoretical or Conceptual Frameworks Used in Related Studies

Several studies within this review identified using frameworks for their studies. In three studies, Kolb's (1984) Experiential Learning Theory was used as the guiding or underpinning framework (Dearmon et al., 2020; McNamara, 2015; Miller et al., 2017). Kolb's experiential learning theory is a well-known and utilized framework for adult learners. Also, Knowles' (1980) *Adult Learning Theory* was used in one study to guide the evaluation of simulated activities to prepare nursing students for CP (Briscoe et al., 2017). Adult Learning Theory (Knowles, 1980) is based on learners drawing from past experiences to inform their learning practice. According to this theory, adult learners are self-directed and want their current knowledge valued. Additionally, *Constructivist Learning Theory* was utilized for one study that evaluated

students' perceived ability to apply therapeutic communication techniques in a simulated experience (Donovan & Mullen, 2019). The constructivist theory posits that learners need to actively engage new knowledge by connecting it to experiential practice experiences.

Lazarus and Folkman's (1984) *Stress Theory* informed Admi et al.'s (2018) theoretical framework and the development of measurement tools used while exploring undergraduate nursing students' perceived stress and satisfaction related to clinical learning experiences. Further, Bandura's (1997) *Self-efficacy Theory* was noted to have informed the development of a preparedness measurement tool (Fan & Mak, 1998), which Cohen et al. (2014) modified for their study to compare clinical preparedness in USA-born versus non-USA-born students.

In summary, few studies in this review indicated using a theoretical or conceptual framework to guide their study. Also, no study within this review was noted to have used Bandura's Self-efficacy Theory to guide their study.

Measuring the Phenomenon: Instruments and Tools

Within this review, several instruments or modified tools were utilized to examine or measure influential components of CPP, as defined by this thesis. However, none were found that directly measured undergraduate nursing students' preparedness for CP. This subsection provides a brief overview of the instruments and tools utilized within the related reviewed articles, thus informing this study and future CPP researchers.

Instruments Used in Nursing Research

The following instruments and tools were identified by nurse researchers within the articles included in this review. One study sought to understand student perceptions of readiness for practice using the *Fitness for Practice* Survey (unknown origin; Levett-Jones et al., 2015). Anxiety and stress, as concepts associated with CP, were measured using Spielberger's (1986) *State-Trait Anxiety Index* (STAI; Baksi et al., 2017; Dearmon et al., 2020), Lovibond and Lovibond's (1995) *Depression, Anxiety, Stress Scale*

*(*DASS; Chernomas & Shapiro, 2013) and Admi's (1997) *Nursing Student Stress Scale* (Admi et al., 2018). Researchers have also measured student performance with a competency-based assessment tool developed by Fisher and Parolin (2000; Aggar & Dawson, 2014). Donovan and Mullen (2019) utilized a pre-post self-reporting survey developed by Disler et al. (2013) to measure perceived confidence levels, simulation satisfaction, and perceived preparedness for CP following a simulated experience. Dearmon et al. (2013) utilized the *Perceived Stress Scale* (Cohen et al., 1983), a 10-item scale self-reporting tool to measure an individual's level of situational stress. Lastly, the *Characteristics of Student Preparedness for Clinical Learning* (Chipchase et al., 2012), which originated from a Delphi study of allied health students, was utilized by Banneheke et al. (2017).

In summary, no tools were found that measure CPP for nursing students. The presented instruments and tools aided in discovering potential elements of or about CPP for nursing education. However, no tool or instrument identified was specifically designed to measure the phenomenon. Thus, further qualitative research is needed to determine if any instruments might be useful or could be modified to be used for the study of CPP for undergraduate nursing students. Accordingly, further explorations of the phenomenon's potential characteristics and components are needed before a tool could be modified or developed.

Instruments Used in Other Health Disciplines

The following instruments and tools were identified by researchers from other health disciplines within the articles of this review. Cohen et al. (2014) modified and utilized *the Self-efficacy Survey* (Fan & Mak, 1998) to measure perceptions of clinical education preparedness comparing USA-born and non-USA-born radiation sciences students. Farahat et al. (2015) developed the *Perceived Readiness for Dietetic Practice* instrument to evaluate the effects of *Objective Structured Clinical Examination* (OSCE) on perceived readiness for CP with nutrition and dietetic students. Finally, Tal-Saban and Weintraub (2019) used the *Student Self-Competency and Readiness for Fieldwork questionnaire* (SCARF; Tal-Saban &

Weintraub, 2012) to assess the effectiveness of a student tutoring program for enhancing readiness for CP.

The following studies related to medical student preparedness informs on several more tools. Bosch et al. (2017) used multiple scales to evaluate medical students' preparedness for clinical practice and explored factors influencing preparedness and stress (i.e., clerkships). They used Schwarzer and Jerusalem's (1995) *Self-Efficacy Scale*, Cohen and Williamson's (1988) 10-item *Perceived Stress Scale* (PSS-10), and Knoll et al.'s (2005) *Support Coping Scale.* Also, the *Preparedness for Hospital* (Hill et al., 1998) questionnaire designed to explore perceptions and preparedness of medical students transition to CP was modified and used by Hickson et al. (2015) for paramedicine students. This questionnaire uses a 6-point Likert scale and contains 41 items, including the following subscales: interpersonal skills, confidence, collaboration, management, science, prevention, holistic care, and self-directed learning. Finally, Parsell and Bligh's (1999) 19-item *Multi-professional Shared Learning Scale* questionnaire evolved from a questionnaire study of undergraduate health professional students (N = 120) using a principal components analysis. The three-factor scale (i.e., teamwork and collaboration, professional identity, roles and responsibilities) was designed to evaluate students' readiness for interprofessional learning.

In summary, some similarities between nursing research and other health professional research are noted in measured characteristics, such as stress and confidence. Also, while some of the instruments and tools provide insight into the characteristics and attributes believed to measure preparedness, there continues to be a lack of evidence to support any indicators of CPP. Therefore, further qualitative research is needed to support the use or development of a clinical preparedness instrument.

Non-Research Academic Publications

The literature search process revealed four non-research publications that were relevant to this thesis study. First, Oermann, Shellenbarger, and Gaberson (2018) published a book for clinical nurse educators aiming to support them in maximizing nursing students' clinical learning. The second publication is an article (Phillips, 2017) that recounts the experience of one school of nursing using early

exposure to clinical sites. The final two articles describe tools developed by educators to guide students in their preparations for clinical practice (Harvey & Lehman, 2020; Vogelsang & Besse, 2019).

According to Oermann, Shellenbarger, and Gaberson (2018), "students need cognitive, psychomotor, and affective preparation for clinical learning activities" (p. 64). First, cognitive preparation means the students prepare for their clinical experience by completing pre-clinical learning activities, such as patient research. The student is expected to gather patient information and prepare for the learning activities during the clinical day. Second, psychomotor preparations ensure students have adequate time to practice skills within simulations or laboratories prior to CP. Third, affective preparation includes addressing students' concerns and anxieties prior to the clinical experience or day, helping the students identify the cause of the anxiety, and helping them problem-solve their insecurities with CP. Finally, Oermann, Shellenbarger, and Gaberson (2018) also note the importance of the agency-based orientation and the orientation with the instructor on the first clinical day to clarify the student's role and expectations for the clinical course.

Phillips (2017) describes implementing an excursion activity to decrease anxiety and prepare students for the anticipated CP experience. Excursions consisted of bringing the students (in uniform) to the clinical site to introduce them to the staff, environment, type of patients, and care they could anticipate providing during their CP experience. Anecdotal evidence suggests that students have increased confidence and perceived preparation since these clinical excursions have been implemented within their nursing clinical education program (Phillips, 2017).

Two papers describe preparation tools for clinical instructors and nursing students for CP. Harvey and Lehman (2020) created the Clinical Preparation Tool (CPrT), which enabled "students to address theoretical gaps in their knowledge, anticipate potential priorities of care, and develop a plan for implementing and evaluating" (p. 301). The CPrT is used to identify what the student needs to prepare for prior to the clinical day. The document consists of a list of checkboxes within several categories. The

categories indicate common and relevant information to review for patients admitted to the specific clinical unit. For example, the categories for an acute surgical unit would likely include postoperative day elements, admitting diagnosis, common procedures, common comorbidities, and post-operative nursing considerations and interventions. Similarly, Vogelsang and Besse (2019) proposed the PREP Framework for nurse educators to "optimize student preparation in clinical nursing education" (p. 86) by identifying students' learning needs. The mnemonic reads as follows: *Purpose* (clear instructions, expectations, and rationale for assignments and preparation); *Realistic* (expectations for data collection; purposeful direction and specific intent, avoiding details, and focusing on relevant interpretations, fluctuations and trends of the data, as opposed to focusing on copying down all the details); *Evaluation* (evaluate the student's preparation, their ability to provide safe care); *Performance* (the student's ability to act upon their preparation – praxis; the student's preparation works to guide their practice throughout the clinical day). Vogelsang and Besse also prioritized cognitive and affective preparation through activities that increase familiarity with anticipatory activities. However, studies to support and evaluate such activities are necessary.

Synthesis of Nursing Research Literature

Table 1 presents the nursing-focused, peer-reviewed research articles included in this review (N = 27). The table contains notes on the study design, instruments or tools used, the publication's focus, and a brief description of the relevant findings within each article. The researcher noted patterns and recurring themes related to student preparedness for CP within published research articles during the initial review process. Upon further scrutiny, the themes reflected elements within the definition of the phenomenon described in Chapter 1 of this paper. Thus, the three emergent themes were categorized as dispositional ("state-of-being" and "state-of-mind"), conceptual ("knowing-that"), and procedural ("knowing-how") influences.

Table 1

Summary of Nursing Research Articles Reviewed on Clinical Practice (CP) Preparedness for Undergraduate Nursing Students (N = 27)

Articles	Country	Design/ Method/N	Data collection tool or method	Objective/focus of the paper	Key findings related to clinical practice preparedness
Admi et al. (2018).	Israel	Cross-sectional (N = 892)	*Nursing Student Stress Scale* (NSSS; Admi, 1997); *Nursing Students' Professional Satisfaction* (NSPS)	Student stress and satisfaction in clinical practice	• Second-year students report feeling stress when unprepared for clinical practice related to knowledge and skills performance.
Aggar & Dawson (2014).	Australia	Cross-sectional Exploratory study (N = 88)	Competency-based assessment tool (Fisher & Parolin, 2000) **	Student perception of preparedness for oral medication; simulation-based and in-clinical environments	• No statistically significant difference in nursing students' perception of preparedness for medication administration in simulation-based practice and assessment, compared to within the clinical environment.
Alshahrani et al. (2018).	Australia	Mixed-Methods (N = 58)	Questionnaire* (13 items, including one open-ended question)	Identify factors and strategies for positive clinical practice experiences in 1st year nursing students.	• Students reported high anxiety about making critical mistakes (n=42; 74%), first contact and interactions with patients (n=42; 73%), and some feared not following set expectations (n=17; 30%). • Students (n=43; 74%) also identified the need to prepare and organize for CP placements.
Baksi et al. (2017).	Turkey	RCT; Pre/post-test (n = 35); Control group (n = 39)	*State-Trait Anxiety Index* (STAI; Spielberger, 1986)	Effectiveness of decreasing anxiety for first-year nursing students with a preparatory clinical education	• Post-test demonstrated a statistically significant ($p < 0.05$) decrease in anxiety for the intervention group.
Banneheke et al. (2017).	Malaysia	Cross-sectional Descriptive (N = 173)	Characteristics of student preparedness for clinical learning (Chipchase et al., 2012)	Clinical instructors' perception of characteristics for preparedness for clinical learning of health professional students.	• Nursing instructors (n = 34; 20%) rate student preparedness characteristics as "very important" for professionalism, willingness, communication and interaction and personal attributes, professional and interpersonal skills, knowledge and understanding.

Beavers et al. (2020).	Canada	Qualitative description (N = 63; medicine n = 7; nursing n = 32; and other allied health n = 24)	Focus group with semi-structured interviews	Student perceptions of clinical learning preparedness following a hospital orientation.	• Key requirements for hospital orientations were identified: timely submission of pre-requisites, acquisition of essential materials, knowledge of safety procedures, familiarity with the physical environment, familiarity with staff, identification of safe persons, identification of roles (learner and other personnel), discussion and attainment of specific learning objectives, support, and opportunity for skill development.
Briscoe et al. (2017).	New Zealand	Qualitative Descriptive (N = 10)	Semi-structured interview	Evaluating the effectiveness of simulations for preparing student nurses for clinical practice	• Nursing students indicate that simulations provide valuable experiences enabling them to practice and encounter challenging situations prior to clinical practice situations. In addition, participants spoke about improving their interactions with patients and families.
Chernomas & Shapiro (2013).	Canada	Mixed methods Cross-sectional Descriptive (N = 437)	*Depression, Anxiety Stress Scale* (DASS; Lovibond & Lovibond, 1995); Open-ended questions	Investigate the prevalence of stress, anxiety and depression on nursing students, associated factors, and quality of life	• Students feel unprepared for clinical practice. • Students associated some of their anxieties and stress with CP preparations. • Students associate increased stress with pre-clinical preparation activities before the clinical practice.
Cowen et al. (2016).	USA	Mixed methods (N = 96)	Survey with two open-ended questions*	Exploring fears and concerns of first-year nursing students.	• Nursing students felt unprepared and lacked confidence regarding making mistakes and causing harm, lack of course success, lack of practical knowledge, fear of interactions with patients and families, and confidence in physical assessment skills.
Cowen et al. (2018).	USA	Qualitative Descriptive (N = pre-survey; N = 73 post-survey)	Survey (9-item) with three open-ended questions and descriptive statistics*	Examine nursing student expectations, anticipated time for clinical day preparations, and learning styles.	• Prior to the clinical course, nursing students anticipated dedicating on average up to 7.4 hrs for pre-clinical preparation/ week, which was higher than the actual hours of preparation (average of 3.2 hrs/week).

Curtis (2007).	Australia	Mixed methods (N =1741 post-workshop; n = 140 – 160 per workshop; N = 267 post clinical; N = 10 postgraduate)	Questionnaire (4-point Likert scale) with general comments section*; Questionnaire (5-point Likert scale) to alumni*	The effectiveness of pre-clinical workshops for a mental health clinical course using problem-based learning and role-playing.	• A two-day problem-based approach pre-clinical workshop (simulation scenarios, standardized patients, role-playing, and debriefing sessions) prepares nursing students by increasing confidence before a mental health placement. • Immediately after workshops, students described the value of increased knowledge and confidence. • After the clinical course, participants noted the usefulness of the intensive workshop for CP. • Graduates reported that the workshops were relevant and educational.
Dale et al. (2013).	Norway	Qualitative (N = 7)	Focus group with semi-structured interviews*	Nursing students' perception of what makes a good learning experience in clinical courses.	• Nursing students identified that being prepared (i.e., readiness to learn, competences and confidence) is a factor in perception of the clinical learning experience. • Nursing students identified the need to take responsibility for their preparedness and willingness to learn in CP.
Dearmon et al. (2013).	USA	Mixed-Method Quasi-experimental (N = 50)	Pre-questionnaire: *Perceived Stress Scale* (PSS; Cohen et al., 1983) Pre-post questionnaires: *Knowledge Assessment**; *Self-Confidence Assessment** *STAI* (Spielberger, 1986); Post-Focus group	Effect of a simulation-based orientation for nursing foundation clinical course on knowledge acquisition, anxiety, self-confidence, and student satisfaction in BSN students preparing to begin their first clinical experience	• Students' *Perceived Stress* scores done pre-simulation were significantly higher than average population scores ($p < 0.0001$). • Post simulation-based orientation: K*nowledge assessment* scores improved in 54% (n= 27) of participants. • The *STAI-Trait* scores: lower anxiety scores for participants with previous healthcare experience; decreased post- simulated experience. • The *Self-Confidence Assessment:* skills confidence increased post-orientation; no increased confidence in ability to find information in medical record. • Focus group: More positive attitudes and improved self-confidence post-simulation-based orientation.
Donovan & Mullen (2019).	USA	Quantitative (N = 116)	Pre- and post-simulation survey (Self-reported	Assess the effectiveness of learned therapeutic communication techniques in	• Nursing students' self-assessment for confidence increased from a mean of 4.54 (on a scale of 0-10; from no to very confident) prior to the simulation

			simulation survey; Disler et al., 2013)	a simulated setting with standardized patients.	to a mean of 7.06 after the simulation, demonstrating a positive increase in self-reported confidence. • Nursing students rated a mean of 7.78 (scale of 10), indicating that the simulated experience assisted in preparing them for clinical practice.
Joolaee et al. (2015).	Iran	Qualitative (N = 17)	Semi-structured interview*	Iranian nursing students' preparedness for clinical practice.	• Nursing students feel unprepared for clinical practice as they express their fears and anxieties about failure, apathy, intellectual immaturity, the clinical environment, the unknown, making mistakes, self-confidence, and a lack of competencies.
Kelly et al. (2020).	Australia	Mixed methods (Control group n = 108; Intervention group n = 99)	Block randomization and surveys; Focus groups	Effectiveness of classroom-based *Depth of Field: Exploring Ageing* resource in preparing nursing students for clinical practice placement.	• In their first clinical placement, nursing students felt emotionally unprepared to communicate with older adults in care despite participating in the *Dept of Field: Exploring Ageing (DOF)* resource. • Participants found the DOF was not helpful, while others noted it helped prepare them for aspects of delivering physical care to older adults.
Kermode (1987).	Australia	Quantitative Retrospective (N = 97)	Questionnaire * 5-point Likert scale	Undergraduate nursing students' perceptions of their preparation for clinical practice.	• One week of pre-clinical activities consisting of clinical skills assessments/evaluations, nursing knowledge evaluations, establishing personal learning objectives, and a pre-clinical workshop (i.e., introduction to roles, learning activities, performance evaluation during the clinical experience). • A questionnaire demonstrates an increase between pre-clinical preparations and students' perceived preparedness for clinical practice.
Kirkbakk-Fjaer et al. (2015).	Norway	Qualitative Descriptive (N = 15)	Focus group interviews *	Psychiatric RN preceptors/instructors' expectations for a prepared student	• Preceptors in psychiatric placements perceived nursing students' clinical practice preparedness through their self-management ability, understanding of illness, interaction, communication, relationship building, reflecting on practice, and student attitude.

Leh (2011).	USA	Qualitative Exploratory descriptive (N = 42)	Focus group interviews* Semi-structured questions	Exploring nursing students' preconceptions of the community health practicum	• Nursing students entering a community health practicum felt insecure and unprepared for the clinical setting and experiences. • Students reported concerns over the *unknown* and an inability to prepare for the clinical experience. Also, indicating the effect of not knowing and the clinical uncertainties surrounding confidence levels.
Levett-Jones et al. (2015).	Australia	Mixed method (N = 144)	Fitness for Practice survey, 22-item *(source unspecified)*	Exploring the student's perception of their readiness for their first clinical practice experience	• Students feel unprepared for practice related to knowledge deficit, worry about theory recall and ability to apply knowledge, lack confidence, and perceive inadequate clinical skills. • Students feel nervous, anxious, and worried due to fear of failure, the unknown, patient safety, making mistakes, working outside their scope of practice, bullying and belonging, and fears of not feeling welcomed and bullied by nursing staff. • External factors: location of the placement and associated costs; work schedule and conflicts with placement schedule.
McNamara (2015).	New Zealand	Qualitative Description (N = 158)	Questionnaire *(source unspecified)*	Nursing students' perception of new simulation program in preparing them for clinical practice	• A 4-day newly developed simulation program to prepare students for clinical practice. • Students see the value of pre-clinical simulation, with the majority strongly agreeing with its value in preparing students for clinical practice. • Students gained clinical and practical knowledge and skills.
Mitchell et al. (2015).	Australia	Mixed method (N = 691)	Survey (Mitchell et al., 2013) **; Focus groups (students); Interviews (lecturer)	Effectiveness of Best Practice Guidelines (BPG) Objective Structured Clinical Examination (OSCE)	• Focus groups indicated that students (n = 91) felt more confident in their practical abilities following Objective Structured Clinical Examinations (OSCE). • Students felt their engagement in the OSCE prepared them for clinical practice.
Morrell & Ridgway (2014).	UK	Qualitative (N = 8)	Diary entries	Nursing students' perceptions of preparedness for final practicum	• Factors that support or hinder preparation for final practicum: expectations too high, mentorship, lack of knowledge, lack of support, stress due to challenges in balancing course work, clinical expectations, and work-life.

					• Simulated practice is beneficial to student learning and feeling prepared.
O'Connell et al. (2020).	Canada	Quantitative (N = 215)	Survey*	Identifying the value of an alternative intensive theory course for preparing students for managing care for older adults.	• A significant increase in participants (Phase 1, n = 116; Phase 2, n = 99) feeling better prepared for managing responsive behaviours in older adults ($p < .001$), after completing an intensive theory course prior to CP. • A positive correlation ($p < .01$; $p < .001$) was noted between feelings of distress and unpreparedness. • Students who felt prepared reported lower levels of distress.
Parker & Grech (2018).	Australia	Mixed-Methods (N = 186)	Questionnaires** *Standard course evaluation tool with two added questions about experiences.*	Reviewing that hospital-based simulation effectively prepares the student for clinical practice.	• Undergraduate nursing students (n = 111) described their practice-based learning experiences regarding support, authenticity, and resources. • Clinicians (n = 85) reported their satisfaction with nursing students' preparedness for clinical placement post-simulation.
Turner & Keeler (2015).	USA	Qualitative Descriptive (N=296)	Survey*; 23-point Likert scale and one open question	Exploring the value of pre-clinical patient research prior to the clinical practice day.	• Students (n = 111; 37%) reported increased preparedness with pre-clinical preparatory activities. • Participants also reported high levels of stress and sleeplessness.
Venkatasalu et al. (2015).	UK	Qualitative (N = 12)	Semi-structured interviews*	Effectiveness of a high-fidelity simulation-based experience versus classroom-based end-of-life care to prepare first-year nursing students for CP.	• High-fidelity simulation helped prepare first-year nursing students to care for dying clients. • Effectively mentally and emotionally preparing students for clinical eventualities.

Note. *Researcher developed. ** Original tool modified/adapted.

Dispositional Influences

The term *dispositional* refers to a person's physiological and psychological state. In this context, dispositional influences related to preparedness are elements that impact a person's "state of being" and "state of mind." The themes identified within the dispositional influences category included stress, anxiety and confidence, emotional readiness and maturity, willingness, support, and physical and financial strain.

Stress, Anxiety, and Confidence

Several nursing studies have reported that stress (Admi et al., 2018; Turner & Keeler, 2015), anxiety (Alshahrani et al., 2018; Baksi et al., 2017; Joolaee et al., 2015; Levett-Jones et al., 2015), depression and confidence (Chernomas & Shapiro, 2013), as well as fear (Alshahrani et al., 2018; Cowen et al., 2016) are associated with feelings of unpreparedness for CP. These studies include only one Canadian study (Chernomas & Shapiro, 2013), and none explicitly explore stress and anxiety related to CPP.

In a mixed-method study, Chernomas and Shapiro (2013) investigated the prevalence of stress, anxiety, and depression in undergraduate nursing students enrolled in a mid-western Canadian university (N = 437). The participants frequently reported feeling unprepared and stressed (Chernomas & Shapiro, 2013). Additionally, pre-clinical preparation (i.e., patient research the night before the clinical day) was associated with increased feelings of stress (Chernomas & Shapiro, 2013). Similarly, Turner and Keeler's (2015) study (N = 298) on pre-clinical preparatory activities found that nursing students reported higher stress (n = 198; 71%) in reaction to pre-clinical preparations with lower perceived preparedness (p = .015), lower perceived ability to provide safe care (p = .002), and increased sleeplessness (n = 215; 76%; p = .002). Furthermore, several researchers have also found that stress and anxiety are associated with feelings of preparedness for CP (Joolaee et al., 2015; Levett-Jones et al., 2015; Cowen et al., 2016).In a qualitative study of Iranian nursing students, Joolaee et al. (2015) found that fear and anxiety were

associated with the unknown clinical environment, unknown scope and nature of the profession, abrupt exposure to a new professional and environmental culture, making mistakes, and low self-confidence. Similarly, in a qualitative study exploring the concerns of Australian nursing students (N = 144) prior to their initial clinical placement, Levett-Jones et al. (2015) found that students felt nervous, anxious, and worried about failure, the unknown, patient safety, making mistakes, working outside their scope of practice, and being bullied. In addition, the participants of Levett-Jone et al.'s (2015) study also identified a lack of confidence in their clinical skills and abilities.

Similar to these previous studies, Admi et al.'s (2018) study of stress in CP noted that nursing students (N = 339) identified having significant stress (p <.001) associated with feeling unprepared regarding knowledge and skills performance, insufficient resources, and close supervision in the clinical setting. Similarly, Alshahrani et al. (2018) also reported the influence of preparedness on student anxiety. For example, first-year nursing students (N = 58) were anxious about making critical mistakes (n = 44; 77%), their first contact and interactions with patients (n = 42; 74%), being assessed by a clinician (n = 24; 42%), and not following instructions (n = 17; 30%). Also, students (n = 43; 74%) answered an open-ended question and identified the need for "being positive, prepared, and organized for the first clinical placement" (p. 106), as well as being supported and asking questions.

Lastly, Cowen et al.'s (2016) mixed-method study described student nurses' fears and concerns about their clinical placement. The participants (N = 96) reported feeling unprepared, lacking confidence in their ability to complete skills, being afraid of making mistakes and causing harm, lacking knowledge, interactions with patients and families, and fear of failing the clinical course.

Emotional Readiness and Maturity

Evidence suggests that emotional readiness and maturity affect CPP (Joolaee et al., 2015; Kelly et al., 2020; Kirkbakk-Fjaer et al., 2015). However, none of the following studies provide insight into the Canadian context, nor do they explicitly explore perceived nursing students' CPP.

Joolaee et al.'s (2015) qualitative Iranian study on preparedness for CP found that student (N = 17) maturity (i.e. the capacity to respond to situations or emotions) was an important factor in feelings of preparedness, noting that participants lacked intellectual and social maturity (Joolaee et al., 2015). In an Australian mixed methods study exploring students' preparedness to care for older people, Kelly et al. (2020) identified that nursing students (N = 226) felt emotionally unprepared to care for older, dependent adults despite participating in a pre-clinical preparation session based on the realities of an older person. Participants noted that their skills courses prepared them for the physical tasks needed to care for the older population; however, they felt unprepared for the emotional aspect of care (Kelly et al., 2020). In Kirkbakk-Fjaer et al.'s (2015) study of preceptors in psychiatric settings, while students were expected to be emotionally prepared for CP, participants (N = 15) noted that immature students were emotionally unprepared. Accordingly, instructors assumed unprepared students were more likely to be emotionally triggered. In addition, participants reported that emotionally unprepared students were anxious, insecure, and dreaded interactions (Kirkbakk-Fjaer et al., 2015). However, their study did not provide insight from the nursing students' perspective regarding CPP for a psychiatric placement.

These findings indicate a potential component of psychological and emotional preparedness for CP. Thus, it also demonstrates a need to further explore the psycho-affective preparedness of nursing students as they enter into new CP placements.

Willingness

Three studies provide evidence that students' willingness is a factor in CPP (Banneheke et al., 2017; Dale et al., 2013; Kirkbakk-Fjaer et al., 2015). Based on a focus group interview, student participants (N = 8) in Dale et al.'s (2013) Norwegian study noted the need to take responsibility for their preparedness and willingness to learn in CP. Similarly, preceptors in Banneheke et al.'s (2017) and Kirkbakk-Fjaer et al.'s (2015) studies expected students to be willing to participate and actively engage in clinical learning and experiences.

These studies provide insight into nursing students' attitudes and clinicians' expectations of nursing students' engagement as a characteristic of preparedness within the clinical setting. These studies provided some perspective on CPP and offered insight into the potential avenues of inquiry for further explorations (i.e., student perception of attitude and engagement for CPP).

Supports

One qualitative UK study on student perceptions of preparedness for final placements found compelling evidence that *support*, such as mentorship, positively impacts students' sense of preparedness (Morrell & Ridgeway, 2014). Participants indicated the need for positive support during the clinical placement, often feeling alone and stressed without adequate mentorship. Their mentors shaped their experiences, and with positive support, they felt an increased sense of confidence in their skills and achievements, thus giving them more independence (Morrel & Ridgeway, 2014). Nursing students' clinical placements prior to final placement was not explored.

Physical and Financial Strain

Levett-Jones et al.'s (2015) Australian study (N = 144) found that certain external factors influenced student preparation (n = 17; 12%). These stressors were noted as "practicalities" and "pragmatic issues" for the participants. For example, the clinical site location, associated costs, and conflicting work schedules were substantial stressors for nursing students and impacted perceptions of preparedness for CP. No other nursing studies in this review investigated or found that physical or financial factors impact clinical placement preparedness. However, several studies from other health and allied health studies further inform such dispositional influences and are examined later in the chapter.

In summary, the literatures suggest that dispositional influences such as stress and anxiety, confidence, emotional readiness and maturity, willingness, support, and physical and financial strain impact nursing students' clinical placements. One Canadian study provided information on stress, anxiety, and depression. Few studies questioned preparedness influences, with only one study providing insight into potential physical and financial factors. Evidence suggests the presence of dispositional influences within nursing student CPP, despite the lack studies that provide an in-depth exploration on such influences.

Conceptual Influences

Conceptual influences refer to the cognitive and metacognitive nature of being prepared, which means the competencies and knowledge ("knowing-that") needed for CP. Competencies and knowledge were noted themes within the conceptual influences category. Competencies and knowledge related to preparedness for communication and interactions within CP were also noted as important by nursing students and instructors.

Communication and interaction expectations, and abilities related to nursing student preparedness for CP were noted in four studies (Banneheke et al., 2017; Curtis, 2007; Kelly et al., 2020; Kirkbakk-Fjaer et al., 2015). Kirkbakk-Fjaer et al. (2015) highlighted the psychiatric preceptors' expectation for students to be willing to engage and communicate with patients struggling with mental health issues. Similarly, preceptors in Banneheke et al.'s (2017) study placed high importance on students' abilities to communicate in practice. Kirkbakk-Fjaer et al.'s (2015) and Banneheke et al.'s (2017) studies did not explore the student's perspective of preparedness characteristics.

Furthermore, Kelly et al. (2020) found that students in their first CP felt unprepared for challenging communications with older dependent adults despite participating in an in-class pre-clinical preparation session. Conversely, Curtis (2007) reported increased confidence and feelings of preparedness following a two-day workshop that utilized standardized patients for experiential

experiences in therapeutic communications, focusing on mental health scenarios and conditions. The results of Kelly et al.'s (2020) and Curtis's (2007) studies may differ due to the participants' level of experience (viz., year in the program and number of CP experiences). These last four studies also emphasized that confidence, knowledge, and experiential experiences are associated with student communication abilities. Also, these last studies suggest that communication is an important competency prior to clinical practice; learning to communicate and interact within the CP environment.

Furthermore, three studies briefly identified competencies and knowledge as important factors in nursing student CPP (Kirkbakk-Fjaer & al., 2015; Levett-Jone & al., 2015; Morrell & Ridgeway, 2014). In Kirkbakk-Fjaer et al.'s (2015) study, psychiatric clinical instructors expected nursing students to have a basic understanding of the psychiatric diagnosis and the ability to use knowledge in practice (Kirkbakk-Fjaer et al., 2015). Levett-Jones et al.'s (2015) study found that nursing students felt unprepared for practice because of a lack of knowledge and confidence in their ability to use knowledge in practice. In Morrell and Ridgeway's (2014) study, final clinical placement students reported stress and frustration regarding staff expectations for student competencies and knowledge that were too high. These three studies provide evidence that knowledge and confidence in students' abilities to use knowledge in practice may impact perceived CPP. However, clinicians' and nursing students' perceptions of ability and expectations in using knowledge in practice differ.

Procedural Influences

Procedural influences refer to factors affecting the student's ability to perform or *knowing how* (i.e., practical knowledge) in the CP setting. The themes identified within the literature regarding procedural influences include pre-clinical education and simulation, learning experiences, and preparatory activities.

Pre-Clinical Educational Activities

Two studies explored formal pre-clinical educational programs designed to prepare students for CP. Baksi et al.'s (2017) Turkish RCT study used randomization to assign 67 nursing students to either the intervention group (n= 35) or the control group (n = 39). The intervention group participated in a three-session Clinic Preparatory Education Program, which focused on anxiety, interpersonal relationships, and problem-solving skills, and included an actual introduction to the clinic. Pre and post-test findings revealed a significant decrease ($p < 0.05$) in the intervention group's anxiety scores, while the control group results remained unchanged. The second study focusing on preclinical education was conducted by Kermode (1987); they described the *Pre-Clinical Week* (i.e., focusing on skills, knowledge, roles, objectives, and expectations) for undergraduate nursing students (N = 97). The results of a survey following a recent practicum suggested that pre-clinical week increased perceived preparedness in four areas: clinical skills (r = .35, p <.001), communication and interaction skills (r = .59, p <.001), nursing knowledge (r = .53, p <.001), and clinical judgements skills (r = .55, p <.001). These studies present evidence that educational strategies are beneficial to student CPP.

Timing of Practical Education. In a recent Canadian study, O'Connell et al. (2020) reported that students who completed a restructured curriculum, in which the clinical course started after the adjacent theory course was completed, felt better prepared to manage responsive behaviours with older adults in the clinical setting. In addition, Mitchell's (2015) focus groups revealed that nursing students felt more prepared and confident for CP following the completion of an *Objective Structured Clinical Examination* (OSCE). These studies suggest that the students' success within associated formal education courses impacted their perceived CPP.

Pre-Clinical Simulated Activities

Several studies reported that simulations contribute to nursing student's preparedness for CP by increasing knowledge (Parker & Grech, 2018; McNamara, 2015), confidence (Dearmon et al., 2013;

Donovan & Mullen, 2019; Morrell & Ridgeway, 2014), and interactions or communication (Briscoe et al., 2017; Curtis, 2007; Venkatasalu et al., 2015). For example, in a study of undergraduate nursing students (N = 186), Parker and Grech (2018) found that the use of *Simulated Hospital and Health Services* (SHHS) effectively prepared the students for CP by increasing their knowledge. The study also revealed that clinicians (N = 85) believed nursing students were adequately or well prepared for CP (86%) following the SHHS mainly associated with professionalism (n = 67; 79%), conduct and ethical behaviour (n = 69; 81%) and communication (n = 53; 64%).

While Dearmon et al. (2013) found that a simulation-based orientation session decreased anxiety and increased confidence for nursing students (N= 50) preparing for their first clinical experiences, Morrell and Ridgeway (2014) reported that students expressed increased confidence and preparedness for final CP following simulated practice sessions. McNamara (2015) reported on the outcome of a four-day practical workshop consisting of simulated activities focused on introducing first-year nursing students to the clinical process, from admission to discharge, such as basic care, documentation, care plans, etc. McNamara (2015) reported that all participants (N = 158) agreed that the simulated activities within the workshop should continue, while the vast majority of the participants (n = 152) agreed or strongly agreed that because of the clinical workshop's simulated activities, they gained clinical knowledge.

One study used simulated experiences with standardized patients to teach nursing students how to apply therapeutic communication techniques. It noted a significant increase in confidence ($p < .001$) from a score of 4.54 on pre-experience to 7.06 out of 10 post-experiences (Donovan & Mullen, 2019). Results also demonstrated that student participants found the simulation experience significantly assisted them in preparations for CP experiences, with mean scores of 7.78 on 10 (n = 116; Donovan & Mullen, 2019). Similarly, Curtis' (2007) study consisted of a two-day workshop in which scenarios (i.e., with a focus on interviewing and assessing various mental health conditions) were presented to nursing students

using standardized patients. In Curtis's (2007) study, participants reported increased confidence and enthusiasm for clinical placements following the workshop. As previously mentioned, Dearmon et al. (2013) and Donovan and Mullen (2019) also reported similar findings. Likewise, in a qualitative descriptive study (N = 10), Briscoe and colleagues' (2017) reported that nursing students found simulations valuable in preparation for CP by improving their interactions with patients and families. Similarly, Venkatasalu and colleagues (2015) found that simulations prepared students to care for dying patients compared to only participating in classroom-based seminars.

One study did not find significant added value to simulation experiences (Aggar & Dawson, 2014). In Aggar and Dawson's (2014) study (N = 88), two groups received similar instructions before practical application, including a 2-hour lecture and 3-hour laboratory practice. In addition, one group (n = 48) participated in simulated activities for medication administration, while the other group (n = 40) administered medication on the unit to actual clients. Differences in perceived preparedness scores, as measured by an adapted version of Fisher and Parolin's (2001) competency-based assessment tool between the two groups were nonsignificant. However, the authors maintain that simulated environments improve perceived preparedness and help the students improve time management, post-medication situations, and safety components, which are less feasible in the clinical setting.

These several studies provided evidence that simulation activities before CP may influence nursing students' perceived preparedness for CP as they increase their knowledge, confidence, communication, and interaction. Studies on virtual simulations and their role in CPP were not found in the studies included in this review.

Pre-Clinical Student Preparation Activities

Three studies reported on pre-clinical student preparation activities that influence CPP (Beavers et al., 2020; Cowen et al., 2018; Turner & Keeler, 2015). In a recent Canadian study, Beavers et al. (2020) explored healthcare discipline students' (n = 63; undergraduate nursing students', n= 32, 51%; medical

students', n= 7, 11 %; and other health disciplines', n= 24, 38%) perceptions of preparedness following hospital-based orientations. Focus group participants identified critical components of hospital orientations that enhanced their clinical preparedness. These components included knowledge of safety procedures, physical layout and resources on the unit, introductions to the healthcare team, safe resource persons, roles, and learning objectives; Beavers et al., 2020).

Using a quantitative approach, Turner and Keeler (2015) explored the use of *PreLab* (i.e., a term used to describe the range of activities students engage in to prepare for CP) in a sample of nursing students (N = 541; all levels of the program). Survey results supported PreLab preparation's perceived value in-providing safer patient care, increasing critical thinking skills, documenting, and collecting relevant information, developing and implementing a care plan, and participating in post-conference discussions. However, as described in the stress and anxiety section, most participants reported that PreLab-type activities also contributed to increased stress and anxiety (71%) and reduced sleep the night before the clinical day (76%). Notably, despite the increased stress and sleeplessness, students who participated in PreLab the day prior to clinical practice reported increased preparedness compared to students who did not do PreLab or did PreLab the morning of the clinical day (Turner & Keeler, 2015). As reported in a previous section, stress, anxiety, and sleeplessness associated with CP was also evidenced in Chernomas and Shapiro's (2013) study. Conversely, one qualitative study (N = 42) found that many nursing students felt insecure and unprepared for a community health clinical, noting the absence of pre-clinical activities such as patient research the night before their CP day (Leh, 2011). Time to prepare for CP experiences was similarly reported in Cowen et al.'s (2018) descriptive study examining nursing student expectations for CP. They reported that participants (N = 96) anticipated dedicating 7.4 hours a week to prepare for CP. However, in a follow-up survey, participants (n = 73) reported an average of only 3.2 hours of actual preparation per week.

These last studies provide insight into the role that pre-clinical preparatory activities have on nursing student's perception related to being prepared for CP. These studies appear to commonly suggest that preparatory activities provide them with important information on what to anticipate knowing and doing within CP (viz., ready for the use of theoretical and practical knowledge in CP), however not without the concern that the associated stress and sleeplessness can be detrimental.

Findings from Other Health Disciplines

The literature findings within other health disciplines saw the emergence of the same three categories: dispositional, conceptual, and procedural influences. These findings are not unlike what was reported in a scoping review by Atherley et al. (2019). A synopsis of the literature on CPP within other health disciplines is presented in Table 2.

Atherley et al.'s (2019) scoping review of medical students' transition to clinical learning reported similar findings to the above synthesis on preparedness for nursing students' practice. As such, stress, anxiety, feeling a lack of knowledge and skills, feeling unprepared, feeling overwhelmed with clinical demands, not meeting expectations, and unfamiliar settings were identified. As well, similar to the nursing literature, Atherley et al. noted that implementing pre-clinical skills activities or courses increased perceived preparedness, confidence, and motivation, and reduced anxiety. Additionally, Atherley et al. found peer support, mentorship, and interactions within the CP environment as factors that facilitated the transition to the clinical setting. Finally, students' personal development, including self-directed learning and reflective practice, was also valued in CPP.

Table 2

Summary of Other Health Professional Articles Reviewed Related to Practice Preparedness (N =24)

Articles	Country	Discipline	Design/ Method	Data collection	Objective/focus of the paper	Key findings related to clinical practice preparedness
Atherley et al. (2019).	Netherlands	Medicine	Scoping review (N = 45)		Identify conceptual perspectives for the transition to undergraduate clinical practice: educational, social, and developmental.	• Medical students struggle with educational, social, and developmental challenges as they transition to clinical learning. • Innovations in curriculum or courses are needed to improve student transition to clinical learning. • Improve social development by building staff and student relationships. • Developing through reflective practice and knowledge transfer strategies
Blackmore et al. (2014).	Canada	Medicine	Meta-Analysis (N = 15)		Assess the effectiveness of intensive pre-clinical activities to improve skills, knowledge and confidence for medical students transitioning to postgraduate/residency programs.	• Students who completed an intensive pre-clinical "boot camp" reported improvements in clinical skills, knowledge, and confidence ($P < .001$).
Bogo et al. (2016).	Canada	Social work	Qualitative Descriptive (n = 18 interviewed; n = 68 online survey)	Semi-structured interviews*	Instructors' (n = 18) perceptions of year one students' readiness for clinical learning.	• Instructors perceived younger students as having more anxiety, difficulties receiving criticism, and less knowledge compared to mature students who demonstrated more confidence and had more knowledge and life experiences.
Bosch et al. (2017).	Germany	Medicine	Cross-sectional (N = 147)	Survey* (6-point Likert scale for confidence and educational preparation; *Support Coping Scale* (Knoll et al.,2005) for coping failure; *Self-Efficacy*	Evaluate medical students' preparedness for clerkships—factors influencing preparedness and stress; measured within three dimensions of confidence, formal education, and coping with failure	• Students with higher self-efficacy perceived themselves as more prepared through formal education and had more CP experience. • Perceived preparedness is associated with stress. • Seeking support regularly was a dimension for preparedness to deal with failure.

				Scale (Schwarzer & Jerusalem, 1995); and *Perceived Stress Scale-10* (Cohen & Williamson, 1988).		
Carpenter et al. (2018).	USA	Medicine	Mixed methods Retrospective non-experimental (N = 743; n = 371, class of 2016; n = 372; class of 2017)	Survey* (10-item, 5-point Likert-scale and open comment box))	Perceived value and effectiveness of simulations for osteopathic medical students.	• Following clinical experience simulations: • Participants (n = 357; 96.2%; class of 2016) reported feeling better prepared for communications with family members. • Participants felt more prepared the caring role.
Chipchase et al. (2012).	Australia	Occupatio-nal; Therapy Physiother-apy; Speech Pathology	Observation al Delphi survey (N = 258, round 1; n = 161, round 2)	Questionnaire* (62 characteristics; 7-point Likert scale and open-ended responses)	Discover clinical educators' perspectives on student characteristics for demonstrating clinical practice preparedness	• Experts agreed on six themes: Knowledge and Understanding; Willingness; Professionalism; Communication and interaction; Personal attributes; Skills. • Student preparedness characteristics such as professional appearance and willingness to engage in learning held greater value than knowledge and understanding.
Chumley et al. (2005).	USA	Multi-design	Quantitative (n = 165, 2006 cohort; n = 166, 2005 cohort)	Pre/post-self-assessment* (3-point Likert scale for 18 skills)	Evaluation and content validity for a 2-week intensive pre-clinical transition course for third-year medical students.	• The data demonstrated that the 2006 cohort was significantly ($p < .0028$) better prepared than the 2005 cohort who did not receive the 2-week intensive course.
Cohen et al. (2014).	USA	Radiology: radiother-apy; nuclear medicine	Non-experimenta l Causal Comparative (N = 86; n = 56, US born; n = 30 non-US-born)	Self-efficacy survey; measuring three domains: communication, social comfort, and clinical confidence (Fan & Mak, 1998) **	Comparing perceived clinical preparedness related to levels of communication, social comfort, and clinical confidence between students born in the US and students born elsewhere	• Non-US born students were less confident in communication ($p = .022$), with hospital jargon ($p = .000$), had lower levels of social comfort ($p = .003$), and a lower mean value related to connecting with classmates ($p = .009$). • Non-US-born students reported lower clinical confidence and preparedness for CP overall.

Dalwood et al. (2018).	Australia	Physiotherapy	Mixed-method; Quasi-experimental (n = 50, first survey; n = 52, second survey)	Pre- and post-surveys Quantitative and qualitative questions *(no specified source)*	Effectiveness of a nine-week peer simulation program for preparing third-year physiotherapy students for CP.	• Participants' perceived value of peer simulation with knowledge, skills, confidence, clinical reasoning, time management, and communication. • Participants valued the simulation experience for preparing them for clinical practice.
Farahat et al. (2015).	USA	Nutrition; Dietetic	Mixed-methods Pre/post design (N = 37)	Perceived Readiness for Dietetic Practice (PRDP; Farahat et al., 2015) * *Pre/Post questionnaire* *Follow-up interviews*	Nutrition and dietetic students' perceived readiness for practice following Objective Structured Clinical Examinations (OSCE) simulated experiences.	• Readiness to perform dietetic role 4.9±2.5 pretest vs. 5.8±1.9 post-test (p = .03) • Professional role improvement (p = .01) • Charting improvement (p = .02) • Leadership skills (p = .003)
Fulton et al. (2019).	Canada	Social work	Qualitative (N = 31)	Focus group interviews*	Perceived effectiveness of pre-practicum preparatory role-playing simulations for foundational year in the master's in Social Work program.	• Findings included three themes: personal, exercise, and context reflections. • Increased confidence and communication skills. • Students learned from new situations through role-play, instructor guidance and support during role-play, and debriefing on the experience. • Role-playing provided student time to learn context, roles, responsibilities, and safety expected for the clinical placements.
Gelman & Lloyd (2008).	USA	Social work	Mixed-methods (N = 204)	Survey (Gelman, 2004) ** ten-point Likert scale and open-ended questions	First-year master's in social work students' self-perceived anxiety and concerns.	• Mean anxiety scores of 5.8 on a ten scale • 72% (n = 147) noting moderately anxious or higher; 27% (n = 55) indicating that anxiety interferes with learning (moderate or higher) • Gender and ethnicity were not significant. • Age, past experiences, and prior courses had lower perceived anxiety. • Clinical preparedness scores 5.1 on 10 scale; 70% (n = 142) fear lack of skills and experience; 64% (n = 130) afraid of mistakes

						• Age, experience, and prior courses significantly increased their sense of preparedness ($p < .05$). • Talking to family and friends was the most common anxiety-managing strategy (45 %, n = 92).
Hayes et al. (2004).	UK	Medicine	Mixed-methods (n = 27, GED; n = 134, UG)	Questionnaire * (13-item, seven-point Likert scale and two open questions)	Comparing undergraduate entry medical (UG) students and graduate entry programmes (GEP) and exploring how prepared medical students feel about starting full-time clinical practice.	• GEP students reported feeling more prepared and confident and less anxious, frightened, and intimidated for clinical practice. • Gender was a significant indicator with women reporting more anxiety than their male counterparts.
Hickson et al. (2015).	Australia; New Zealand	Para-medicine	Cross-sectional (N = 682)	Preparedness for Hospital (Hill et al., 1998) **	Paramedicine students' self-assessed preparedness for clinical placement.	• Female participants reported feeling more prepared than their male counterparts related to preparedness for improving patient health habits ($p = .001$). • Age presented significant differences in perceived preparedness for self-directed learning and collaboration.
Johnston et al. (2018).	Australia	Physioth-erapy	Quasi-experimental (N = 43)	Pre/post-test & survey* (five-point Likert scale)	Explore simulated learning experiences (SLE) value in preparing physiotherapy students for clinical placement	• Physiotherapy students value SLE as a preparatory component to clinical practice. • Post-simulation and post-CP experience, SLEs help prepare for CP, increase confidence, and help develop professional behaviour
Miller et al. (2017).	USA	Physioth-erapy	Mixed-methods (N= 163; Class A, n = 54; Class B, n = 54; Class C, n= 55)	Post-questionnaire three open-ended questions	The effectiveness of a two-week experiential (simulated) preclinical module is evaluated by the evaluation of physiotherapy students' perceptions and performance outcomes. Includes standardized patients	• Post-implementation points (i.e., mid-term and final) suggest a significant increase in clinical reasoning ($p < 0.001$), Screening ability ($p < 0.001$), Examination ($p < 0.001$), and Evaluation ($p = 0.001$) • Students valued the module and their experiences. The module was helpful for feedback, had helpful experiences, and valued working with patients. • Students had increased confidence, felt more comfortable interacting with patients, were

						better prepared for examinations, and were less nervous. • Students were able to organize, integrate knowledge in practice and become more efficient in interviews and examinations
Parsell & Bligh (1999).	UK	Medicine; Nursing; Dentistry; Physioth-erapy; Occupatio-nal Therapy; Radiography; Orthoptics	Quantitative (N = 120)	*Multi-professional Shared Learning scale* *	The development of a questionnaire for evaluating healthcare students' readiness for interprofessional learning.	• The three-factor scale (i.e., teamwork and collaboration, professional identity, roles, and responsibilities) was designed to evaluate students' readiness for interprofessional learning.
Prince et al. (2005).	Netherlands	Medicine	Quantitative (N = 71)	Questionnaire* (95-item, five-point Likert scale and ten open questions)	Evaluating the presence of problems medical students have when beginning clinical practice experiences.	• Half the students were nervous about beginning clinical practice ("clerkship"). • Half the students felt unprepared for clinical practice, that the transition felt abrupt, and felt the workload was too heavy; 75% felt they lacked study time. • Eleven percent of students considered quiet at the start of clinical practice. • Students (72%) reported that clinical practice was better than expected. • Knowledge was also a concern for students; lack of knowledge and understanding. • Problem-based learning and simulations with standardized patients helped prepare students for clinical practice.
Rodger et al. (2011).	Australia	Occupatio-nal Therapy	Qualitative (N = 79; n = 29 students; n = 41 practice educators; n = 8, practice education	Focus groups *	Exploring what makes for a quality practice placement: students, education, and faculty perspectives.	• Student preparation is one of the key findings. • Educators were critical of the students' skills (e.g., ethics, documentation, and technical skills) and work readiness (e.g., ethics and placement requirements). • Students felt under-prepared for documentation and technical skills. • Some other key findings include the importance of a welcoming learning environment, received

			staff members)			orientation with clear expectations, quality feedback, consistent approach and expectations, open, honest relationships (student–educator), and supervisor experience and skill.
Shacklady et al. (2009).	UK	Medicine	Mixed-methods (N = 164; n = 58, non mature; n = 29, mature students)	Questionnaire * (three open questions, two seven-point Likert-scale; two open text responses to explain Likert-like questions)	Assessing the effect of maturity on medical students' transition to clinical learning.	• Mature students were more likely to respond that they transitioned well to CP (p = .002). • Both groups felt that support (e.g., instructors, peers, and intensive skills training) was helpful to CP. • Mature students expressed more confidence in their knowledge compared to non-mature students. • Mature students had more life experiences to draw on and reported an easier transition to the CP environment.
Tal-Saban & Weintraub (2019).	Israel	Occupatio-nal Therapy	Cross-sectional Comparison Correlative (N = 84)	Student Self-Competency and Readiness for Fieldwork questionnaire (SCARF; Tal-Saban et al., 2012)	Assessing the effectiveness of a student tutoring program to enhance student readiness for practice placements.	• The tutoring program exposes students to clients/students with special needs to prepare students for their placements. • High participant anxiety was related to perceived competencies and readiness for CP experiences. • The program increased perceived readiness and decreased anxiety.
Timmerberg et al. (2019).	USA	Physioth-erapy	Mixed-methods (N = 112)	Delphi method	Develop a set of elements that a physiotherapy student should demonstrate before clinical practice.	• Experts agreed on six essential elements that students must be proficient in to be prepared for their first clinical experience. • Attitude, engagement, behaviour • Ability to introduce themselves. • Respecting others in the clinical environment • Punctuality (respecting due dates) • Application of ethics, privacy and confidentiality (HIPPA regulations) • Appropriate appearance (dress code)
Wallace et al. (2014).	Australia	Dental hygiene	Qualitative (N = 22)	Focus group *	Dental hygiene students' views following a practice placement with older adults in residential care.	• Students received a pre-clinical orientation on common medical and dental issues seen with aged clients. • Students were unprepared and overwhelmed by the care environment and interactions with

						clients (e.g., smells, frail appearances of clients, and interactions with cognitively impaired seniors). • Students described the need for a pre-clinical orientation to prepare for interactions and environmental difficulties.
Widyandana et al. (2012).	Indonesia	Medicine	Qualitative Experimental (N = 60)	Focus group *	Explore the difference when exposing medical students to the clinical setting before clinical practice experiences.	• Thirty (50%) students participated in an 11-day clinical skills training program in a primary care setting. • Students who participated in the skills training program felt better prepared for clinical practice ("clerkship") and had less difficulty transitioning to clinical practice compared to students who did not complete the skills training program.

Note. *Researcher developed. ** Original tool modified.

Dispositional Influences

Dispositional influences are the elements that impact a person's "state of being" and "state of mind." This section includes psychological influences, personal characteristics, and physical influences on CPP. The concept of psychological readiness as a factor affecting students' clinical learning (i.e., stress, fear, anxiety, and depression) was explored (Bogo et al., 2016; Hayes et al., 2004). Furthermore, several studies included in this review noted the importance of personal characteristics and demographics, including age, gender, and past CP experiences, as factors influencing preparedness for CP (Bosch et al., 2017; Gelman & Lloyd, 2008; Hickson et al., 2015). Gelman and Lloyd's (2008) study of first-year master's in social work students (N = 204) on CPP and self-perceived anxiety revealed that the majority of participants (72%; n = 147) were moderately or highly anxious. Some participants (27%; n = 55) also identified that their anxiety would likely interfere, at a moderate or higher level, with their clinical learning. Additionally, students felt moderately prepared for practice. Also, concerns similar to those noted in nursing studies were revealed, such as lack of skills, knowledge and experience, fear of making mistakes, workload, not meeting expectations, student-instructor interactions, and challenges (Gelman & Lloyd, 2008). Another study of medical students' preparedness for CP also reported high self-reported anxiety scores (Hayes et al., 2004). Furthermore, Bosch et al. (2017) reported the result of an online questionnaire measuring perceived confidence, self-efficacy, and preparedness to deal with failure in medical students' (N = 147; Bosch et al., 2017). This study found that confidence and self-efficacy significantly influenced students' perceived clinical preparedness. Bosch et al. (2017) propose that the higher the perceived self-efficacy, the higher the perceived CPP. Confidence was also frequently noted as influential within nursing studies associated with CPP (e.g., Chernomas & Shapiro, 2013; Leh, 2011; Levett-Jones et al., 2015).

Some researchers reported on participant demographic characteristics. Contradictory data on the significance of gender as a factor in preparedness have also been reported (Bosch et al., 2017; Gelman &

Lloyd, 2008; Hickson et al., 2015). Two studies noted no significant differences regarding genders (Bosch et al., 2017; Gelman & Llyod, 2008). However, Hickson et al.'s (2015) study in paramedicine noted that female students scored higher in one domain of preparedness related to being prepared to improve patient's] health habits. Whereas Hayes et al. (2004) found that female participants reported higher anxiety compared to their male counterparts. Furthermore, some evidence suggests that age and past experiences may contribute to student perceptions of preparedness for CP (Bosch et al., 2017; Gelman & Lloyd, 2008; Hickson et al., 2015). Age and emotional maturity were also influential in a few studies (Bogo et al., 2016; Hayes et al., 2004; Shacklady et al., 2009).

The relationship between preparedness and several additional personal characteristics has been reported in several studies. For example, a US-based study noted that their sample of radiology, radiotherapy, and nuclear medicine students (n = 30) studying outside their country of birth reported significantly lower clinical education preparedness within the domains of social comfort, communication, and clinical confidence compared to their US-born counterparts (n = 56; Cohen et al., 2014). Also, another study found that ethnicity was not a factor in student preparedness (Gelman & Lloyd, 2008). Mature students with prior life experiences are reportedly more prepared for CP experiences, demonstrating more confidence, coping and resilience (Bosch et al., 2017; Gelman & Lloyd, 2008; Shacklady et al., 2009). Personal attributes, behaviours, knowledge and competencies, willingness, professionalism, and interpersonal and interprofessional communication are characteristics that clinicians seek for student CPP (Chipchase et al., 2012; Timmerberg et al., 2019). Moreover, emotional maturity was reported in two studies (Kelly et al., 2020; Wallace et al., 2014) Wallace et al. (2014) reported that dental hygiene students (N = 22) felt unprepared for CP with older adults in residential care, feeling overwhelmed by the environment (i.e., sights, smells, interactions). This is somewhat similar to nursing students' feeling unprepared emotionally when interacting with older adults (Kelly et al., 2020).

In summary, similar to nursing studies, the literature from other health disciplines also suggests the presence of dispositional influences such as stress and anxiety, confidence, and emotional maturity impact students' clinical placements. However, other health discipline research also reported on the potential of demographic characteristics including age, gender, and country of birth as factors influencing preparedness for CP.

Procedural and Conceptual Influences

Procedural ("knowing-how") and conceptual ("knowing-that") influences were often found intertwined within the same studies, likely because theoretical knowledge and practical competencies are equally important in experiential and situational experiences in CP. Therefore, they were incorporated within the same section.

Theoretical and skills preparation in health programs are critical elements for quality student clinical placement experiences (Bosch et al., 2017; Rodger et al., 2011). Rodger et al. (2011) explored the perspectives of students (n = 29), practice educators (n = 41), and faculty members (n = 8) when questioning what makes for a quality practice placement. Results demonstrated that one common factor was student preparation for the practice placement. Like nursing studies (e.g., Joolaee et al., 2015; Levett-Jones et al., 2015), Rodger et al.'s (2011) participants felt unprepared for CP, notably related to technical skills and documentation. Furthermore, student preparedness for CP was often discussed and associated with the student's ability to transfer knowledge to the CP (Bosch et al., 2017; Prince et al., 2005; Wallace et al., 2014).

Prince et al. (2005) followed up on the results of their previous study (Prince et al., 2000), in which medical students reported feeling unprepared for CP. Prince et al.'s (2005) follow-up study also found that medical students (N = 71) felt unprepared to begin CP (53%), felt uncertain about CP (58%), that the transition to CP was abrupt (40%), and a better experience than expected (72%), and that a good introduction would make the transition to CP easier (93%). Also, similar to nursing studies, participants

valued pre-clinical activities and learning from simulated activities with standardized patients before CP (Curtis, 2007; Dearmon et al., 2013; Donovan & Mullen, 2019); they also perceived knowledge deficits or gaps and struggled with increased program workloads while in CP (Cowen et al., 2016; Morrell & Ridgway, 2014).

Pre-Clinical Education Activities

A few non-nursing studies have reported positive results for student CPP initiatives by incorporating methods focusing on pre-clinical interventions (e.g., intensive courses, transition courses, boot camps), namely, to increase student CPP through skills proficiency (Blackmore et al., 2014; Chumley et al., 2005), confidence, self-efficacy, and decrease anxiety and stress (Chumley et al., 2005; Tal-Saban & Weintraub, 2019). Blackmore et al. (2014) completed a meta-analysis (N = 15) of "boot camps" (i.e., a combination of simulation-based and other educational approaches) to better prepare medical students for their transition to CP settings (viz., residency programs). They found that participants demonstrated significant ($p < .001$) improvement in clinical skills, knowledge, and confidence following the boot camp experiences. Dalwood et al. (2018) studied enhancing CPP through peer simulations, they found that physiotherapy students (n = 50, pre-survey; n = 52, post-survey) valued their experiences and perceived CPP with an increase in their clinical reasoning skills, communication skills, and ability to identify knowledge and skills deficits. Chumley et al. (2005) also reported on the effectiveness of a 2-week intensive course that was implemented to increase medical students' preparedness for skills performance as they transition to CP (i.e., "clerkship"). Results support the claim that the students significantly ($p < .0028$) increased preparedness scores following the course.

Two more studies reported using simulated activities to prepare students for effective interpersonal, interprofessional and therapeutic communications in the clinical setting (Carpenter et al., 2018; Fulton et al., 2019). Fulton et al. (2019) collected data from a focus groups of social work students (N= 31) on their perceptions of a pre-practicum role-playing activity. Participants in this study commented

on subsequently having more effective communication skills and feeling more confident to begin the practicum (Fulton et al., 2019). Similarly, Carpenter et al. (2018) found that participants (N = 743; medical students), following a clinical experience simulation felt better prepared about communicating with family members and caring for actual patients.

Researchers have reported that non-nursing students value pre-clinical activities, such as modules, intensive skills labs or courses and simulations, as beneficial in preparing them for CP, as well as increasing feelings of confidence regarding competencies and skills before placements (Johnston et al., 2018; Miller et al., 2017). For example, Johnston et al. (2018) explored physiotherapy students' perceptions of simulations as preparatory activities prior to their first CP experiences. All participants (N = 43) "agreed" or "strongly agreed" post-simulation and post-CP experience that the simulated learning experiences were valuable, helpful in preparing for CP, increased confidence, and helped develop professional behaviour.

Farahat et al. (2015) found that readiness for practice scores increased post-simulated Objective Structured Clinical Examinations (OSCE) from 4.9±2.5 pretest vs. 5.8±1.9 post-test for dietetic students (N = 37). Miller et al. (2017) evaluated the effectiveness of a two-week experiential learning module (including simulated activities with standardized patients) to enhance physiotherapy students' readiness for CP experiences. A comparison between the results of a pre-implementation questionnaire (Class A, n = 54) and a post-implementation questionnaire (Classes B, n = 54; Class C, n = 55) demonstrated that participants valued the learning experiences within the module, felt more confident beginning CP, and felt they improved their abilities to examine patients. Clinical performance scores were also evaluated, and results demonstrated significantly higher performance scores in comparison to the control group's scores (Class A; n =54). In both studies, students gained confidence with simulations, which helped improve their transition to the clinical setting (Farahat et al., 2015; Miller et al., 2017).

Widyandana et al. (2012) found that a pre-clinical skills training program was effective in increasing medical student preparedness for CP ("clerkship"). They also had an easier transition to practice experience than students who did not participate in the 11-day program in a primary healthcare setting ("early clinical experiences"). While Tal-Saban and Weintraub (2019) did not specifically address their Community-Academia Student Tutoring (CAST) program as a form of early exposure, the program exposes students to clients/students with special needs to prepare students for their placements. Thus, they were able to increase perceived readiness and decrease anxiety.

Chapter Summary

This review explored the literature to present relevant research evidence and inform the planned study related to CPP in undergraduate nursing students. This review synthesized the findings of 55 publications from nursing and various other healthcare disciplines. Self-efficacy theory was valuable in informing inquiry during the literature search. Thus, at the beginning of the review process, self-efficacy theory informed avenues of exploration within the literature. Later, the framework guided the reviewer in identifying and interpreting patterns observed within the literature, which led to categorizing the findings within dispositional, conceptual, and procedural influences. Evidence presented in this review demonstrated the emergence of conceptual, dispositional, and procedural dimensions in the literature, thus informing the phenomenon and contributing to an understanding of the sources of influence.

Inconsistent language and utilization of the terms or concepts to describe two different phenomena (i.e., preparedness for clinical practice placements vs. readiness for professional practice) have caused difficulties in focusing searches of the literature and have limited explicit attention in researching the CPP phenomenon. Burford and Vance (2014) note that preparedness is a problematic concept with multiple meanings. Hence, preparedness for CP has not been clearly defined; it has been vaguely or inconsistently conceptualized and has yet to be measured in nursing literature, although

measures have been developed in other disciplines. Further qualitative explorations of the phenomenon will inform the development of instruments or tools.

The current literature provides hints of possible influences of CPP; however, the evidence is unclear and scattered among other related studies, suggesting the need for further research in this area. For example, this review reports on various activities to prepare students for CP (e.g., simulations, laboratory practice, assessments and evaluations, patient research). Activities range in time, length, content, and experience. Moreover, the pre-clinical preparatory activities were generally delivered as adjuncts to clinical courses or outside curricula. Notably, students generally view all types of these activities positively. Common outcome measures of the various activities included feeling better prepared for CP, less anxious or less stressed, and more confident after engaging in the preparatory activities.

Finally, the review findings suggest that current knowledge and understanding of the CPP phenomenon are limited despite increasing exploration and interest within nursing and other health disciplines. Additionally, no Canadian study was found that explored undergraduate nursing students' perception of CPP. Therefore, the review supports the need to explore the phenomenon of CPP for undergraduate nursing students with a Canadian perspective. Providing this perspective will benefit Canadian nursing educators by informing them of students' learning needs by considering the influences on CPP. Thus, this narrative review demonstrates a need for further research on students' perspectives on CPP and identifying factors that facilitate or hinder their preparedness. A study exploring student perspectives will offer insight into students' views on CPP, contribute to the limited literature in this area, enhance educators' knowledge about CPP, and posit future avenues of exploration.

Chapter Three: Methodology

Chapter three delineates the research methods, thus explicating "the steps, procedures, and strategies for gathering and analyzing data" (Polit & Beck, 2019, p. 735) for this study. Accordingly, this chapter presents the research design and methods, including the sampling method and inclusion criteria, the setting and recruitment process, the data collection procedures, the role of the researcher, and the data analysis strategy. Also, ethical implications and strategies used to achieve trustworthiness are discussed later in the chapter. Informed by self-efficacy theory, this study aimed to retrospectively explore and describe perspectives on and experiences with clinical practice (CP) preparedness (CPP) for undergraduate nursing student participants.

Research Design: Qualitative Description

Qualitative description is grounded in naturalistic inquiry, which facilitates studying a phenomenon in its natural state (Lincoln & Guba, 1985; Sandelowski, 2000). Qualitative research approaches vary according to the purpose of the study (Creswell & Poth, 2018). A well-informed qualitative researcher will choose the approach that best fits the research purpose (Creswell & Poth, 2018; Willis et al., 2016). A qualitative descriptive approach explores a poorly understood or ill-defined phenomenon or when the literature provides little information about the problem (Creswell & Poth, 2018; Polit & Beck, 2017). Current literature provides limited explicit information on CPP in nursing education; therefore, this research design was well suited to explore the phenomenon.

A qualitative descriptive design aims to comprehensively describe the phenomenon based on participants' perspectives (Willis et al., 2016). In a qualitative descriptive study, comprehensive descriptions are kept close to the data by describing the phenomenon from what the participants present (i.e., perceived and experienced; Sandelowski, 2000, 2010; Willis et al., 2016).

Methods

Methods consist of strategies and procedures used in structuring a study to inform the collection and analysis of data to address the study's purpose (Polit & Beck, 2019). This qualitative descriptive study included purposive sampling, semi-structured interviews with open-ended questions, and content analysis.

Setting

The study was completed with students attending a College of Nursing (CON) at a mid-western university. Students are admitted to the CON after completing year-one pre-requisite nursing courses. Undergraduate nursing students from this CON are placed at long-term care facilities for their initial clinical placements. Later, they complete one community health placement and one specialized (e.g., maternity, mental health, palliative) placement before their last transition to practice placement (i.e., preceptorship/senior practicum). All other clinical placements are within hospital settings such as subacute, acute medicine, medical-surgical units. Finally, the researcher considered the virtual environment as the study's setting, as virtual interviews were the data collection method.

Sample and Sampling Procedures

For qualitative descriptive studies, it is critically important to recruit individuals who have the information that is being sought by the researcher (Sandelowski, 2000). Accordingly, purposive sampling guided the researcher in selecting knowledgeable individuals (i.e., *information-rich)* about the described phenomenon (Creswell & Poth, 2018; Polit & Beck, 2019; Patton, 2015).

Inclusion Criteria

The population of interest was undergraduate nursing students. Participants included undergraduate nursing students willing and able to participate in one virtual interview and had completed at least two clinical courses (i.e., Nursing Practice 1 and 2). Students enrolled in years three or four of the program (i.e., Nursing Practice 3, 4, 5, 6) who had not started their final practicum also met inclusion

criteria. In keeping with the aim of the study to explore and describe the perspectives on and experiences with CPP, participants who had at least two such direct experiential and situational experiences shared their knowledge of the phenomenon as key informants. Participants who started their senior practicum (i.e., Nursing Practice 7) were excluded from the study. By excluding undergraduate nursing students who have started their entry-to-practice/senior practicum, we refrained from including data about the known phenomenon of professional practice readiness or transition to practice.

Sample Size

As this study sought in-depth insight into the phenomenon of study, it required a small number of information-rich participants (Morse, 2000; Polit & Beck, 2017). Thus, considering the study's scope, nature, and purpose a small sample size was warranted (Morse, 2000; Patton, 2015). Smaller sample sizes with in-depth interviews yield rich and abundant data (Patton, 2015). This study planned for a small sample size of 10 to 15 participants, with consideration to limited resources and being flexible and re-evaluating the number of participants according to the number of interested participants, the researcher's time, and the quality of the data collected, and data saturation as an ongoing process (Guest et al., 2006; Patton, 2015). Also, given the homogenous (i.e., participants likely sharing similar perceptions, experiences, beliefs, and behaviours) nature of the participant group, it was likely that data saturation be achieved by approximately the 12th interview (Guest et al., 2006). Furthermore, it was anticipated that data collection would be completed once no new information about the phenomenon was revealed in the interviews, thus, achieving data saturation (Morse, 2000; Polit & Beck, 2017).

Ultimately, I was contacted by 30 potential participants, resulting in 20 participants volunteering and completing the interview. Despite a slightly larger sample size than planned, 20 participants are considered average for small studies (Patton, 2015; Sim et al., 2018; Vasileiou et al., 2018). The meaningful and insightful data generated increased the quality of this qualitative research. Additionally, there appeared to be data saturation by the 15th participant interview. However, I noticed that despite

most themes being identified by the sixth participant interview, new information continued every few interviews, with the new information pertaining mostly to the different life experiences, CP situations, and backgrounds. Given the nature of the phenomenon, it was relevant and important to consider these data findings, which were ultimately included within the respective categories. Thus, while the 12th interview was the last to yield new information, it was not until the 15th participant that data saturation was confirmed (i.e., new information threshold 12 + three, as suggested by Guest et al., 2020). However, given the nature of the phenomenon and newfound volatility in participants situations (i.e., age, experience level, social supports, past clinical experiences) that appeared as important influences of the phenomenon of study, I felt it prudent and within the study's means to complete the last five interviews of willing participants. This decision also met the average of 20 participants for small studies (Patton, 2015; Sim et al., 2018; Vasileiou et al., 2018). These additional five participants further confirmed the themes and categories, and ultimately added to the robust and rich information gathered.

Recruitment Process

Recruitment was initiated following ethical approval of the University Research Ethics Board (REB; *Protocol Number HE2022-0133*) and upon obtaining access approval from the College of Nursing. The University's Research Center assisted by sending a brief *Letter of Invitation* (see Appendix A) as an attachment within a *Recruitment Email* (see Appendix B) to potential participants. This recruitment email also included the research participant *Consent Form* (see Appendix C). Interested undergraduate nursing students were asked to contact the researcher via email, text, or telephone; No reminder email was needed. I communicated with the interested participants about the study, answered any questions, sent the research participants information, received consent forms via e-mail, and selected a mutually convenient date and time for the interview. Once an interview time was confirmed, an Outlook invitation with a Zoom link (from the researcher's private university account) was sent to the participants prior to

the interview. Participants were sent a $25 electronic gift card to Amazon.ca immediately before the interview. Participants were offered a summary of results to be distributed following preliminary analysis.

Instruments

Consistent with the qualitative description and the purpose of this study, semi-structured interviews were the primary data source for this study. Interviews allowed the researcher to focus on the topic of interest (Polit & Beck, 2017) and facilitated inquiry by using sub-questions to explore the phenomenon under study (Creswell & Poth, 2018). In addition, researchers seek understanding by asking questions related to the concerns or experiences about, responses to, reasons for, and the factors for the phenomenon (Sandelowski, 2000). The data collection technique of semi-structured, open-ended individual interviews was ideal for such questions (Sandelowski, 2000; Willis et al., 2016), as it supported in-depth data collection specific to the phenomenon, including information about the who, what, and where, are sought in qualitative descriptive inquiries (Sandelowski, 2000). Furthermore, open-ended questions provided participants with the opportunity and freedom to describe their experiences in their own words (Polit & Beck, 2017), thus, yielding “in-depth responses about people's experiences, perceptions, opinions, feelings, and knowledge" (Patton, 2015, p. 14).

A semi-structured interview guide, informed by self-efficacy theory and the literature review (see Chapter 2), was developed to structure and guide the interviews (See Appendix D; *Interview Approach and Guide*; Creswell & Poth, 2018; Willis et al., 2016). Self-efficacy theory was reflected in the interview questions including the concept of triadic reciprocal relationships (i.e., between person, environment, and behaviour) and the sources of self-efficacy (i.e., mastery experiences, vicarious experiences, verbal persuasion, physiological and affective state) guided the development of the interview questions. For example, a question such as “When you think about the CP courses you completed, what did you do to prepare?” informed on all the self-efficacy sources and other potential influences, such as the person and the environment. Also, questions such as “What or who helped with being prepared for CP?” or “How did

you learn what you needed to do to be prepared?" addressed the who (i.e., person) and what (i.e., environment) that influenced participants' preparedness, and how (i.e., behaviour) that lead to being prepared. Interview questions and how they were linked to the primary and secondary research questions to self-efficacy theory are presented in Table 3.

Additionally, several brief demographic questions were asked at the beginning of the interview (see Appendix D: *Interview Approach and Guide*). The demographic data was used to describe the sample and reflect inclusion criteria. The demographic section of the interview guide included age, gender, program admission date, student status (i.e., full-time, or part-time), current year and term of the program, clinical courses completed and currently enrolled in. Finally, one last demographic question asked participants to identify their highest completed education before their current nursing program, which further described the sample in consideration with assumptions based on self-efficacy theory's mastery experiences and the findings of the literature review in Chapter 2. Furthermore, questions related to employment and work hours during the academic year were also asked; these factors were expected to impact the study findings based on the factors reported in the literature review. Other demographic data such as marital status, children, and finances were expected to be discussed and described by participants within the interview should they be influencing factors for CPP in the study.

Data Collection Procedures

The interviews were expected to take between 45 and 70 minutes to gather in-depth participant data. Interviews lasted between 49 and 107 minutes, with an average of 70 minutes to complete one interview. Data collection was conducted between end-July and end-September 2022. Interviews were conducted using video conferencing between the researcher and participants at a mutually agreeable time. The interviews were conducted via the university's licenced student/researcher Zoom account. Zoom has been successfully and widely used for qualitative research purposes (Archibald et al., 2019; Lobe et al., 2020) and is reported as a user-friendly platform for both researchers and participants

Table 3

Interview Questions: Guided by Self-Efficacy Theory and Rationale

Interview Questions	Research Question	Link to Self-Efficacy Theory	Rationale
Can you tell me where you were placed for each of your clinical practice courses completed and in what term you completed each?	Q1	Establishing presence of sources	Confirms meeting of inclusion criteria. Encourages calling to consciousness each clinical experience to address the phenomenon of interest.
Being prepared for clinical practice or clinical practice preparedness is something we talk about as part of nursing education. What does clinical practice preparedness mean to you?	Q2		Elicits participants to reflect on the definition of the phenomenon.
When you think about the clinical practice courses you completed, what did you do to prepare for clinical?	Q1, Q3	All sources of self-efficacy Person and environmental influences	Asks for examples; prompts guide in considering possible activities for participants to consider.
How did you learn what you need to do to be prepared for clinical? Or What or who helped you with being prepared for clinical practice?	Q1, Q4	All sources of self-efficacy: Influential people	Prompts also direct participants to consider aspects of the curriculum.
Tell me about a time when you felt or thought yourself prepared for clinical practice and what that was like for you?	Q1, Q2	Mastery experiences Influence on person	Prompts direct the participant to consider influences in comparing with other experiences.
Tell me about a time you felt unprepared for clinical practice and what that was like for you?	Q1, Q2	All sources of self-efficacy.; influence on the person	Prompts direct participants to consider other potential sources.
What prevents you from being prepared for clinical practice?	Q4	All sources of self-efficacy Person and environmental influences	Ask for examples and prompts to consider environmental influences.
What is most helpful in being prepared for clinical practice?	Q4	All sources of self-efficacy	Exploring sources and influences that facilitate.
What is most challenging in being prepared for clinical practice?	Q4	Person and environmental influences	Exploring sources and influences that hinder.
Is there anything I did not ask you about clinical practice preparedness that you would like to share with me?	Q1		Open question: asks to explore/consider potential elements neglected by the investigator.

Note. Q1 = Primary research question: How do undergraduate nursing students perceive and experience their clinical practice preparedness? Secondary research questions: Q2 = What does being prepared for clinical mean to the undergraduate nursing student? Q3 = How do undergraduate nursing students prepare for clinical practice? Q4 = What influences or affects students' preparedness for clinical practice?

(Archibald et al., 2019). Zoom is a credible, secure videoconferencing tool that can record entire sessions and easily convert video and audio files to third-party software. Recording interviews allowed the researcher to complete transcriptions, review the interviews, and complete field notes (Polit & Beck, 2017). Also, audio/visual recordings allowed the researcher to be an active listener during the actual interview and return to the recordings to take additional notes and begin data analysis. In addition to the videoconference platform, a digital audio recording device was used as a backup to prevent data loss during the interviews.

Videoconference interviews are beneficial for decreasing cost and geographic and scheduling barriers (Mirick & Wladkowksi, 2019). During the COVID-19 pandemic, video communications also increased accessibility (Lobe et al., 2020) and decreased potential health risks. Videoconferencing within this study increased accessibility and flexibility for the participants and the researcher. These remote face-to-face interviews via videoconferencing also allowed the researcher and participants to establish rapport through auditory and visual interaction (Archibald et al., 2019; Deakin & Wakefield, 2014; Lobe et al., 2020; Mirick & Wladkowski, 2019), as well as record such interactions. However, a few challenges were considered before the interviews began, including the potential for weak rapport with participants, potential environmental or technological distractions (e.g., other members of the household or environment/setting, pets, traffic, notifications, emails), technical malfunctioning (e.g., poor video or audio quality) or internet connection issues (Lobe et al., 2020; Mirick & Wladkowski, 2019; Oliffe et al., 2021; Polit & Beck, 2017). Consequently, to be prudent, the researcher addressed and minimized these potential issues prior to the scheduled interview session. Gray et al.'s (2020) suggestions and strategies for Zoom interviews were implemented including: Test Zoom ahead of the interview; provide technical information to the participants; have a backup plan in case of technical issues; plan for distractions; provide a direct link to the meeting; consider storage needs; hardwire computer to the internet; facilitate uninterrupted internet connection (e.g., disconnecting other devices that may disrupt internet

connection); create a visual reminder for starting the recording; manage consent processes (i.e., submission of the Consent Form, see Appendix C, and reviewed during the introduction to the interview, see Appendix D: *Interview Approach and Guide*) prior to the start of the interview. Consequently, there was only two occasions of technical difficulties regarding connection, which resulted in one participant restarting the connection successfully and continuing the interview with a momentary disruption. Another participant was unable to connect resulting in an attempted rescheduling, however the interview was never completed. Additionally, a few instances of domestic animal noises and distractions, resulting in a few momentary distractions.

Video recordings of the interviews took place with explicit participant permission, which was verified prior to initiating the interview. As well, Participants were informed that they could turn off their cameras while recording or stop the recordings at any time. No requests or incidences resulted in the stopping or pausing the interview, nor turning off the camera. Recordings were kept private and downloaded by the researcher and were not disseminated. Zoom recordings were secured with user-specific authentication, passcode protection, and end-to-end encryption (i.e., using a cryptographic key, enabling encryption of communications; Palmer, 2021).

Role of the Researcher and Other Considerations

I used the interview guide (see Appendix D) to direct the participant and focus on the topic while listening and probing when appropriate. I incorporated Patton's (2015) 10 principles and skills for interviewing, which included: 1) Asking open-ended questions, 2) being clear, 3) listening, 4) probing when appropriate, 5) observing (non-verbal interaction), 6) being both empathic and neutral, 7) making transitions (transitioning to another question), 8) distinguishing types of questions, 9) being prepared for the unexpected (being flexible and responsive), and 10) be present throughout (attentive and engaged). For example, saying “Tell me more about that” for probing when appropriate; “Thank you for sharing your experience. You have explained how difficult that was for you” to demonstrate listening; “You have

explained what clinical practice preparedness is to you, the next questions are related to your experiences with clinical practice preparedness as you begin a new practice rotation."

It was important to establish rapport with participants within the study's virtual environment. To create a safe and trusting relationship with the participant, the researcher took the time to interact with the participant before the interview. This was an important step in building a trusting relationship and creating a safe environment for the participant. When participants are at ease and, ideally, have established a rapport with the researcher, they are more likely to provide essential details about their experiences (Polit & Beck, 2017). Also, the researcher was mindful of non-verbal communication by the researcher or the participant. Observational skills were practiced, and notes were taken during the interviews. Upon review of the recorded interviews, I noticed the verbal and non-verbal communication, facial expressions and demonstrations of emotion related to their lived experiences.

It is understood that risks, errors, and unethical practices occur in the CP setting and that a participant may have divulged during the interview. At the beginning of the interviews, I disclosed that should information be divulged where there is concern about a person's health and/or life, I would be obliged to report it to the appropriate authorities. It was important to address this at the beginning of the interview to ensure full discloser to the participants of the legal and ethical obligation of the researcher.

Finally, *reflexivity* "is the process of reflecting critically on the self and of analyzing and making a note of personal values that could affect data collection and interpretation" (Polit & Beck, 2017, p.164). Before and throughout the data collection process, I kept a reflexive journal and notes. Within the reflexive journal, I first outlined my values and thoughts about the phenomenon, expectations or assumptions, potential biases, preferences, and fears. Additionally, the advisor and I met several times during the interview phase of the study: twice in preparation before the first interviews (i.e., including ethical approval amendments, reviewing researcher approach to the interview process), once after the second interview and two more times before the last interview within an 11-week timeframe. These

sessions were used to debrief about the interview process, questions, and responses with my faculty advisor.

Data Analysis

Qualitative content analysis (Elo & Kyngäs, 2007; Graneheim & Lundman, 2004; Sandelowski, 2000, 2010) was used to analyze the interview data. Qualitative content analysis is a structured and iterative process of systematically applying codes to analyze the collected data (Graneheim & Lundman, 2004; Sandelowski, 2000; Polit & Beck, 2017). Furthermore, the inductive analytical technique and iterative process provided a structure for preventing the researcher from biased interpretations or unintended data transformation and presented a comprehensive description. The intent of content analysis is to synthesize and convey findings in the words of the participants, maintaining a focus on description or manifest content as opposed to interpreting the meaning behind the words (Elo & Kyngäs, 2007; Graneheim & Lundman, 2004; Sandelowski, 2000, 2010). Moreover, the inductive analysis aimed to "discover patterns, themes and categories" (Patton, 2015, p. 542) within the data, which is appropriate for discovering a phenomenon that is not well explored (Elo & Kyngäs, 2007; Patton, 2015).

The audio recordings from the interviews were transcribed verbatim, and the researcher's notes and reflexive journal were reviewed. Next, transcripts were read while listening to the recordings to ensure accuracy. Then, each transcript was read to get a sense of the *whole* (Burnard, 1991; Elo & Kyngäs, 2007; Tesch, 1990). Transcripts were reviewed and read several times throughout the data analysis process. Critical phrases and statements were identified to facilitate the coding process, which was informed by the research questions. The data was broken into units (i.e., critical words, phrases, statements), coded, and categorized. Then, the researcher reviewed and reread the transcripts, codes and categories to identify and name themes. Through the use of NVivo 12 computer software (QRS International, 2017), this analytical process allowed the researcher to organize and describe the raw

narrative data. Five transcripts were provided to the faculty advisor which they coded and used to compare with the researcher's emerging analysis.

The Zoom audio recordings of the interviews were transcribed verbatim using NVivo Transcription software (2020). NVivo 12 software is a digital tool for organizing, managing, and qualitative coding. Managing and organizing data and using transcription software greatly benefit the researcher. To appropriately and optimally utilize the NVivo 12 software, the researcher completed five online courses prior to data collection. Courses were offered asynchronously and were completed the week before data collection began. The five courses included Focused Learning: Coding; Focused Learning: Queries and Visualizations; NVivo 12 Moving On: How to use the advanced functions; NVivo12 Fundamentals: project setup, import, organize, start analysis, deepen analysis; NVivo Core Skills: How to import, organize & explore data for analysis. Additionally, one of the courses offered a focused session with an NVivo research expert to assist the researcher in appropriately using the software for the study's aim.

NVivo software is not without limitations. Maher et al. (2018) noted that using NVivo software was beneficial in managing data. However, they also found that using a traditional approach to coding (i.e., using sheets of paper, colored markers, and large display boards) was more visual and allowed for a kinesthetic interaction with the data. Maher et al. (2018) concluded that the combined use of traditional and digital NVivo software provided a valid mode of analysis. The researcher did not use the traditional method suggested by Maher et al. (2018); however, I used Microsoft Excel as the NVivo 12 software allowed for the easy transfer of data, spreadsheets, tables, and graphics.

Trustworthiness

Trustworthiness refers to demonstrating the validity or quality of the findings through credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1985; Guba & Lincoln, 1989). Additionally, qualitative description seeks *descriptive validity* (i.e., accurate description of events by most individuals) and *interpretative validity* (i.e., accurate depiction of the meaning of the phenomenon as

intended by the participants; Sandelowski, 2000; Willis et al., 2016). Strategies used to ensure trustworthiness included delineating data collection and data analysis procedures with rationale for approaches chosen, reflexivity through journaling, listening, prolonging engagement, structured interview process, video and audio recordings, and clear data analysis procedures.

Credibility. Credibility is the study's ability to demonstrate that the data and findings presented are accurate reflections of the participants' reality (Guba & Lincoln, 1989; Polit & Beck, 2017). As previously noted, the researcher utilized reflexivity through reflective journaling in this study. Thus, their perceptions, biases, and assumptions were apparent prior to data collection, and a reflexive stance continued throughout the data collection and analysis process. This activity enabled the researcher to remain cognizant of their impact on the study and enhanced the credibility of the findings. In addition, the researcher used *thick descriptions* (i.e., complete and comprehensive descriptions). In addition, the advisor also read selected transcripts to confirm the emerging analysis.

Dependability. Dependability is the study's reliability; similar findings would occur if replicated (Guba & Lincoln, 1989; Polit & Beck, 2017). Thus, a consistent approach to interviewing and following the semi-structured interview guide enhanced dependability. To ensure the validity of the interview guide, the first two interviews were examined to determine the need for any modifications to the guide or interview questions. Upon review and discussion with my advisor it was determined that responses from participants addressed the purpose of this study and no modifications to the interview guide were made.

Confirmability. An accurate representation of the information provided by the participants supports confirmability (Guba & Lincoln, 1989; Polit & Beck, 2017). Careful tracking of data and maintaining an audit trail linked with categories and themes enhanced the confirmability of the analysis. Debriefing with the advisor helped confirm the process used to arrive at the findings. Also, using quotes as examples in reporting the findings enhanced confirmability.

Transferability. Transferability is the ability to transfer the findings to other settings, contexts, or groups (Guba & Lincoln, 1989; Polit & Beck, 2017). The researcher enhanced transferability with thick descriptions of the findings and ensured quotes were included to support the analysis. This helps readers determine the relevance or appropriateness of findings for their context. Notably, the timing of the data collection (i.e., interviews) of this study was conducted during a period of anticipated return to in-person learning following COVID-19 restrictions.

Ethical Considerations

The ethics protocol was submitted to the University Research Ethics Board (REB) for approval before commencing the study. College of Nursing Access Approval was also approved as part of the REB application. Ethical approval was obtained prior to any recruitment or interaction with participants. The researcher maintained informed consent and voluntary participation (see Appendix C, Consent Form). The researcher respected the principles of the Belmont Report (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1978) and maintained beneficence, respect for human dignity, and justice. Participant confidentiality and anonymity were maintained per the protocol descripted in the Consent form in Appendix C.

Beneficence

The beneficence principle holds the researcher responsible for the harm and benefits produced and imposed upon the participants as part of participating in the study (Polit & Beck, 2019). Thus, the researcher took responsibility for limiting harm and ensuring more significant benefits. Thus, risks, discomforts, and protection from exploitation measures were considered and implemented.

Risks and Discomforts

There was no foreseeable physical or psychological harm to the participants of this study. However, the researcher was cognizant that participants could have past clinical experiences that were stressful or upsetting. Participant safety and trust with the researcher were ensured by informing and

reminding the participants of their ability to stop the recording, take a break or stop the interview at any time. In addition, the researcher had information available for the participants to access the student counselling services at the University.

Protection from Exploitation

The researcher ensured that the information participants chose to share with the researcher was not used to exploit them. Any sensitive or personal information shared with the researcher remained confidential, with the exception that the health or safety of a person should be at risk. Furthermore, the participant-research relationship was and will not be exploited.

Participants' personal information was kept confidential; participants' names and other identifying information were not included in any of the study's data files, publications, thesis, or other forms of dissemination. Instead, a list of names and associated identification numbers was kept in a separate secure file. Only the researcher and advisor had access to participants' names. Collecting and accessing personal information complies with provincial and federal privacy legislation. Furthermore, the original recordings were saved on the researcher's university secure network, which was accessible to the researcher only and password-protected. The advisor also had access to confidential research information (e.g., de-identified transcripts) through the secure university network (i.e., cloud, as imposed by the REB) should confidential information have been needed by the advisor, and information was made available directly on the university cloud (see the Consent Form in Appendix C for complete confidentiality procedures).

Respect for Human Dignity

Respecting human dignity includes the right to self-determination and full disclosure; in other words, voluntary participation, and informed consent (Polit & Beck, 2019). The researcher ensured that participants were fully informed before and on an ongoing basis throughout the study, ensuring that participation or withdrawal was voluntary and respected. Moreover, this study did not conceal or deceive

participants in any way. All questions were answered truthfully to the best of the researcher's abilities. The participant was informed of all data collection, data storage, and use on the Consent Form (see Appendix C), which also indicates the purpose of the study, what participation entails, and the potential benefits and harms. Also, the consent form notes that participation is voluntary and that withdrawal from the study can occur at any time.

Justice

The participants had the right to fair treatment (i.e., right to equality) and privacy. Therefore, the researcher treated all participants equally and provided the same benefits and study processes, including consistency in the recruitment and interviewing processes. Additionally, the researcher upheld the anonymity and privacy of participants by completely following through with the anonymity and confidentiality protocols identified in this chapter and within the *Consent Form* (see Appendix C).

Chapter Summary

This chapter delineated the study's methodology, demonstrating a cohesive integration of qualitative research methods, processes, strategies, and approaches, consistent with the research design that best suited the purposes of this study. In brief, the research design of qualitative description was selected for its alignment with the nature and purpose of the study. This study used purposive sampling techniques, semi-structured interviews with open-ended questions for data collection, and qualitative content analysis with inductive techniques for data analysis. Strategies, processes, and other considerations were presented with justification for their inclusion. Finally, strategies for trustworthiness and, ethical considerations were discussed.

Chapter 4: Findings of the Study

This chapter reports on the findings of this study. This section describes undergraduate nursing student (UNS) participants' perceptions of and experiences with clinical practice (CP) preparedness (CPP). Five themes were identified: 1) Psychological preparedness, 2) Cognitive preparedness, 3) Physical preparedness, 4) Clinical practice environment, and 5) Sources of clinical practice preparedness (CPP). Overall, CPP is characterized by the first three themes or three types of preparedness: psychological, cognitive, and physical. Themes four and five reflect participants' views of what impacts their preparedness, specifically, the clinical practice environment and sources for CPP. First, a description of the sample is presented, then, the thematic findings are described, providing insight into the phenomenon of CPP.

Description of the Sample

A total of 20 participants were interviewed. Table 4 provides a brief overview of the participants' demographic data. The majority of participants identified as female (n=16, 80%), and 20 percent (n=4) of the participants identified as male. No participants identified with other gender expressions or identities. Participants were between the ages of 19 and 40. Two-thirds (n = 13; 65%) identified as being between the ages of 19 and 23, while the remainder of participants were between the ages of 24 and 30 (n = 4; 20%) or 31 and 40 (n = 3; 15%).

Table 4

Participants Demographic Data

Gender	n	%	Completed clinical practice courses	n	%	Employment	n	%
Female	16	80	Nursing Practice 2	6	30	Employed	18	90
Male	4	20	Nursing Practice 3	7	35	Unemployed	2	10
Other			Nursing Practice 4	6	30			
			Nursing Practice 5	1	5			
Age			Higher education	7	35			
19-23	13	65	Some higher education	4	20			
24-30	4	20	Certification	1	5			
31-40	3	15	Degree	3	15			

Most participants were admitted to the undergraduate nursing program in 2021 (n = 12; 60%), with seven in the winter session and five in the fall session. Three participants were admitted in the winter of 2020 and in the fall of 2020 intakes (n = 6, 30%). Finally, two participants were admitted in 2019, one in each winter and fall intake (n = 2, 10%). Furthermore, the participants' time of admission into the program aligns with the completed CP courses, except for two participants who self-reported having to retake a clinical course (i.e., Nursing Practice course) at one point in the undergraduate nursing program. Of the 20 participants, six (30%) completed two CP courses (Nursing Practice 1 and 2), seven participants (35%) completed three CP courses (Nursing Practice 1, 2, 3), six participants (30%) completed four CP courses (Nursing Practice 1, 2, 3, 4), and one participant (5%) completed five CP courses (Nursing Practice 1-5). In addition, 19 participants (95%) were full-time status students, and one participant (5%) was a part-time student.

Seven participants (n = 7; 35%) had completed or started other post-secondary education before being admitted to the undergraduate nursing program. The participants who completed a post-secondary program identified completion of a bachelor's degree in arts or sciences (n = 3; 15%) or a certificate program (n = 1; 5%). The remaining 13 (65%) participants identified a secondary school diploma as the highest level of education.

Findings

Participants described three types of CPP that constitute their overall sense of CPP. These types include the students' psychological (i.e., mental and emotional state), cognitive (i.e., knowledge and knowing) and physical (i.e., bio-physical and material) preparedness. Within each of these themes or types of preparedness, participants revealed thoughts and behaviours that they engaged in to prepare for and in anticipation of the CP experiences based on what they perceived as influences (i.e., clinical practice environment and sources) they encountered. Participants also described what they *do* (i.e., activities or behaviours) to prepare for CP courses and during CP experiences. Figure 6 provides an overview of the

themes and categories, including which themes include categories. It is important to note that features within each type of preparedness are not mutually exclusive. Figure 7 illustrates the interconnection between the types of CPP and what influences preparedness, specifically, the CP environment and sources.

Figure 6

Themes and Categories of Clinical Practice (CP) Preparedness (CPP)

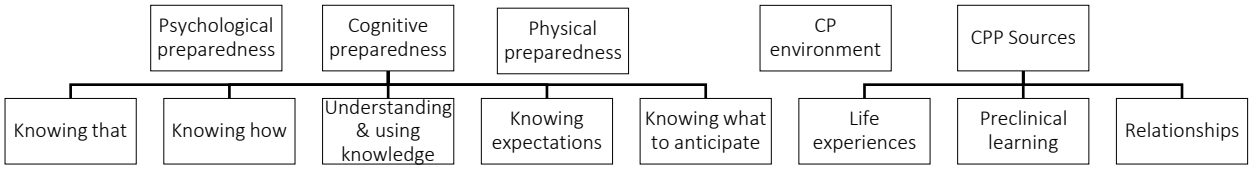
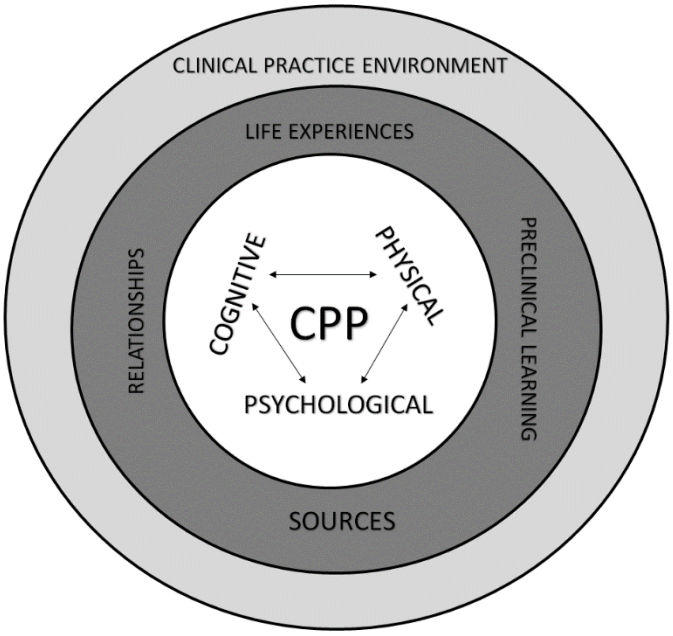


Figure 7

Clinical Practice Preparedness



Theme 1: Psychological Preparedness

Psychological preparedness refers to the mental and emotional state of an individual. Participants remarked on the need for psychological preparedness, using terms such as *mentally prepared* or *ready*, *feeling prepared to engage*, and *mindful*. Moreover, participants reflected on how their perceptions and

emotions influenced their psychological preparedness and many emotional (i.e., affective) responses to feeling prepared or unprepared for CP. Finally, participants shared what they did to psychologically prepare for CP.

Participants reflected on how their emotional state of preparedness relies on their perceived abilities to respond or act as expected during the CP experiences and as judged by themselves and associated influential persons (e.g., family, peers, patients, nursing staff, and instructors). Furthermore, their perceived psychological state, which included any mindset, attitudes, motivations, stressors, and/or emotions, contributed to the student participants' perceptions of self within the CP environment:

> The other element for me is psychological preparedness. So, I find that when I was going into acute, I was really anxious, and I felt like, “Oh my goodness, I don't know if I'm ready for acute nursing.” And so that was a different element, whereas, for surgery, I was like, “Let's go, I'm ready” (UNS009).

Participants also remarked on their perceived preparedness to engage in the CP environment. Thus, the participants referred to their preparedness as their readiness to engage and meet expectations as a learner, their readiness to engage and interact with persons within the CP setting (i.e., patients, families, health care staff, and clinical instructors; CI), and their readiness for “caring for real people” (UNS008):

> I think it's kind of a different thing but feeling confident to enter the clinical environment as a learner. And I guess part of it is feeling confident to start actually caring for real people. But then it's also feeling prepared to engage as a learner and speak to, kind of collaborate with the [clinical instructor] in that way (UNS008).

Participants reflected on the expectations they put upon themselves as learners, finding it difficult to align their expectations of themselves with their capabilities to care and interact within the CP setting:

> So, I think a lot of students struggle with that because they expect themselves to be up to doing everything right away. So, you have to feel like you have the knowledge base maybe, and the confidence to be able to ask questions and use clinical as a learning experience (UNS008).

In addition, the participants described their emotional state and readiness for interactions and caring for real people in the CP setting. A few participants noted the need to regulate emotions as they reacted to negative or challenging exchanges with persons:

> Preparing yourself that this is it, this is it! Like you're interacting with patients … and you have to be mindful of what you're going to say. … Sometimes, the [patients] they have dementia and … they didn't really mean what they say. So, preparing myself for that too. Like not to be emotional when interacting with them. I mean, like what they say, don't take it personally (UNS021).

Similarly, some participants associated their perceived preparedness with their confidence and emotional readiness to interact with healthcare members, patients, and their families in the clinical setting:

> I have to psych myself up for the interpersonal part of it. That's something mentally I have to prepare myself for, communicating with patients and with families and with other nurses and things, because I get social anxiety around that. So that's in my head. I have to prepare myself for what am I going to say. I make mental lists of how am I going to structure my day or how am I going to enter a certain conversation to make sure I get everything. But, you know, have the conversation that's important at that time and stuff. So, I think it really varies for different students, the amount and type of preparation they need (UNS008).

Participants also spoke of their emotions when they felt prepared or unprepared for CP. These expressed feelings ranged from positive and assertive emotions when feeling prepared to negative emotions and expressions of critical self-judgement and intrusive thoughts. Words used to describe their feelings related to CPP and unpreparedness by participants are listed in Table 5.

Table 5

Words Used by Participants to Describe Feelings Associated with Clinical Practice Preparedness.

Feeling prepared	Feeling unprepared	
Confident	*Nervous/Anxious/Stress*	*Decreased confidence*
Empowered	*Scared/Fear/Panic attack*	*Not happy*
Relaxed	*Feeling lost/Stupid*	*Unworthy/Useless*
Comfortable	*Feeling unsupported*	*Dumb/Not smart/idiot*
Happier	*Overwhelming*	*Doubting ability/Dread*
Cheerful	*Out of my depths*	
Felt nice	*Demoralizing/Discouraged*	
Feels good		

Participants associated these feelings of preparedness with their perceptions and experiences during CP events. Table 6 lists the participants' descriptions that elicited emotional responses to feeling prepared or unprepared for CP. They often associated their perceived knowledge, practical abilities, interactions, and relationships with persons (e.g., instructors, nursing staff, patients, peers) as the reason for such feelings. They described feeling prepared when they knew what to do, how to complete tasks, what to say, and had enough time to research what they needed to know. Also, participants noted feeling prepared for CP based on their perceived ability to perform or complete tasks.

Table 6

Reasons for Emotional Responses to Clinical Practice Preparedness.

Knowledge and understanding	Thoughts and perspectives
• What to know (*I should know this*) and what to do and what to say • How to do (practical-psychomotor skills) • Research and pre-briefing (time to know) • Understanding (*what's going on*) • What to do	• Making errors and fear of failure • Motivations and attitude • Judging and comparing self • Feeling judged • Pre-shift anxiety • Interactions, relationships, and support from persons • Being and feeling supported and guided through new experiences.

Participants commented on experiences that shaped their thoughts and perceptions (i.e., psychological preparedness) of their CP preparedness. Participants remarked on their *perspective (*or

mindset, attitude) as influential in situations of stress, anxiety, or psychological distress and discomfort and how their perceptions impact their psychological preparedness for the CP day:

> I think just the mindset, too. It's like if you're going into clinical with a bad attitude, you[‘re] probably going to have a bad workday. It's just like if you're working any other job. So, having the mindset that *you're just a student* [emphasis added], it's okay if you don't get things on the first try. Because sometimes, even the fully-fledged nurses aren't going to get things on the first try too. So, it's not like you have to be perfect and do everything 100 percent (UNS024).

Additionally, stress or anxiety-inducing situations, having had past relatable experiences (lived experiences, past CP experiences) and anticipating unknown or new situations influenced the participants’ perceived psychological preparedness:

> When you don't feel prepared, it seems really scary and overwhelming, and it's demoralizing. … If I'm not prepared, I just get really anxious cause I feel like, “Oh, I'm not able to actually get anything out of this, and I'm not going to learn what I need to learn from this” because I don't have the foundation of feeling prepared or feeling supported. I get more anxious with that definitely if I don't feel prepared (UNS008).

One participant used the term *pre-shift anxiety* to describe their perceived preparedness as they dealt with stressful and new situations in the CP environment:

> I'd say the most challenging would definitely have to be pre-shift anxiety. Because it could really influence everything that you're thinking of at the moment when you should be focused on researching your patient. But you're just more anxious about how the day's going to go. … It could impede a lot of the things that you do. So, I'd say that would be one of the things that prevents you most from being prepared (UNS012).

For a few participants, anxiety was such that they sought out professional help. This was the case for participant UNS012: “I found that my pre-shift anxiety was way too much, so I actually called my

doctor. She put me on anxiety medications". Others expressed overall increased anxieties; "I hate to admit it, I wasn't this anxious when I was a kid. I wasn't this type of person, but really, going into nursing school kind of just shocked a lot of us" (UNS016).

Also, feeling judged and fearing failure was important in participants' CPP. Participants discussed comparing themselves to their peers to inform them of their CPP, thus also affecting their perceived state of psychological preparedness: "Comparing yourself to others and feeling crippled because somebody else is more prepared than you are" (UNS009).

On another note, many participants spoke of the struggles for work-life balance resulting from their perceived overwhelming coursework and program expectations. Participants associated these struggles with increased feelings of psychological and cognitive unpreparedness for CP. They judged that personal life responsibilities and obligations, such as finances and the need to support themselves and others, contributed much more to these feelings of unpreparedness than for other students who did not have such responsibilities.

> Maybe I would say other responsibilities that I have. … Even though work does influence my preparedness, it does affect it. … It does affect it because most of the time when I come back from work, I don't have time to review my notes. I don't have time to go over those things. … I have these other responsibilities, as also with my family and things like that (UNS030).

Theme 2: Cognitive Preparedness

Cognitive preparedness is the second and most often discussed component identified by participants in association with CPP. While the term cognition is commonly defined with psychological considerations (e.g., mentation, thought processes), for this analysis, *cognition* or the *cognitive* aspect of CPP is presented separately and incorporates perspectives (i.e., thoughts and perceptions), knowledge and metacognition. Participants shared many behaviours and activities they engaged in to be cognitively prepared for CP.

The most common recurring word participants used to describe their experiences and perception of CP preparedness was "*know" or "knowing,"* which was used by the participants collectively over 2000 times during the interviews. Participants used these words (i.e., know and knowing) when discussing five occurrences. Within cognitive preparedness, five categories were identified. The first three types of *knowing* referred to knowledge and were distinctly remarked upon: Theoretical knowledge (*knowing that*), practical knowledge or psychomotor skills (*knowing how*), and *understanding* and *using* knowledge in CP (i.e., critical thinking and judgment to enact the nurse's role). Participants also remarked on an additional two types of knowing associated with CPP; unlike the other three, which are associated with knowledge, these additional two are knowing *expectations* and knowing *what to anticipate*. These last two refer to actions and behaviours that are perceived as expected of them (i.e., knowing expectations) and of preparatory actions or activities based on their perception of what they are going to see and do in CP (i.e., knowing what to anticipate).

Knowledge (Knowing That, How, Understanding and Using)

Participants spoke of having a theoretical basis (i.e., knowing that) for the CP experience as one of the important components of CPP. Having had theoretical knowledge pertinent to the CP experiences was revealed as essential: "I would say having the theory basis to enter into a new clinical. So, understanding if I'm going into acute care, I've studied acute conditions. If I'm going into palliative care, I've had a palliative care class" (UNS009).

All participants discussed the practical ability (i.e., knowing how) to perform functional, organizational, and interpersonal skills (i.e., interactions and communication):

> I feel learning of the skills that you'll be using in your clinical is definitely a big one, but not just learning it, but being comfortable practicing it as well. So you don't feel too shocked the first time you use it in clinical (UNS027).

Participants also shared that to be cognitively prepared, it is crucial to understand "what is going on" (UNS028). The participant's ability to link theoretical and practical knowledge facilitated their readiness to use nursing knowledge (e.g., critical judgment and action) in CP. That is, understanding the implications of theoretical knowledge, in particular, was associated with being prepared to act and to know how to act in CP:

> I would think it's a lot more understanding versus actually 100 percent knowing. Because I mean, I talk to my friends, and we're all going into clinical … in the moment, we don't know what to do. So, it's a lot of researching … before you actually go in and do something (UNS024).

Knowing Expectations

Participants identified that knowing or not knowing what is expected of them (i.e., knowledge and behaviour) was a significant element in their CPP:

> It means being informed [of] what your responsibilities are and what you expect, to make sure that everything you have to do ahead of time to actually [be prepared for CP] (UNS004).

Participants discussed knowing behavioural expectations (i.e., roles, responsibilities and limitations), what to know (i.e., knowing that and knowing how), and also the expectations others or persons (e.g., clinical instructors), put on them, as well as the expectations they put on themselves, as particularly important: "We're still students, and we've probably just learned whatever we're doing, what, last week" (UNS024). Thus, participants spoke of the importance and need for clarity of the expectations for clinical knowledge (knowing that, knowing how), what to know and research, and what materials to have prepared: "I would say, not knowing what to expect. I feel like cause if I don't know what to expect, I don't know what to prepare for exactly" (UNS030).

It was also made evident that clinical instructors, themselves as learners, their families, the individuals within the CP environment, and the program set the expectations of the students for being

prepared for CP. Participants also spoke of past CP experiences, preclinical learning, and persons as sources for informing them of expected clinical knowledge and behaviours.

Knowing What to Anticipate

Participants spoke of *anticipation*, being able to anticipate what they will need to know (i.e., knowledge), see and do (i.e., practical knowledge and using knowledge) while in the CP environment. Their ability to anticipate CP situations informed them about what and how to prepare for the CP experiences: “I guess, just because it's so new, right. There's so much that's unexpected … you can't quite grasp everything” (UNS014).

Participants who lacked knowledge or experience in CP were challenged with not knowing what to anticipate. Thus, knowing in anticipation of CP was often associated with *unfamiliar* and *unknown* CP situations: “I think the most challenging is when something comes up that you weren't anticipating, or you didn't think about the night before. I think that's hard” (UNS027). Not knowing invoked fears and insecurities in the participants' competencies and increased feelings of stress and anxiety, thus making them feel unprepared for CP: “It stresses me out to be in the unknown, with not knowing what to expect” (UNS004).

Participants identified not being able to anticipate what to know, what to do and how to do it without being informed through past experiences (i.e., life experiences and previous CP experiences), preclinical learning (i.e., academic courses), and significant persons (e.g., CIs, peers, mentors). Thus, participants were informed of what to anticipate through various sources. This next participant speaks to having learned what to anticipate from previous CP experiences as the CP course progressed:

> Trial and error, the first few days, are always more stressful because you don't know exactly what to expect and you're in a new setting and new people, new everything. … By the second week, you're like, “OK, I need to print more of these papers. I need to bring these things. I don't have to bring these things. They need to review these illnesses”, that kind of thing (UNS004).

Activities for Cognitive Preparedness in CP

The findings revealed many behaviours and activities participants engaged in to be cognitively prepared for CP experiences. Participants spoke of what and how they prepared in anticipation of and while onsite during the CP experience. The findings revealed preparatory activities and behaviours specific to two timeframes to be prepared cognitively: before and during the clinical day.

Before the clinical day, participants prepared for CP by reviewing, researching, and practicing competencies (i.e., knowledge; knowing that and how) that are important to the CP environment. Participants reviewed and researched illnesses and treatments (i.e., knowing that) that were anticipated and specific to their clinical rotation and common to the CP environment. In addition, participants noted the importance of reviewing psychomotor skills (i.e., knowing how) before the CP experiences. They practiced at home and in the laboratory, reviewed videos, checklists, and notes. Participants felt more prepared if they were informed by the clinical instructor of the skills they would be performing for the CP day, allowing them the time to review how to complete tasks:

> A lot of [clinical instructors] will give you a list of things that, based on the unit, you should review. And I'd review those, or there's certain skills that I know would come up. So, when we started giving meds, I would review that (UNS008).

After the first couple of CP experiences, participants began to accumulate and organize a clinical binder to use as a reference and resource while in CP. These clinical binders include medical facts on illnesses, medications, and laboratory values, and they also had memory aids, facts sheets, and checklists (including skills), which contributed to their sense of preparedness while in the CP environment:

> I actually started [the clinical binder] in nursing practice three; in nursing practice one and two, I kind of just went with the flow. Like, I only started doing that [in] the most previous clinical. ... I think it was just because this unit was a bit more intense, so I felt that I needed to be a bit more prepared for my acute medicine rotation (UNS012).

Additionally, reflective practice was frequently noted by participants as they revealed the need to reflect on their previous experiences and in anticipation of the next CP experience the evening before the CP day, thus informing their preparedness for the following day (CP day 2):

> Normally, I would know which patients I would have because I had them the day before. I'd have the same patient two days in a row, so I would make a little list of “at this hour, I'm going to see if there's any order changes or medication changes,” “at this hour, I'm going to give the medication,” “at this hour I'll do vitals.” I kind of just made a whole schedule. And yeah, that really helped me the next day stay on track (UNS027).

Also, social media personalities (i.e., influencers) on YouTube, TikTok, podcasts and other platforms were identified as influential in informing cognitive preparedness: “I listen to some podcasts I’ve reviewed their things, and I feel much more prepared seeing or listening to how others break down … the questions. And so that's really helped me” (UNS004).

During clinical days, participants continued preparatory activities and behaviours in the CP environment. Thus, participants would arrive early to become informed (i.e., researching and reviewing) and prepare for tasks (i.e., reviewing and observing). Also, two underlying influences were viewed as barriers by participants, including inadequate time to research to know and understand, and limited access to information in the clinical area (i.e., access to resources and technology). More specifically, to become prepared, participants gathered patient information (i.e., patient research), seeking to know what was going on (i.e., knowing that and understanding). Thus, having time to research their patient’s conditions, medications and treatments, create lists and complete daily organizer sheets, utilize the resources they prepared in advance (e.g., clinical binder) and review guidelines, and effectively understand and plan their CP day. Daily routine sheets helped them plan and organize patient care needs:

> I definitely make sure I get there early so that I can see who my patients are, and I can have a little second to review in my binder. You know, important things that we need to know about

> their condition and stuff. And there's a brain sheet that I would use, so write down important information on that. So, I have that at hand throughout the day (UNS014).

Based on the expectations of what they thought they needed to know, participants also perceived they had insufficient time to complete their patient research and become informed about the patient's needs and anticipated care. These expectations contributed to their perceived lack of knowing (or inadequate) preparedness:

> Every first day of the clinical rotation, that's why I don't feel prepared is because of the time constraints … I don't ever feel prepared going into it. But as soon as I know what I am doing, I am more prepared (UNS016).

As well, participants discussed reviewing how to complete nursing skills and tasks by reviewing organizational protocols, policies, and guidelines, as well as course skills checklists, demonstration videos, and videos accompanying their textbooks (i.e., Nursing Skills Online). A few participants noted visualizing and partaking in cognitive rehearsals before engaging in skills:

> I guess I visualize it. So, if I have to put in a catheter, which I haven't done in ages, I can watch a video. Or I can watch my own video on YouTube. I can review this on the [HOSPITAL] website, the skills. And then, I have all my stuff ready. And then go over the steps of how to do things in my head before I actually go into the room (UNS013).

While differences in computer and paper-based charting were noted as a challenge, the sites with limited computer and internet access proved to be challenging. Participants valued having access to

> information, such as reference manuals and materials, guidelines, protocols, procedures and policies, and the internet (e.g., Google Docs, course notes, learning platforms, applications, etc.). Access to information on-site to research and review was a significant element for participants needing to understand "what's going on" (UNS026) to feel prepared:

> I do a lot of [review and research] while I'm there, but you never know what's going to show. You don't really have time to prepare for everything. But then, it's to know your resources, I guess. So, you need to know where to go to prepare quickly if you need to (UNS008).

Moreover, phone applications with evidence-based resources (e.g., Up-to-Date, Lexicomp) were also helpful tools to prepare and feel increased confidence in their ability to become prepared for nursing tasks or answering questions:

> Just having these apps on my phone, because I think also that these apps helped me prepare, like Lexicomp. … There's apps that I use throughout the entire rotation and there is one that I used a lot, Up-to-date, those two apps (UNS012).

Participants identified multiple resources and materials that were helpful in their preparation for cognitive preparedness in CP. Table 7 lists all identified resources and materials the participants utilized for their cognitive preparedness before and during the CP day.

Finally, the participants often associated sources of cognitive preparedness as past experiences, preclinical learning (i.e., courses), and persons (i.e., clinical instructors, mentors, and peers). CP sources are observed and reviewed later in this chapter.

Theme 3: Physical Preparedness

Physical preparedness is the final type of CPP described by the participants. They spoke of bio-physical and material preparations for CP. Notably taking care of their biological and physiological needs through grooming, eating, and sleeping. Several elements associated with physical preparedness were previously discussed in psychological and cognitive preparedness—namely, elements within self-care and activities for cognitive preparedness for CP. As noted earlier, CPP types share features.

Participants noted that essential physical self-care such as grooming (e.g., bathing, brushing teeth, dressing, fixing hair), eating, and sleeping are essential components to being prepared for the CP experiences. Thus, ensuring that physiological needs are met was often the first step to feeling prepared

Table 7

List of Resources and Materials Used by Participants for Clinical Practice Preparedness.

Reference materials and clinical binder	Theory course content	Other reference materials and manuals	Social media and online nursing influencers
Preparatory booklet, worksheets, and student learning package. List of definitions, common illnesses/diagnoses and treatments, common medications, equipment, laboratory diagnostic tests and values, skills checklist, quick reference sheets, unit routine, calculation formulas, protocols, guides, and daily organization sheets/checklists.	Course content, PowerPoint slides, textbooks, University learning platform, website, library (e.g., Nursing Lib guides), videos, Nursing Skills Online (NSO), and the university channel.	Toronto Notes, flashcards, pocketbooks/ companions, drug guides, badge cards, and online clinical bundles.	Nursing influencer videos and personalities on social media platforms such as YouTube, TikTok, and podcasts (*e.g., Registered RN, Nurse in the Making, nursing.com*).
	Phone applications	Resources on the unit	Other
	Up-To-Date, Lexicomp, Micromedex, University learning platform, Google Docs.	NSO, reference books, parental drug manual, Compendium of Pharmaceuticals and Specialties (CPS), policies and procedures manual, online intranet, internet access, and medical applications.	Internet access to search engines and platforms (Google, YouTube videos/channels, skills demo videos), purchased clinical bundles.

for the CP day: “I would say that the most important, it's my health. How I take care of myself, so I sleep well, I eat well” (UNS025).

Participants noted the importance of having materials prepared and *ready to go*. Table 8 lists all the materials mentioned during the interviews for what participants identified needing and having prepared before the clinical experience. Participants often noted the need to have prepared their bags and materials the night before the CP day:

> My bag is usually already packed and ready to go the night before. So, all I really have to do is put on my scrubs and just go, head out the door, breakfast and brush my teeth and go (UNS012).

Table 8

List of Materials for Clinical Practice Physical Preparedness

Attire	Equipment and supplies	Resources	Provisions
Uniform/scrubs clothes name tag shoes	stethoscope pen light blood pressure cuff printed worksheets or brain-sheets coloured pens	clinical binder notes medication cards	snacks meals coffee water bottle

Other aspects of physical preparedness discussed by participants were awaking and arriving early, grabbing provisions, having enough gas in the vehicle, and making transportation arrangements. Some participants went to the clinical site before their first day to become familiar with the site, where to park and where to go: "I went the day before to make sure which door I was going in, where to park, that kind of thing" (UNS004).

Participants also frequently remarked on self-care activities. While many activities included physical components, participants often engaged in these self-care activities to also feel psychologically prepared for CP experiences. Thus, in preparation for CP experiences, participants engaged in physical, social, mental, and spiritual activities. Table 9 provides a list of the described self-care activities participants engaged in for CPP.

Table 9

Self-care Activities for Clinical Practice (CP) Preparedness.

Physical	Social	Mental and emotional	Spiritual
Exercising, grooming, eating, sleeping, scheduling time for physical needs.	Time with family (meals), friends (talking, visiting), pets (engaging with, going for walks).	Psychological services (counselling), treatment (medication), limiting activities the night before CP, singing, self-reflection, meditation.	Worshipping, praying, singing.

The three types of preparedness (i.e., psychological, cognitive, and physical) for CP described in this chapter demonstrated shared features. The findings suggest that the three types of CPP (i.e., psychological, cognitive, and physical) have an interconnected relationship, noting that a deficit in one type, despite being prepared in the others, could impact their perceived and actual CPP.

Theme 4: The CP Environment

Participants were aware of the impact of the CP environment – its varying elements, such as interactions, structures, and events – on their CPP. Several circumstances were identified within the CP environment that contribute to the students' perceived preparedness, including clinical instructor-to-student ratios, access to information (i.e., resources, materials, technology, and applications), adequate time to become prepared and informed (e.g., understanding, anticipating, patient research, treatments and care plans, planning, and organizing), familiarity with the CP site (physical layout, equipment, and technologies), the climate of trust or distrust on the unit (i.e., learning environment, relationships and interactions with persons within the environment).

First, access to the clinical instructor was mentioned as a contributing factor to the participants' perceptions on and experiences with preparedness. Participants remarked that limited support and supervision in the CP environment was a barrier to their CPP:

> And there's also usually six or seven people in a group. So, one clinical instructor for that many people can't be around to answer all your questions, and you have your patients and the other students [have] their patients. They're not going to be doing the same thing. And so, you don't have as much support (UNS004).

Also, previously identified as influential to cognitive preparedness, having access to technologies and information in the clinical setting is important to the participants in feeling they have the tools to become prepared. In addition, participants spoke of ease of access to clinical information, resources, and materials through their personal cellular phones and site computers. As such, access to intranet resources (i.e., drug guides, skills, policies, and procedures), clinical applications (e.g., Micromedex, Lexicomp), and computer charting, and patient information retrieval contribute to the participants' ability to be prepared for the environment and anticipated experiences:

> At [Hospital 1], it just takes forever to do your patient research in the morning because you've got a binder that's like this thick. And a lot of the papers are very unimportant to what we're actually doing, especially if they've been there for a long time. There's just so much information, whereas on a computer, you can type things, you can go from document to document, you can see all the vitals. It's all in a chart for you. It's all laid [out] properly. And also, [Hospital 2] had the Intranet, so you could go look up the nursing skills that you needed specific to that hospital, you go look up the supplies. … This instructor was also very laid back with cell phones. As long as you weren't abusing that privilege and using them in a patient's room … but if you needed to access your clinical prep and … you needed to access lecture notes … that was very helpful (UNS004).

While considering participants' access to information and, more pointedly, *ease of access* to information, participants noted that the *time* to prepare while in CP and become adequately informed for anticipating their CP experience was equally important. Participants discussed their time to prepare, research, and review crucial clinical information (i.e., patient research), which allowed them to feel more prepared for the care of their assigned patients and meet expectations (i.e., knowing that, knowing how). Thus, CPP elements were noted as the time to look up patient information, research medical conditions and medications, understand care and treatments, and plan and organize their clinical day. Some participants emphasized the need for more time before beginning the clinical day:

> In the morning, we only have an hour or 30 minutes to do patient research. … I feel like we should be given more time because that's really new for us, just to get a hold of it [to understand]. But then once we're used to it, it's nice if it's a shorter time because we know where to look exactly (UNS021).

Additionally, consecutive clinical days were consistently mentioned as influential in providing a sense of preparedness for CP experiences. A second clinical day provided the time necessary for the

participant to feel prepared for the anticipated care, improve performance, and consolidate their clinical knowledge and practice:

> I think the only time I actually feel [prepared] those days are on the second day of the rotation … [we] only have it two days a week. It just feels a little overwhelm[ing] going into it again and learning the new patient for the day. But for the second day, I feel much [more] prepared (UNS016).

Another influence was the participants' familiarity with the CP environment, including factors such as the physical layout, knowing where to access information, and finding resources, materials, and equipment:

> Having an understanding of how the hospital has their station set up and that, so I know where to find information right away. That's always important. So, we go back to your first day tour, they do show us where the stuff is kept, and it is important because they have kept charts and clipboards and everything in different places. So, when I can't find something, I might know where to go look for it too. So, that definitely will help with preparedness (UNS028).

Similarly, knowing the unit's organizational structure, such as different staff roles and "who to go to" (UNS027) or approach in varying situations, contributed to perceived CPP. Moreover, a significant influence in the CP environment was the participants' perceptions of the relationships and conduct of the persons in the CP environment: "I think it's just the nervousness of facing a really hard instructor. Because the only times I've felt unprepared is when I haven't had a good relationship with my instructor" (UNS024).

Accordingly, the climate of trust in the CP environment (i.e., as a learning environment) includes a great many factors in the participants' CPP and none were more referenced by participants than the relationships with associated clinical setting persons such as the clinical instructors, nursing staff, peers,

and patients. These persons were identified frequently in the interviews as influential in CPP, and the nature of their relationships are described more fully within the last theme of CP sources:

> I think that good [clinical instructors] have clear expectations and clear guidelines and things that they want from us, because it is very hard to guess. And I don't really feel like it's on us to guess those things. … We usually get an orientation ahead of time, where those [expectations] are laid out, and we hear a little bit about them, which makes it a lot easier to relate and feel supported. I think it's important for them to be open to questions and actually helpful. So, the past [clinical instructor] that I had was very much like that. She was very open, and she would support us but not feed us the answers, I feel that she really made me think (UNS004).

Clinical instructors' expectations, engagement, approachability, verbal persuasion, acknowledgement, feedback or direction, the instructors' conduct toward the student, expertise, familiarity with the CP site, and specialty were all attributed to the participants' CPP. These last points were cited as being an equally important influence on CPP, as expressed by this next participant when speaking of their experience with nursing staff in the CP environment: "Well, it made us really feel less than them, for sure. … it made me not feel prepared because of the way they treated us" (UNS016).

Thus, the CP environment was often associated with psychological stressors. Participants voiced multiple reasons for feeling unprepared for the CP environment, including fear of being judged, embarrassed, feeling intimidated or bullied, practice standards deviations, fast-paced, overwhelming, understaffed, and stressed staff, feelings of being a burden, lack of support, fear of the nursing staff, or of intimidating patients:

> I feel like the environment isn't always the supportive learning environment that would be ideal. Sometimes, it's really fast-paced, or nurses they're overworked, and the whole environment is still really stressful. So, then it's hard stepping into that and feeling competent because, first of all, you're not competent; you're a student. … Because there's no time for that, or you're just in

the way. And then you don't feel prepared (UNS008).

In summary, the findings demonstrate the importance and influence of the physical environment, access to information, and, more importantly, the persons' influence on the participants' psychological and cognitive preparedness within CP environments. As noted, the relationships with significant persons in the CP environment were reportedly important sources of CPP, and further descriptions of the influences of CPP are indicated in the section below within *Sources of CPP*.

Theme 5: Sources of CPP

The sources of CPP were influential components that informed participants of their preparedness and how to prepare for CP. As mentioned in previous sections, CPP components (i.e., types of preparedness and CP environment) are informed by various sources. Three categories for CPP sources were identified from the interviews, including preclinical learning (e.g., courses, simulations, past CP experiences), life experiences (i.e., lived experiences, continued life events and work experiences), and relationships with CP significant persons (e.g., clinical instructors, nursing staff, peers, patients).

Preclinical Learning

The participants described how they are prepared for CP within their formal nursing education. Participants were prompted to reflect on theoretical courses, laboratory/skills courses, simulations, CP courses, clinical site orientation and other preparatory activities and the potential role of these influences on CPP. Moreover, preclinical learning within all aspects of formal nursing education was often referred to, by participants throughout the interviews, as sources (i.e., informing on) for CPP.

Common Factors Informing on CPP Within Preclinical Learning. Two recurring features informed CPP: knowledge and knowing and the timing of preclinical learning experiences.

First, common throughout all types of preclinical learning are the concepts of foundational theoretical knowledge (knowing that) and practical knowledge (knowing how), as well as understanding and using knowledge (critical judgment) in practice. Evident in the findings were the roles that each

nursing program component played in preparing the UNS for CP. These findings reflect the elements found in cognitive preparedness: theoretical and practical knowledge, understanding and using knowledge in practice, and knowing expectations and knowing what to anticipate. In addition to what was already described about cognitive preparedness, participants reflected on *knowing enough* to be prepared for CP. Hence, preclinical learning prepares them to understand, use, and ultimately integrate nursing knowledge into clinical practice:

> I feel like you have to really have a good understanding of the pathophysiology and pharmacology of the patient conditions that you're looking after to be able to go to the next level, which is actually solving problems and trying to communicate with the patient and the health care team. I just think it's really important to come into clinical with a solid understanding of that. … I think integrating knowledge from all the different courses that we take is really important (UNS008).

Some participants discussed that theory courses do not provide "enough on [their] own" (UNS014). They further indicated that not enough knowledge and practical (or experiential learning) opportunities before CP contributed to feeling unprepared. Similarly, most participants expressed that virtual simulations did not adequately prepare them for CP experiences. Participants also indicated feeling *overwhelmed* and having a *disconnect* in using learned knowledge in CP. Participants noted not "understanding what's going on" (UNS004) and lacking a "deeper understanding" (UNS026) for CP. Despite having completed the associated theory courses, participants struggled to integrate what was taught from the theory courses into CP, thus influencing their sense of preparedness:

> It's just harder to directly apply to clinical in a very tangible way like you would with a skills class or physio pathophysiology. … I think in clinical rotations, it's hard for students to think as deeply about all the different courses and integrating everything, it's really overwhelming. … You just spend so much time trying to figure out that and the skills too that, you can't even go to the next step (UNS008).

Second, another common factor revealed within the context of the preclinical learning experience was *timing*. Some participants reflected on the importance of timing theoretical, skills, clinical courses, and simulation experiences. Overall, participants expressed that the timing of the theory and skills courses associated with the CP course contributed to their perceived CPP. Some participants conveyed that completing skills courses prior to, rather than concomitantly with CP courses had a favorable impact on their perceived CPP. Participants also saw great value in the associated theory course when taken before or concomitantly with the CP experiences:

> They taught a bit of pediatrics, and they taught a little bit of post-op in this most previous class. So that's going to help me going into my surgical and then my pediatric rotation. So, I think just like the layout of the courses, do help me prepare for my next clinical rotations (UNS012).

Similarly, this next participant noted how concomitant theory and CP courses can negatively affect the student's perceived preparedness if course content is not addressed prior to exposure in the clinical area:

> I would do all the theory courses first … just have that time to physically practice what you're doing and then go into clinical. I think I would have felt more prepared if I had that opportunity. … because I found a lot, especially for this past medicine rotation, some of the theory stuff I would learn would be coming up sooner in clinical. And then I just would feel like I didn't know how to help this patient. … because I just didn't know what their illness was (UNS014).

Theory Courses. Overall, participants observed that theoretical courses were essential and foundational to their perceived CPP. Participants frequently spoke of understanding health and illness concepts of the theory courses:

> I think most of the courses that I've taken so far, specifically the health and illness courses like pharmacology and acute and chronic illness, those are the main courses that I think really prepare you for what you're going to see in the next clinical rotations (UNS012).

However, participants held mixed views on the value and importance of some theoretical *nursing relations* courses for their CPP. Some participants expressed that nursing relations courses are particularly helpful and others as "useless" in their preparedness for CP. Some nursing relations courses were noted to help add a deeper, more empathetic understanding and communication in their CP.

> I think [course name] was probably the most helpful out of all of them. Some of them, I think are useless, but the [course name] one is probably the one I got the most of. … My prof[essor] told us about how do you communicate with empathy. And I still use that to this day (UNS012).

Participants also spoke of how experiential learning activities in the classroom were helpful to their sense of preparedness, especially for learning how to use theoretical knowledge in CP: :

> We would do case studies on one of the days of the week, and basically, we read. ... But that really helped us a lot. That really helped me a lot with going through the steps on what to do first. So, say this person's going into this, "OK, what should I do? What assessment do I do before calling the doctors?" and stuff like that. That was helpful for me (UNS016).

Virtual Simulations. Participants were prompted to reflect on simulations and if or how they contribute to CPP. All but two participants have only completed online virtual simulations (VSims). The two other participants completed a virtual synchronous simulation session via videoconferencing (i.e., Zoom). None of the participants had previous experience or participated in in-person simulations due to COVID-19 restrictions in effect at the time.

Participants noted that VSims provided a safe environment for practicing and using nursing knowledge, where no harm learning helped consolidate knowledge. Nevertheless, participants' initial responses were to deny VSims' contribution to informing CPP. Most participants immediately responded using "not useful" or other words akin to such meaning. Table 10 lists the reasons participants identified VSims as not being useful.

Table 10

Participants' Reasons for Virtual Simulations Not Being Useful

- No hands-on (psychomotor skills) and experiential learning opportunities
- Lack of realism
- Lack of meaningful interactions (communications)
- Lack of intentional learning (clicking to complete)
- Frustrations with expenses, technology, and lack of Canadian context.

With further prompting from the interviewer, participants did reflect on and identified some elements within VSims that inform CP, including guiding them in knowing what to do for similar situations, what to expect and what to ask or say. Thus, VSims enabled participants to become familiar with select situations they may encounter in the clinical setting. For example, participants identified communication as an element within VSims that informed CP:

> I remember that we used the virtual simulations, and they were actually quite helpful … it emphasizes completing a full assessment, checking the vital signs and auscultating the lungs, auscultating the heart, and asking the patient if they feel any pain anywhere and asking the patient all the assessment questions. So, the virtual simulations were really thorough and that I thought were really helpful for me (UNS010).

Another helpful factor for CPP that emerged from the interviews? included post-simulation discussions (i.e., debriefing sessions). VSims were also noted for being helpful in consolidating routine practices, connecting knowledge, and developing clinical judgment, thus informing cognitive preparedness:

> They're helpful in getting you used to thinking, to integrating all of the pathophysiology and assessment skills with a virtual patient. … I think they are helpful in getting you prepared for actually connecting theory to a real patient interaction (UNS008).

Skills Courses. Participants readily revealed their perception that skills (or laboratory) courses were one of the most important contributing elements informing CPP. The skills courses were deemed

especially valuable in the participants' first exposures to practical nursing tasks and procedures, providing them with the opportunity to be introduced to the nursing know-how (i.e., practical preparedness) needed for CP:

> I just think that being able to go into the skills lab, do the skill and having an environment where you're allowed to mess up, make errors, ask questions, not like sometimes you go in not knowing what you're doing. So, I think that really helps me build on my skills to prepare for clinical (UNS012).

Participants revealed certain elements of the skills courses that are helpful in their CPP, such as their exposure to new equipment, the opportunities to play with the equipment, knowing what to do, the no-harm-safe learning environment, and the repetitive nature of skills practice. Further, repetition and practical testing were noted as a source for building confidence and CPP. Of note, participants remarked favorably on having been evaluated on their psychomotor skills through the submission of individual video recordings:

> At first, I really didn't like that you have to make videos of yourself when you're doing all the skills, and I thought that was a bit strange. But now I understand because you had to repeat yourself so much, and you had to really narrow down your time and stuff, too. So, you're being more efficient. I think that really helped, too. So that I felt better again when I was in clinical (UNS014).

Participants spoke of limitations and inconsistencies in their skills courses, which led to later perceived lack of preparedness in CP. Table 11 provides a list of limitations and inconsistencies observed by participants. As mentioned earlier, the factors of enough time for practice and practical learning opportunities were highly valued. Many participants expressed needing more time in skills courses and open practice time to feel prepared for CPP:

> If there was more time in the skills course to practice or one class where we're learning, one class where we're doing, that would definitely help. I think if there was more open lab time, that would

be good, too. … That would definitely make me feel more confident in the skills and then obviously more prepared come time to actually practice on people (UNS027).

Table 11

Skills Courses Inconsistencies and Limitations Influencing Clinical Practice (CP) Preparedness

- Practice time.
- Instructor availability.
- Practice expectations from lab to CP.
- Equipment availability and failure.
- Equipment differences in CP.
- Realism (not the real world) in the laboratory and doing it on a real person in CP.

Clinical Practice Courses. Most participants described how past CP experiences informed and prepared them for subsequent CP experiences. Past CP experiences were noted as a critical source informing their CPP, including what to expect and anticipate in later experiences. Similarly, past CP courses informed the participants on their cognitive preparedness, providing time to consolidate knowledge and practice using knowledge. CP courses enabled the participants to develop various skills and gain experiential practice. One participant stated that CP courses are "helpful … [in] consolidating the past knowledge and adding to this knowledge and being consistent in practice" (UNS010).

Clinical practice experiences enabled the participants to build on prior experiences to inform their psychological, cognitive, and physical preparedness, thus informing thoughts, behaviours, and expectations for the next CP experience. Participants described that with each ensuing CP rotation, they perceived an increase in their preparedness, despite increasing course expectations. As such, participants spoke about the differences in and evolution of their preparedness from one CP course and experience to the next, shaping their perceptions, decisions, and actions associated with CP: "I think the second [clinical course] I was more prepared. Because I have some experience from the first clinical. I think that's the only difference, I think I feel I'm more confident in doing this" (UNS022).

There were, however, some participants who voiced that their CPP was negatively affected within their CP courses due to events or relationships. This next participant perceived decreased confidence and preparedness for their subsequent CP course as events and relationships with persons (i.e., clinical instructors) from a previous CP experience informed their current CPP perspective:

> I have been really feeling like I don't know if I can handle this. I don't feel confident. My [partner] is a teacher. And [they're] like, "I think it's just because you had a really bad experience, just give it another shot." … I'm actually really anxious for the next semester just based on what happened with the [clinical instructor] in my last one (UNS014).

Another element discussed by participants in relation to CP courses and informing CPP, similarly seen in VSim, is the post-conferencing sessions (i.e., debriefing sessions). Some participants described conferences as a source for information and influence for preparing for later CP experiences. Clinical conferences enabled participants to learn from their peers' experiences as well:

> We also would do post-conference every second day and end the week, and I found that really helpful. … We got to hear about everybody's patient. … Post-conference gave us a really good time to connect and share our experiences and hear others. … [The clinical instructor] would ask, "why is this?" and … "tell the group about this". So, I thought that was really helpful (UNS004).

Clinical Site Orientation. Participants were prompted to reflect on clinical site orientations (e.g., hospital) they may have received on the first day of the clinical rotations. Some participants described that the orientation day prepared them for CP by becoming familiar with the CP environment and clarifying expectations. Table 12 presents the elements included in a site orientation that participants identified that informed their CPP.

Participants described activities during the orientation day that helped to prepare them for CP and becoming familiar with the new environment (e.g., physical environment, location of resources and

materials, equipment), as well as the culture and routine of the unit, such as scavenger hunts and shadowing staff members:

> I'd say [site orientation] are [*sic*] pretty helpful. Just having the first couple of days to get used to the facility. It helps you understand where certain supplies are and where the crash cart is … and knowing where … the charts are and knowing how to navigate things on their [Electronic Patient Record] and that unit-specific kind of thing. … Sometimes even shadowing the nurses or the health care aides. … Seeing how everything's laid out, seeing how the staff work together and seeing the dynamics … really just helped me prepare (UNS012).

Additionally, participants described how orientation days informed them of roles and responsibilities (e.g., policies, procedures, documentation) and clinical instructor expectations: "[What] I'm allowed to do and what I'm not supposed to do" (UNS016). Consequently, the first orientation day was essential in informing the participants on what to know and how to conduct themselves in the CP environment:

> I think usually we get an email, expectations are set. The [clinical instructor] will let us know what they want to see, what they don't need to see, what you can ask your buddy nurse. For me, that's always … pretty unclear. There doesn't seem to be a straight line between different [clinical instructors], what their expectations are (UNS013).

Participants also reflected on orientation days and aspects that did not contribute to their CPP, such as standing and listening for long periods of time. Furthermore, participants noted that providing information beyond the *need-to-know* during the orientation was not helpful for them in their sense of CPP, especially when challenged to retain all the information provided:

> I feel like I hate the first day in the hospital because you're standing, and you listening, … Eight hours you're standing and listening. And honestly, after this first day, I barely remember 50

> percent of the information they give because this is so hard, just standing and not doing anything and just listening (UNS025).

Other Preclinical Activities. Participants were unaware of any workshops or seminars that would help prepare them for CP. A few participants described how, due to overlapping priorities and heavy workloads (i.e., within courses), they would likely not attend optional preparatory sessions despite seeing the benefits of such activities. However, when prompted, a few participants reflected on the potential benefits of workshops related to CPP that focused on mental fitness, self-care, and preparatory activities (e.g., meal prep), in-person workshops for basic patient care, CP rotation-specific skills review, team building (i.e., social or peer support), introduction to CP, and understanding the clinical healthcare structure:

> I would say just more how to deal with things like pre-shift anxiety. I would say more certain situations if they had something that they didn't know prior to the clinical practice, something that we should know. I'd say that would be pretty helpful. Or even just a Q & A where we could ask questions (UNS012).

Life Experiences

A second source for CPP were life (past, current and ongoing) experiences. Past experiences informed the participants on all aspects of CPP. Like preclinical learning experiences, these life experiences informed the participants on what and how to prepare for CP and what to expect or anticipate. Interwoven in the findings were a multitude of elements within life experiences that informed participants' CPP, such as work experiences, home-life responsibilities, relationships, and schooling – which were also described as influences and sources impacting perceptions of and behaviours for CPP. These life experiences were described as informing psychological (e.g., coping and perception), cognitive (e.g., problem-solving, knowledge using) and physical (e.g., anticipating needs) preparedness for CP.

Some participants described that having stressful past experiences and obligations, such as having immigrated, being independent, and being a mature student, play an essential role in informing their CPP (i.e., psychological, cognitive, and physical preparedness):

> I immigrated on my own … It's again very … different from people who … were born and raised in Canada, [they] have all these resources, maybe wealthy parents and who pay for their school and everything. But I needed to survive. And now I'm here, which makes me different. And I'm super grateful for this experience. But at the same time, for younger students, I would suggest just move out and figure it out with yourself. This will be very useful (UNS025).

This same participant observed how having had other life stresses or demands helped to put the stress of the nursing program in perspective:

> This is amazing when you have a family who provides you with … everything. But I feel when you have only one stress in your life, it is nursing school, then [you feel] your life is ruined – because this is nursing school, of course it's stressful – but you need to experience other stresses in [*sic*] life. So then you can compare … the other stresses and understand that nursing school … it's not something that's going to destroy you on the level of death or life. … Even if you fail something, or even if you need to retake something, it's not the end of the world. But for students who … [have] been living in this safe environment. … this is such a big deal, and I feel these people struggle the most in nursing school because this is everything for them (UNS025).

Moreover, mature participants were more likely to discuss how their added responsibilities and obligations, such as a mortgage, rent, tuition, and other financial obligations, impacted their perceptions of CPP:

> I would say other responsibilities that I have. Because I also work sometimes. Even though work does influence my preparedness, it does affect it too. … because most of the time, when I come back from work, I don't have time to review my notes. I don't have time to go over those things

> that you know that my [instructor] needs me to do. … It's because I have these other responsibilities. … Those are the major things [that prevent my CPP], my emotions and the other responsibilit[ies] that I have (UNS030).

As evident from the previous quotes, having responsibilities, life and work experiences prior to entering the nursing programme also informed participants of their perceived CPP. Several participants described that past life and work experiences contributed to their knowledge and skills for CP, such as having been in a work role that developed their interpersonal and interprofessional skills. Participants' work experiences contributed to their increased confidence and ability to manage their behaviour (e.g., responsibilities, accountability, organization, multitasking and prioritization skills, emotions), communication and interactions with health professionals and patients:

> I think what's been really helpful is just having the responsibilities of a full-time job before starting nursing. … Just being used to the nine-to-five. … Just being used to the grind. Showing up on time. Just to set certain professional standards that are also important in a nursing career—being responsible and accountable (UNS013).

Participants with previous work experience in the healthcare field as a nursing assistant (NA; also known as a unit assistant or healthcare aide) or Undergraduate Nurse Employee (UNE; undergraduate nursing students employed to work under the direction of a licenced nurse) identified the important contribution such experiences had on their CPP. Thus, participants who worked in healthcare before or after completing a CP rotation noted its favorable effect on their confidence in their ability to manage care, time, and interpersonal skills (e.g., communication) in CP courses. Additionally, occupying a role in a clinical area provided participants with exposure to new clinical situations:

> My first year, I went in with no previous health care experience, and then I worked the entire summer as a health care aide. ... And that is huge. I was training health care aides on the unit while being a student on my last rotation. … I was flagged constantly by other students to help

> with positioning or more direct care. And so, that was great. I felt super, super confident as a result of that. … I honestly think that it should be mandatory. Like, you need a year of health care aiding before you can go into nursing. … Huge confidence boost, but also being comfortable with patients, being comfortable talking to people and interacting with people and handling people and seeing graphic things. … I felt like I got to know different interprofessional perspectives so much better as a health care aide, and even [more] than I have as a nursing student, which has been surprising (UNS009).

Some participants provided additional insight into their experiences as a UNE. They felt they had an increased sense of CPP, associated with their confidence in their abilities and performance. However, participants also remarked on role conflict at times within their roles as employees and students:

> Expectation and just really because half of the time as students, I feel like, "OK, can I even do this or can I even do that?". For a PICC line, I know students are not supposed to do it, but some of my colleagues at the unit I work at right now they allow me, under their supervision of course. … But if I wasn't working as a UNE, would I even know how to do that? Would I even know if I'm allowed to do that? … But it's just something that I think the school should have a bit of a talk with students saying: "OK, these are what you can do, and these are how to do it" (UNS016).

Moreover, as noted in previous quotes, participants described that their work experiences were essential in managing interactions with patients in CP. Communication *skills* developed within past work experiences were the most frequently cited by all working participants as a positive contributing factor to their perceived preparedness for CP.

Finally, the participants' experiences with the healthcare system was another reported aspect of lived experiences. Some participants described their past experiences with illness and the healthcare system as an aspect of feeling prepared. They associated what they learned through those events as informing them on what to expect within CP:

> I think a lot has to do with family that had different types of illnesses. Like, my [family member], [they] had a heart attack. …That's where I learned what they do in the emergency department when someone presents with arm pain and chest pain and that kind of thing. … I learned about all the procedures they go through after. … Those are some things that I didn't know prior to nursing that help me prepare for all of it. It also helped me study, as well. I already know how this works. So, I'm prepared for that situation. … Just how other family members have certain diseases, kind of help. I know exactly what they went through. So, when I see a patient that presents like this, I kind of know the route that they'll take with them (UNS012).

Relationships

The relationships participants had with significant persons in CP were an important source for CPP. These relationships have been repeatedly referred to and woven throughout this chapter, appearing within every section and each CPP theme. Participants repeatedly identified and spoke of persons with whom they interacted and were supportive and influential in their CPP. Participants described that peers, clinical instructors and nursing staff, family and friends, mentors (mentorship program) and healthcare role models/mentors contributed to informing them on CPP's various components (i.e., types of preparedness, sources, CP environment). These persons ultimately played a significant role as a source in the participants' perceptions and capacity to prepare for CP. Table 12 offers a synopsis of the elements described by participants about the relationships and support perceived and received from persons associated with CPP. The findings revealed that persons and relationships can positively and negatively affect the participants' perceptions of CPP (i.e., psychological, cognitive and physical preparedness).

Relationships and Support from Family and Friends. First, family members and friends influenced participants' sense of CPP, especially depending on the psychological, physical, and socioeconomic supports offered, such as living with family (as opposed to independently), decreasing household obligations (e.g., food preparation, chores), and providing financial support (e.g., education, rent, food).

Table 12

Persons who Influence and Inform on Clinical Practice Preparedness

Family, partners, and friends	• Home responsibilities and obligations (household chores, death, sickness, crisis) • Social interactions and emotional support • Support at home for studying/practicing, respecting boundaries, and time. • Living with family, independently, away (physical presence in the home, loneliness) • Transportation, food, housing, finance
Peers	• Social interactions (social outings) • Academic support (learning together, completing assignments, chat groups, study groups) • Shared experiences (learning from each other's experiences, shared failures, and successes), mutual relationship for support • Comparing self to peers, being judged by peers. • Transportation to clinical (car-pooling) • Mentors and mentorship program
Faculty and clinical instructor	• Availability, approachability, engagement/motivations, interaction • Verbal persuasion, reassurances, • Academic support
Healthcare professional role model/mentors	• Opportunities, engagement, coaching, mentorship • Resources, materials • Verbal persuasion, coaching and advice.

Participants also remarked on the numerous supports provided by family and friends including social interactions, emotional support and encouragement, and transportation to and from the CP setting.:

> Having things ready for the day and having a supportive family really helps. They get my lunch going for the day and drop me off, so that's less things that I worry about. But other than that, they help me, help off balance my stress, so they help take off some load for me, so I have less things to worry about. So having supportive partner and family" (UNS016).

On the other hand, participants who expressed a lack of social support expressed feeling stressed about CP, which contributed to perceptions of poor psychological preparedness for CP. Participants described that living independently or away from the direct social support of immediate family members (e.g., international students, immigrants, mature students) was more likely to negatively influence CPP due to the added financial burdens and household responsibilities:

> Especially as far as a family goes, I can't really rely on them for any kind of support. It's more we're supporting them. So yeah, I guess that's part of being prepared is just to make sure we have all that also lined up, too (UNS014).

Several Participants described that a lack of support and conflicts within relationships (e.g., disagreements, disputes, split household) caused emotional distractions and limited the time they dedicated to preparing for CP. Relational and familial responsibilities or obligations (e.g., death, sickness, finances, housing, dependents) also limited their capability to prepare for CP:

> My personal life, and I'm dealing with something at home, and that takes up my attention and I feel a little bit less prepared. ... So, I guess external factors in my personal life would be the biggest influence on my preparedness (UNS004).

Participants also described the benefits of relationships with friends or family who are healthcare professionals. These participants had access to a resource person (i.e., healthcare role model/mentor) with knowledge and experience, informing them on how to be prepared for CP:

> I think my mom is mostly the one who helps me. She's a big influence. I would say other people that I've talked to … like certain healthcare providers that I've shadowed, have also helped me prepare. They were telling me tips and tricks and what to do in certain skills. That kind of thing, I say have helped me a lot (UNS012).

Furthermore, for some participants, having had interactions and relationships with co-workers, friends, or family who are health professionals also informed their preparedness as they compared their comfort with interprofessional communication in comparison to other students without such exposure:

> When I'm in clinical, I'm not scared of people. Because I know that I have a [clinical instructor], so [clinical instructor] is a nurse, okay, so my friends are nurses too. I'm working with doctors [at the university] and doing research. So, I'm not scared of the doctors in clinical, so I can easily talk to people (UNS025).

Relationships with Peers and Mentors. Participants frequently referenced peers throughout most aspects of CPP. Peers and mentors were seen as sources for psychological and cognitive preparedness and, at times, physical preparedness as well. Participants described how peers had a unique role in influencing the participants' preparedness, thus by sharing lived experiences, working collaboratively to complete assignments or preparatory activities (e.g., clinical workbook, compiling resources and materials for their clinical blinder), getting to the clinical setting (i.e., car-pooling), and using each other as a source for information. Participants indicated that their need to become informed led them to seek out and interact with peers and mentors. Participants sought to connect and build relationships with persons who had previously completed similar CP experiences: "One major thing that I did would be talking to people that have gone on the courses before, because that way I can know what to expect" (UNS030).

Participants sought their peers' advice on what to do and how to prepare for CP experiences. This was either accomplished by direct contact with peers or with a mentor from the mentorship program, as well as through acquaintances or friends. They also utilized social media and chatroom groups organized by other students. While in CP, participants lived vicariously through their peers and were influenced by verbal persuasion:

> I think the students have a big influence because I think … we can all relate to each other; we're all in the same situation. If there's something that we're really unsure on, I usually go to another student first to ask them for their opinions or ask them about what they would do. … I'd say a lot of the time, other students help me prepare the most (UNS012).

Participants also used their peers to compare, measure, and inform their own preparedness (i.e., cognitive preparedness, knowledge, and behaviour). Conversely, they described that being judged by their peers and other influential persons was a constant source of fear and anxiety that affected their perceived abilities to demonstrate preparedness in CP:

> If I have the whole group watching me do a skill, versus just [with] my instructor it's a lot easier go my own pace and not worry about the judgment. … But I don't want to be perceived as unprepared or unable by my peers (UNS004).

Some of the more mature participants remarked on how difficult and isolating it was having more responsibilities than peers and how this can impact their perceived relationships and support from peers:

> A lot of the other students they're a bit younger than me and just in a very different place of life. So, I have a really hard time trying to relate to anybody. When I met anybody in the lab, I was like, I don't live with my parents, and I'm working so hard because I have to pay all my bills and my mortgage and all these things. I'm not going to go get a drink with you. So, I just didn't have those opportunities. Which is probably the fault of my own … I just didn't put an effort to that, but I now realize I really do need some nursing friend[s] (UNS014).

Relationship with Clinical Instructors and Nursing Staff. Clinical instructors (also called Clinical Education Facilitators, CEFs) and the nursing staff in the CP setting played a significant role in influencing the participants' sense of preparedness and informing them of their CPP. These persons were frequently referenced by participants throughout the interviews and noted throughout the chapter, including within the CP environment component, where reportedly the clinical instructor and nursing staff had a critical influence and impact on the participants' psychological and cognitive preparedness.

Participants described their relationships with clinical instructors as either good or poor. They further spoke of having sought out clinical instructors to build a supportive relationship and become informed through asking questions and learning from them: "I think it's just the nervousness of facing a really hard instructor. Because the only times I've felt unprepared is when I haven't had a good relationship with my instructor" (UNS024).

Other participants spoke of challenging interactions causing emotional and behavioural responses and decreasing psychological preparedness:

> I had a [clinical instructor], who literally my entire group, just avoided her the whole day. I had a [classmate] who was hiding from her, walking around trying to avoid her because they were scared. And that is huge. If you're trying to practice and you're scared of your instructor like that, it does not bode well (UNS009).

Two Extraordinary and Influential Events

This study occurred shortly after two important external sociopolitical events. Participants recalled their experiences with and the impact of the COVID-19 pandemic social isolation protocols and a faculty strike on their CPP. Table 13 provides a synopsis of the events and their impact on elements related to CPP.

Table 13

Events and their impact on Clinical Practice (CP) Preparedness

COVID-19 Pandemic	Faculty Strike
• Initial disruption in CP rotations • Introduction of virtual simulations • Disruption in social support and crucial relationships with peers • Limited access to laboratory and practice time	• Course disruptions • Overwhelming condensed end-of-term clinical rotation • Postponed and out-of-sequence clinical and theory courses.

COVID-19 Pandemic

Participants described the isolating effect of the COVID-19 pandemic and the required public health measures to reduce viral spread. Participants noted how the pandemic caused initial disruptions in the CP courses and restrictions to in-person learning, including practice-based learning experiences (e.g., skills courses and laboratory practice time). These disruptions and restrictions along with the implementation of VSims to substitute for CP hours, ultimately influenced the participants' perceived CPP:

> Just the [lack of] opportunity to practice hands-on skills. Again, because we were in COVID, [skills course/laboratory] was the only opportunity we had to actually do a physical practice. So, it was

> critical. … especially the first term where we didn't have in-person clinical, I couldn't have progressed in nursing school without those skills courses (UNS009).

Faculty Strike

Participants described the impact of a faculty strike and subsequent course disruptions, including clinical courses. A few participants remarked on having to complete a CP rotation in either a condensed end-of-term clinical rotation or an out-of-sequence CP course once the strike was over. Participants spoke of the struggles to complete clinical hours in a condensed time frame and being overwhelmed with the coursework during this time. Furthermore, the participants who had their CP rotation postponed to a later semester found they struggled as they began the more advanced Nursing Practice course before having gained experience from an earlier planned course (e.g., completed Nursing Practice 3 before Nursing Practice 2):

> We were hoping we were going to … [have a] medicine [rotation] to prepare us for this surgical rotation. So, when we went into [the] surgical rotation, we felt so confused and just so unprepared. What we had to do is essentially go in there and learn. We didn't use anything from school at all. It was basically what the other nurses taught us on the unit (UNS016).

Chapter Summary

This chapter presented a detailed description of undergraduate nursing student participants' views on the phenomenon of clinical practice preparedness (CPP). Twenty participants shared observations, experiences, and perspectives, adding to the knowledge of CPP and effectively addressing the study's primary question: How do undergraduate nursing students perceive and experience their clinical practice preparedness?

Five themes were presented that convey how participants view and experience clinical practice (CP) preparedness (CPP). Three themes describe CPP as embodying psychological, cognitive, and physical preparedness. The findings demonstrate that all three types of preparedness are interconnected and

therefore all are necessary to provide an overall sense of CPP. Further, the fourth and fifth themes of the CP environment (i.e., features, interactions and events observed and experienced) and the sources of CPP (i.e., what informs CPP; relationships, preclinical learning and life experiences), are overarching and essential components and influences in CPP.

Psychological preparedness, the participants' mental and emotional states, was often informed by past experiences and persons (including themselves). Participants practiced self-care and sought psychological services and social support to prepare for CP. Cognitive preparedness included five types of knowing: theoretical knowledge (knowing that), practical knowledge (knowing how), understanding and using knowledge, knowing expectations, and knowing what to anticipate. Cognitive preparedness was informed by preclinical learning experiences, life experiences, and relationships with significant persons in CP. Participants engage in many activities before, during, and after CP to prepare for subsequent CP experiences. Physical preparedness was the biophysical and material readiness of the participants. At times, significant persons (e.g., clinical instructors, family and peers) contributed to, or hindered this preparedness. Participants cared for their biophysical needs in anticipation of CP and developed strategies to organize their materials and resources for their clinical day.

Several influences and features were identified within the CP environment and as CPP sources that contributed to the students' perceived CPP, including access to information and the clinical instructor, adequate time to become prepared and informed, familiarity with the site, and interactions and relationships. Thus, the findings provide valuable insight into the perceptions and experiences of undergraduate nursing student participants and their clinical practice preparedness.

Chapter 5: Discussion and Conclusion

The primary purpose of this research was to explore and describe undergraduate nursing students' (UNS) perspectives on and experiences with clinical practice (CP) preparedness (CPP). In Chapter 4, the findings of this study revealed rich descriptions of the components and influences of UNSs' CPP. Specifically, the overarching components of CPP include three themes reflecting the types of CPP: psychological, cognitive, and physical. Further, two additional themes reflect what participants thought influenced their CPP, including the CP environment and CP sources (i.e., life experiences, preclinical learning, and relationships).

The intent of this chapter is to offer an interpretation of the key findings, address the research questions, and situate the findings within current literature and issues in nursing education. This chapter incorporates the study's strengths and recommendations within discussion points. The chapter begins with a discussion that reviews the components of CPP within the context of the theoretical framework. A second discussion point explores two extraordinary events that impacted participants' CPP. The subsequent sections include discussions associated with CPP and clinical education and fostering knowledge transfer to promote CPP, the impact of stress and workload, relationships and supporting students, the role of the clinical instructor and supporting their development, and considerations for alternative clinical education models. Following the discussion of the key findings and implications, this chapter addresses the study's limitations and identifies future research considerations. Finally, this chapter concludes with a brief overview of the study's contributions, significance, and key points related to clinical nursing education and UNS CPP.

Study Findings and Self-efficacy Theory

Bandura's self-efficacy theory was a valuable and appropriate theory to guide this exploratory study. Consistent with this guiding theoretical framework, self-efficacy theory allowed the researcher to address the study's purpose of exploring UNS participants' perceived abilities, perceived influences, noted

preparatory activities, and sources of CPP. The concept of self-efficacy, as defined by Bandura, refers to the "belief in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). This meaning closely aligns with clinical practice preparedness as defined by this study, which refers to the UNS's belief in their capabilities and actual ability, knowledge, and competencies to perform within the clinical practice setting.

Bandura's sources for self-efficacy refer to phenomena that influence a particular "belief in one's capabilities" (Bandura, 1997, p.3). Sources, according to Bandura, include enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states. These sources are evident in the findings of this study. Although framed differently, sources identified for participants in this study (i.e., CPP sources: lived experiences, preclinical learning, and relationships) align with Bandura's sources.

Enactive Mastery Experiences

Previous lived experiences and preclinical learning experienced by UNS participants' parallel Bandura's explanation of e*nactive mastery experiences.* Participants noted the essential elements in preclinical learning experiences within their nursing program, specifically the courses, simulations, and skills opportunities provided before CP experiences that supported their CPP. Participants spoke of the value of having prior experiences that prepared them for CP. Previous experiences with coping with new and unfamiliar situations and with communicating and building relationships facilitated their ability to enact such skills in the CP environment. Additionally, participants often explained that with each CP experience, they improved their organization and prioritization skills – contributing to their evolving perception of their abilities to enact the nurses' role. Notably and consistent with the idea of enactive mastery experiences, those with more experiences (i.e., life experiences and preclinical learning experiences) tended to have fewer unknowns to fear and more strategies and learned behaviours to draw upon to inform them of how to act and react to challenging situations. Nursing students learn by enacting the nurse's role in the clinical setting to build their CP knowledge (Stoffels et al., 2019).

Vicarious Experiences

Participants often spoke of their peers, clinical instructors, and healthcare mentors as sources for informing them of their perceived CPP. Vicarious experiences within the CP environment significantly influenced participants' perceived abilities. Participants described how they compared themselves to their peers and measured their capabilities and preparedness for CP by observing their peers and other healthcare staff. Interacting and observing peers and healthcare staff in practice are ways that nursing students learn about nursing practice, thus influencing their development (Stoffels et al., 2019).

Verbal Persuasion

Another significant source for UNS CPP are the persons they have in their relationship network. These persons (i.e., family, healthcare role model, peers, instructors, patients, etc.) are important for informing the UNS on how to prepare, what to do to prepare, and influencing the UNS's perception of themselves and their perceived preparedness for CP. Thus, these relationships and interactions inform the UNS on acting and reacting. Interactions with peers and nursing staff and receiving feedback support the students in their preparedness for CP (Stoffels et al., 2019).

Physiological and Affective State

While the analysis of this study's findings revealed the components of both physical (i.e., biophysical) and psychological preparedness, these components are no different from those noted by Bandura (1997). Participants remarked on how they felt and reacted to those feelings when they perceived themselves as prepared and unprepared for CP. Their perceptions and reactions informed their behaviours. For example, participants reported that their CPP was reduced when they felt anxious or stressed. Students, as learners, experience and are exposed to new events in CP; these events are often viewed as stressful for students and cause emotional and associated physiological reactions (e.g., trembling hands; Jamshidi et al., 2016). Physical and bio-physical preparedness were important to the UNS's perceptions and experiences. Having physiological needs met, feeling physically prepared, having

all materials ready and available, and having a positive outcome and affective state were contributing factors in their CPP throughout their CP experiences.

Bandura's Self-Efficacy Relationships

According to self-efficacy theory, UNSs (i.e., as a person of cognition, affect, and biology), their environment (i.e., social constructs, such as home, school, and CP environment) and behaviour constantly interact in a reciprocal relationship. The study findings lend support for Bandura's reciprocal relationships between person, environment, and behaviour. For example, participants described that as they reflected on past CP experiences or events within the CP environment, they shifted behaviours or acted differently in anticipation of subsequent CP experiences (e.g., creating memory aids or a clinical binder, asking for help or avoiding). Additionally, participants explained that significant persons influenced them, and they further changed their behaviours or actions to achieve perceived CPP. Participants perceived and reacted to a multitude of influences within their psyche, relationships, and environment.

Events that Impacted CPP

This study occurred during two extraordinary events (i.e., the COVID-19 pandemic and a faculty strike), illustrating the importance of the CP environment as an influence. The interviews were conducted from July to September 2022, as participants anticipated emerging from COVID-19 isolation measures and going back into the classroom and in-person learning activities after two years of primarily virtual learning. The participants described participating in distance learning activities during the COVID-19 pandemic from mid-March 2020 to approximately April 2022. Also, in the fall of 2021, there was a 5-week faculty strike.

COVID-19 Pandemic

The impact of the COVID-19 pandemic led to a rapid shift to virtual learning (including virtual simulations [VSims]), temporary cancellation and disruptions of clinical courses, exacerbation and volatility in CP environments, and psychosocial impacts, all of which impacted UNSs and CP courses. As

reported, most participants (n=15; 75%) started the nursing program while COVID-19 isolation protocols were in place.

Participants discussed the stress and impact that COVID-19 had on their CPP. As described in Chapter 4, participants spoke of decreased social support and isolation during the pandemic, which caused increased stress and anxiety when preparing for CP, making evident the importance of psychosocial well-being within nursing education. The pandemic saw increased stress and anxiety from UNS related to new, unknown, or unfamiliar situations, decreased peer support (Chernomas et al., 2023; Michel et al., 2021), and emphasized the importance of relationships for support and learning. Also, largely due to the shift to virtual learning and reduced in-person "hands-on practice," Michel et al. (2021) reported that nursing students felt "underprepared when it comes to many basic nursing skills" (p. 907).

When COVID-19 isolation measures were first introduced in mid-March 2020, the UNSs (n =5; 25% percent of participants) were removed from the clinical environment. Nursing Practice course hours were replaced with VSims. Later semesters saw reduced on-unit CP hours as VSims replaced them (up to 25% of CP hours). The literature supports replacing CP hours for simulations and virtual simulations (Harder, 2020; Jeffries et al., 2018; Padilha et al.,2019; Roberts et al., 2019). Also, during the pandemic, the local jurisdictional body approved simulation replacement hours for up to 50%, which remains unchanged (College of Registered Nurses of Manitoba; CRNM, 2024). The regulating College does not distinguish between in-person and VSims in the required practice experience hours (CRNM, 2024).

One challenge in nursing education identified by UNSs included the replacement of CP hours with VSims hours (i.e., crediting simulation hours 2-for-1 of CP practice hours). UNS participants expressed concern about not having enough hands-on clinical skills opportunities they considered essential to be prepared for CP, also found by Michel et al. (2021). With the introduction of VSims as a replacement for CP experiences during the pandemic, the participants of this study (n = 20; 100%) had no in-person simulation experiences, with only two participants (10 %) having completed one synchronous VSim

session with actors and colleagues; all other VSims were asynchronous. This means most of these participants missed an entire in-person experiential learning opportunity (i.e., in-person simulation) that could have contributed to their perceptions of CPP, the focus of this study.

Furthermore, all participants completed their subsequent Nursing Practice courses with fewer in-person CP hours than previous cohorts, seeing up to 25% of their CP hours replaced by VSims. The study participants collectively described VSim as not helpful for their CPP; they remarked on VSims not contributing to psychomotor skills preparedness and thus feeling underprepared for CP experiences. However, further prompting from the interviewer had some participants reflect on some helpful features of VSims, such as deepening understanding and improving critical thinking. Despite this, participants continued to describe frustrations and limitations to VSims, wanting a more hands-on approach and expected simulations to contribute to CPP through psychomotor skills practice. Participants' perceptions in this study differ from the evidence suggesting that VSims-based experiences enhance learning outcomes and practice preparedness. Simulations focus on developing clinical judgement, critical thinking skills, and non-technical skills (Padilha et al., 2019; Roberts et al., 2019), not necessarily psychomotor skills. Furthermore, the participants may not have perceived the value of VSims; as novices, they tend to focus on tasks, such as psychomotor skills (Benner et al., 2010). Whatever the case, the participants of this study did not perceive that VSims met their needs for CPP.

Also, some participants expressed excitement about in-person simulation experiences despite never having had past opportunities, suggesting a valuing of in-person learning experiences for CPP. Again, the evidence suggests that simulation-based experiences enhance learning outcomes and practice preparedness by developing critical nursing knowledge and skills (Briscoe et al., 2017; Harder, 2020; Jeffries et al., 2018).

Faculty Strike

Late in the fall of 2021, a 5-week faculty strike resulted in the suspension of many courses. Participants described the impact of this disruption on their CP experiences and preparedness. Chapter 4 provides an overview of the participants' descriptions of the challenges faced due to the disruption of their clinical courses. This included the struggles they faced regarding completing hours in a condensed time frame or having their CP rotation postponed, where they struggled with attempting to meet CP course objectives for a more complex Nursing Practice course (e.g., Nursing Practice 3) before completing the disrupted Nursing Practice course (e.g., Nursing Practice 2). Notably, the participants who experienced out-of-sequence Nursing Practice courses struggled to meet expectations and filled the gaps by doing more preclinical preparatory activities. Affected participants described the effective guidance of their clinical instructor and nursing staff as influential in their success in the more advanced Nursing Practice course. Additionally, the challenge of the more advanced Nursing Practice course increased their sense of growth and confidence by the end of the rotation. Thus, once the initially disrupted Nursing Practice course ensued, participants expressed increased perceived preparedness and confidence with that Nursing Practice course, especially since they completed a more complex clinical rotation beforehand. While these findings are limited, they stipulate a simple and logical conclusion suggesting the value of scaffolding in learning outcomes. Scaffolding is a student-centred approach in which the students are provided support “early in their learning, and then gradually remove them as students develop greater mastery and sophistication” (Ambrose et al., 2010, p. 215). Furthermore, this event provides the unique opportunity to inform on the perceptions of such scaffolded learning and its contribution to CPP from one CP experience to the next.

Clinical Education: Learning and Developing for CPP

This study builds supportive evidence on nursing students’ views on CPP and facilitates a discussion of the teaching practices within CP courses and learning environments that impact student

professional development. Similar elements within this study's findings on CPP were identified by Oermann, Shellenbarger, and Gaberson (2018), including the cognitive, psychomotor and affective learning domains, which include "cognitive (knowledge and intellectual skills), psychomotor (skills and technological abilities), and affective (professional attitudes, values, beliefs)" (p. 18) domains. This study's findings, which align with the literature, suggest that UNSs develop and deepen their psychological (i.e., mental/thoughts, perceptions, emotional resilience) and cognitive preparedness (i.e., cognition, knowledge, and metacognition) throughout undergraduate nursing education.

Nursing education programs aim to develop students' nursing knowledge and competencies through theoretical (i.e., knowing-that) and practical (i.e., knowing-how) courses; therefore, nursing education must continue to strive to optimize the student's ability to use theoretical and practical knowledge in actual practice in the care of clients and their families (Benner et al., 2010; Oermann, Shellenbarger, & Gaberson, 2018). Participants of this study described that to be prepared for CP, it was critical to have prerequisite knowledge, including theoretical and practical nursing knowledge, such as psychomotor skills (i.e., cognitive preparedness). They often referred to the importance of knowing and understanding (i.e., theory to practice link) what was happening with their assigned patients. It is logical to conclude that for UNS to be prepared for CP, they must be cognitively prepared. Again, such cognitive preparedness requires prerequisite knowledge (Benner et al., 2010; Oermann, De Gagne, & Phillips, 2018), including practical (i.e., psychomotor skills and non-technical skills) and theoretical knowledge.

The Unknowns and the Empowerment of Knowing

Participants described that to be prepared for CP, they need to anticipate what to know (i.e., knowledge) and what they will see and do within the CP environment. This is similar to Leh (2011), who found how the many unknowns within CP impacted UNS' perceptions, emotions, and reactions associated with preparedness for CP courses. Students experience many anxiety-inducing situations, especially as they are constantly expected to interact and engage with unknown and novel experiences in a stressful

and unfamiliar environment (Simpson & Sawatzky, 2020). UNS "have no experiences of the situation they face" (Benner, 1984, p. 21). As such, students cannot predict many elements and situations they will encounter within a perceptibly volatile contemporary healthcare environment. "Nursing students enter a new clinical area as novices; they have little understanding of the contextual meaning of recently learned textbook terms" (Benner, 1984, p. 21).

Not knowing, not understanding, and not being familiar with the environment influence preparedness features, contributed to psychological responses (e.g., increased anxiety), especially for the first few CP experiences (Walker & Verklan, 2016), as they reconcile becoming professionals with new responsibilities of caring for real human persons and, for many, for the first time in their lives. In comparison, in this study, participants with more transferable life experiences, preclinical learning, and CP experiences (i.e., theoretical and practical) had more opportunities to develop their knowing-that, knowing-how, understanding and using nursing knowledge in practice, resulting in feelings of empowerment, joy, and self-confidence. In contrast, participants with fewer life and work experiences expressed how unpreparedness made them feel nervous, anxious, dreadful, doubtful, scared, stupid, unsupported, and useless. Therefore, by considering the UNS's past experiences, preclinical knowledge, and the unknowns that affect their sense of perceived preparedness, educators are in a better position to support students' psychological, cognitive, and physical preparedness for CP. Furthermore, facilitating experiential and practical experiences ultimately guides students in transferring their knowledge into practice. This reinforces the importance for clinical instructors to know their learners.

Preparing for CP with Experiential and Practical Learning

The purpose of CP courses is to continue to develop knowledge and competencies in CP (i.e., understanding and using) by facilitating cognitive, situated, and experiential learning opportunities, a vital component of nursing education. "Nursing, like all practice disciplines, relies on situated cognition and action" (Benner et al., 2010, p. 13). It is important to promote more situated and experiential learning in

the classroom (Benner et al., 2010) and support faculty in developing knowledge activities (Du Plessis, 2019). Given this understanding, the past decade has seen the introduction and increase in active learning activities within the classroom (Oermann, De Gagne, & Phillips, 2018). For example, flipped classrooms are where the student learns new concepts and content before the in-person class and uses or applies those new concepts within the classroom. Another example is problem-based learning, such as case studies, to facilitate the development of situated knowledge (Oermann, De Gagne, & Phillips, 2018). Participants of this study reinforced that such learning strategies are helpful and contribute to CPP.

Some psychological (e.g., coping and responding professionally) and cognitive aspects (i.e., understanding and using nursing knowledge) can only be developed through experiential and situated learning experiences within actual (or *more realistic*) situations, such as within simulated or clinical experiences (Benner et al., 2010; Oermann, De Gagne, & Phillips, 2018). Participants of this study described how experiential learning was valued and helped to develop their sense of CPP for their subsequent practice experiences. While nursing knowledge (i.e., knowing-that and knowing-how) can be imparted within the classroom, it is only in real situations that students develop and use practical nursing knowledge, further developing their clinical judgement and critical thinking skills (Benner, 1984). The study's findings described the participants' claims that knowing-that and knowing-how is "not enough" to prepare them for CP; experiential learning (viz., skills laboratory practice and simulation experiences) opportunities before CP courses were highly valued and increased their sense of preparedness for CP. Thus, enhancing opportunities for experiential learning could address this need and further enable knowledge transfer when they are in CP.

A Learner, Not a Nurse

Clinical practice experiences provide opportunities for UNSs to use knowledge in practice (Oermann, Shellenbarger, & Gaberson, 2018). However, "nursing faculty members seem to expect students to perform skills competently the first time they attempt them, they often keep detailed records

of students' failures and shortcomings, which are later consulted when determining grades" (Oermann, Shellenbarger & Gaberson, 2018, p. 8). In this study, participants felt unprepared for being evaluated by some clinical instructors and nursing staff as they felt they were expected to understand and use nursing knowledge without having had similar situated or experiential learning opportunities, using terms such as "harsh," "intimidating," "watching me," "judgment." As previously stated, the purpose of CP courses is to provide practical opportunities for the students to *develop* and *use* nursing knowledge in CP. Since using knowledge in practice is a learned skill, students cannot be expected to know how to effectively transfer their knowledge into practice. A question for educators is how can we better guide students in using knowledge in practice?

The skills performance and knowledge gap mentioned above appear to reflect the well-known *knowledge transfer to practice gap* phenomenon identified in professional education literature (Scharff et al., 2017). The UNS' perceptions within this study support the contention that this gap still exists today. Thus, further exploration of clinical nursing instructors' perceptions of nursing students' preparedness for CP and the implications of knowledge transfer would inform the education and support students need for CPP.

Fostering Rather Than Expecting Knowledge Transfer

Participants in this study felt more prepared when clinical instructors could integrate theoretical nursing knowledge into the CP experience, guide their critical thinking, and foster a deeper understanding. The clinical instructor's role is to facilitate learning, guide and deepen learning in the clinical setting (Benner et al., 2010). Cognitive readiness theory indicates the need to allow students time to prepare, know, and learn how to question their understanding of a situation (i.e., critical thinking; O'Neil, 2014). This points to the significance of pedagogical and relational practices used by clinical instructors and the difference they can make in learning and clinical practice preparedness. Clinical instructors need the support and tools to develop as educators.

Knowledge transfer in this study's context refers to the UNS's "ability to take what it learned in one context" (Scharff et al., 2017, p. 78) and use it effectively in CP. Fostering knowledge transfer improves UNS's sense of perceived preparedness, confidence, and efficacy in CP. It is important to ensure that clinical learning activities are being appropriately integrated and utilized (Benner et al., 2010) to ensure that the clinical instructors apply learning transfer strategies (Roumell, 2019) within students' experiences in CP. Based on the study findings and consistent with the literature in this area, activities and elements that foster knowledge transfer in CP include clear and explicit expectations, assignment standardization and course alignment, appropriate time to prepare and gather information, access to information in the CP environment, mentorship, clinical instructor expertise and support, clinical conferences, CP setting climate and learning environment (Devos et al., 2007).

Knowing How to be Prepared. The study findings reinforce the importance of making course expectations, objectives, and roles and responsibilities of the student, clinical instructor, and staff in the clinical environment clear for learners. Students prepare for CP experiences by seeking out peers, creating lists and fact sheets, assembling resources, and reviewing course notes and skill rubrics (to name a few). Using tools, resources, and guidelines within CP is a lifeline for CPP for the "extremely limited and inflexible" (Benner, 1984, p. 21) nature of students as learners. Such behaviours are typical for students as they prepare for many novel CP experiences and seek to meet objectives and expectations. Thus, UNSs need explicitly presented expectations: "They do not know what they do not know, and they have limited understanding of how to go about learning it" (Benner, 1984, p. 185). Thus, it is important for clinical instructors to be clear on objectives and expected behaviours (i.e., performance and professional conduct) to be prepared psychologically, cognitively, and physically for CP. Furthermore, expectations must be consistent and clear for students. This includes consistency in expectations between faculty members (i.e., within theory courses) and clinical instructors (i.e., as learners transfer knowledge to practice), and also clinical instructor to clinical instructor. Although, this consistency can be challenging in

larger programs with larger numbers of faculty and clinical instructors, collaboration between faculty members and clinical instructors is critical.

Also, UNSs need materials and resources to prepare for CP experiences; however, while they are in the CP environment, resources become more important for learning to become effective. Participants valued the materials and resources available to them in the CP environments, access to information, online and on-site resources, materials, and technologies (e.g., access to online library services, course notes, and professional and appropriate applications). When some of these resources were unavailable at clinical sites, participants noticed and missed these resources. Clinical instructors are encouraged to fill the resources gap by providing printed materials (e.g., fact sheets) or allowing students to use their electronic devices to access course notes or applications (i.e., apps) for evidence-based clinical decision support (i.e., Up-to-date) or clinical resources (e.g., medical or pharmaceutical resource applications).

Time to Know and Become Prepared. Participants described their need to know what was expected of them and what to anticipate, which helped them to prepare psychologically and cognitively (e.g., researching, reviewing, practicing). Thus, it was important for the participants to be given the necessary time to prepare before the CP experience and to review psychomotor skills. This is consistent with Oerman, Shellenbarger, and Gaberson (2018), who also advise clinical educators to provide time for nursing students to cognitively prepare for CP experiences. Providing the time for the students to become prepared before the practice experience enables the students to "have adequate knowledge to care for patients" (p. 66), anticipate patient care, and for the student to be corrected and ask for clarifications before caring for patients (Oerman, Shellenbarger, and Gaberson, 2018). Clinical instructors could provide more instruction to help students focus on priorities in relation to gathering patient information.

Preparing and Knowing with Clinical Assignments. Benner et al. (2010) notes that "clinical assignments provide powerful learning experiences, especially in those programs where educators integrate clinical and classroom teaching" (p. 12), that is, aligning theory course content with clinical

course experiences. Clinical patient assignments encourage experiential learning opportunities, and reflective practice deepens understanding and facilitates the use of nursing knowledge in practice; both are effective approaches for fostering knowledge transfer in CP (Benner et al., 2010). Clinical instructors are encouraged to align clinical assignment with recent course content, when possible.

A factor to consider in using clinical assignments to foster knowledge transfer is to ensure clear and consistent expectations. Thus, as previously discussed, educators should provide explicit instructions on how to prepare for a patient assignment and what information is needed to be prepared for patient care (i.e., what data to gather and understand and what to anticipate). This is also relevant and applies to completing documentation or written assignments (e.g., clinical flowsheets and journal reflections).

Participants of this study described patient research activities as deepening their understanding of a patient's situation, influencing their sense of feeling prepared to care for the patient and prepared to learn in the CP environment for developing clinical judgement and critical thinking. However, it is also important to allow students adequate time to become prepared and to understand in order to guide clinical judgement and critical thinking. Providing time for data gathering (i.e., patient research) is one strategy for enabling students to prepare and anticipate what they need to know. Patient research includes gathering information and having the time to review and look up new or unfamiliar theoretical knowledge (e.g., pathophysiology of the illness, laboratory values and pharmacological considerations).

Another strategy for ensuring clear and consistent expectations for clinical assignments is to standardize written assignments, such as rubrics, content, format, and length (Vignato et al., 2021). To encourage CPP, educators need to facilitate and support clear expectations and standardized CP preparation information, activities, and assignments (e.g., case study and care plans, instructor information sheets, pre-clinical worksheets, data gathering worksheets, and communication tools). Thus, one approach is to use the same worksheets and strategies within the classroom, laboratory, simulation, and CP courses. Hence, creating as much consistency as possible so that students can become familiar

with the tools – already used to develop knowledge and understanding – to also develop their preparedness when they enter a new clinical environment/setting. When tools and assignments are consistent, familiar, and clear there are fewer unknowns, which could also reduce stress and anxiety.

Another strategy to approach assignments and foster knowledge transfer is to scaffold assignments (Coffman et al., 2023). This type of strategy provides students with a way to develop their knowledge by completing assignments at their level and later given the opportunity to deepen their development by continuously adding steps (i.e., scaffold) to reach the desired outcome.

Preparing and Knowing with Orientations. The study participants described their need to know the learning outcomes, their roles and responsibilities as students and learners, and those of the clinical instructors (i.e., expectations, objectives, and performance outcomes). Also, students needed time to organize their materials and resources to meet expected behaviours in anticipation for and during the CP experiences (i.e., physical preparedness and, by extension, psychological preparedness). Typically, students are prepared for their Nursing Practice course with a course orientation and, later, a clinical site orientation (Oermann, Shellenbarger, & Gaberson, 2018). However, participants did not indicate having experienced any course orientation; in fact, some participants noted the need for a preclinical orientation-type session to become familiar with the course expectations and to be given the opportunity to ask questions about the CP experience. The course orientation ought to include expected behaviours and conduct, course objectives and performance expectations, and discussion to address any preconceived notions (Oermann, Shellenbarger, & Gaberson, 2018).

The clinical site orientation should focus on the most important elements needed for the student to feel safe, informed, and prepared for the CP experience while in the CP environment. Providing a structured clinical site orientation “help[s] them to feel welcome and comfortable in the new environment” (Oermann, Shellenbarger, & Gaberson, 2018, p. 68). In this study, some participants thought that site orientations promoted their perceived CPP. Participants listed components of the site

orientation that promoted familiarity with the CP environment and prepared for CP experiences. Other information can be shared later in consideration of students' cognitive load (Oermann, Shellenbarger, & Gaberson, 2018). Study participants also identified cognitive load as an element that did not contribute to their CPP during clinical site orientation. Similarly, orientations should support UNSs in their physical preparation. It is advantageous for educators to contact students prior to the first clinical day to inform them of the expected behaviours, appearance (e.g., dress code), materials, common skills and illnesses seen on the unit, meeting spots, parking or bus route information, and a list of materials required (e.g., uniform, pen light, binder).

Knowing and Preparing Through Reflective Practice. "Students need time to reflect on their care of patients" (Benner et al., 2010, p. 219). Participants in this study described having difficulties with setting priorities in care and managing time in care delivery, and they expressed needing more time to understand the patient's situation, as they struggled with clinical judgement and critical thinking skills. Novices (i.e., nurses, students, and clinical instructors) tend to be task-focused and lack the insight of more experienced nurses and educators (Benner, 1984; Benner et al., 2010). Providing students the time to reflect on practice prompts a deeper understanding of the patient's situation, using nursing knowledge and skills development (e.g., communication) and developing critical thinking and problem-solving (Benner et al., 2010). A strategy for ensuring reflective practice and its use in CPP is to maintain small patient care assignments (1-2); thus, the UNS can focus on learning outcomes, developing competencies (Benner et al., 2010) and understanding and using knowledge while in CP.

Another strategy for developing through reflective practice is clinical conferences. Study participants valued conferences, describing their contribution to deeper understanding and increased CPP for subsequent experiences. Some participants described how clinical conferences and debriefings were particularly helpful in deepening their understanding of nursing knowledge and becoming familiar with new situations and practice experiences. Participants shared that they learned from each other's

experiences during these debriefing experiences. Pre-conference (takes place before the patient care) provides the opportunity for the students to discuss their knowledge and understanding (i.e., think critically) of the assigned patient's condition, treatment, and care needs (Oermann, De Gagne & Phillips, 2018). Post-conference (later or at the end of the CP day) provides the opportunity for reflective practice (Benner et al., 2010) as they develop a deeper understanding and "find meaning in their clinical day" (Oermann, De Gagne & Phillips, 2018, p. 195). Clinical instructors are encouraged to organise pre-conferences or pre-briefings with their students prior to patient care and facilitate post-conferences near the end of each clinical practice day.

Prepared Because of Clinical Work Experiences

Opportunities to work in the clinical environment outside of educational programs continue to be valued by nursing students (Gamroth et al., 2006). Participants in this study valued working in the clinical setting (i.e., as a healthcare aid/attendant or Undergraduate nurse employee) and shared how their clinical work experiences benefited their perceived CPP. Whether there is an increase in perceived benefit to clinical work experiences now due to decreased in-person clinical hours following the pandemic remains to be examined. Students who gain work experience in clinical practice settings are valued for helping relieve the strain on the healthcare system due to healthcare professional shortages (Canadian Association of Schools of Nursing [CASN], 2022). However, CASN (2022) cautions against unregulated care provider programs (e.g., UNE) "when done wrong" (p. 6), suggesting that student nurses can be *underprepared* for the transition to professional practice.

Stress, Workload, and Competing CPP Priorities

Participants in this study described workload stress on multiple occasions related to prioritizing which assignments to complete (e.g., sacrificing CPP activities over other nursing program assignments), how much time to dedicate to each and how much can be completed around personal life obligations (e.g., paid employment), and sleep. These elements do indicate a need for a more comprehensive look

into the psycho-affective impact that heavy workloads have on students' ability to be or feel prepared for CP. Stress in nursing education programs is an international issue; this is seen with the high rates of mental health-associated issues (e.g., stress, anxiety, depression) in nursing students (Alsaraireh & Aloush, 2017; Chernomas & Shapiro, 2013; Chernomas et al., 2023; de Moissac et al., 2022). The complexities in healthcare and an explosion in knowledge are reflected in entry-level competencies that have led to heavy nursing curricula (Benner et al., 2010; Vignato et al., 2021). This has contributed to heavy workloads for nursing students (Vignato et al., 2021). Workload contributes to stress and anxieties related to CP (Tung et al., 2018).

Participants in this study identified that course workload (e.g., assignments, activities, expectations) influenced their cognitive, psychological, and physical preparedness for CP. Promoting CPP and reducing stress and anxiety can no longer only include traditional interventions (e.g., self-care, meditation, exercise); they can be reduced at their source, specifically by reducing student workload (Tung et al., 2018; Vignato et al., 2021). Given the impact on students' stress (Vignato et al., 2021) and their ability to prepare for CP experiences, which enhances their perceived preparedness, one idea is to consider revisiting the number and nature of assignments.

Considering Priorities for Preparedness

Participants reported struggling with setting priorities in preparation for CP, given their experiences of heavy workloads in courses. Anxiety over CPP can lead to UNSs prioritizing one type of preparedness over another. For example, a student may prioritize cognitive preparedness by completing preclinical research activities or assignments (e.g., completing patient research) over physical preparedness such as sleep (i.e., staying up late and completing the assignment). In such a situation, the student will be neither cognitively nor physically prepared for the CP experience. Their lack of sleep increased stress, fear of making mistakes and health concerns (Chernomas & Shapiro, 2013; Thomas et al., 2017). The educator needs to consider CPP priorities and discuss these priorities with their students.

Setting clear and focused expectations contributes to more meaningful learning and satisfying CP experiences. It is important to promote basic biophysical needs as a priority (e.g., eating, sleeping) over increased cognitive load to promote preparedness. For example, encouraging sleep health, planning preparation time before the CP, and communicating specific and clear expectations on what to know with a list, guide, or worksheet are recommended.

Relationships in the CP Environment

Participants of this study described the importance of feeling welcomed in the CP environment, which promoted their learning and feelings of preparedness. Pienaar et al.'s (2022) literature review on supportive clinical learning environments also reported on the importance of student support and relationships within the CP setting. The study participants viewed nursing staff as role models and used their interactions and observations with these significant persons to inform their sense of preparedness, deepen their knowledge and improve their practice. While the nursing staff's primary function is to care for patients, they are also expected to teach and guide students in practice.

As already discussed within Bandura's sources of self-efficacy earlier in this chapter, participants were impacted by the relationships they built with significant CP persons. These persons were peers, clinical instructors, and healthcare role models or nursing staff. They informed, guided, and promoted (or hindered) students' perceived preparedness for CP. These relationships were often described as quintessential to their perceived and actual ability to be prepared.

Participants in this study identified the value of peer support, which helped to reduce anxiety as they relied on peers to become informed on and support them in their CPP activities. Researchers also have found that UNSs benefit from peer support as it helps reduce anxieties (Dalgaty et al., 2017; Walker & Verklan, 2016). Moreover, participants in this study valued supports that aligned with CPP components, such as psychological counselling, tutoring, and mentorship programs. Some participants suggested the

importance of ensuring the continuation and support of *mentorship* and peer support programs, as these supports positively impacted their sense of CPP.

The "Good" Clinical Instructor Promotes Perceived CPP

Participants in this study described the clinical instructor's vital importance in their CP experiences and sense of CPP. Clinical instructors are critical to students' clinical learning and experiences (Oermann, Shellenbarger, & Gaberson, 2018). Nursing education literature informs educators on what makes a "good" clinical instructor (Melrose, 2022; Soroush et al., 2021). Participants in this study referred to clinical instructors as "good" or "bad" and also considered themselves "lucky" when placed with a good instructor. They used the descriptor "good" or "bad" depending on the clinical instructors' expectations, engagement, approachability, verbal encouragement, feedback, and guidance, as well as their conduct and relationship with students, expertise, and familiarity with the CP site.

Within this study, participants described clinical instructors' contribution to their perceptions of preparedness; they remarked on the instructor's impact on their CP anxieties fears, stress, unknowns, inconsistencies, and unrealistic expectations. These were greatly diminished when a positive relationship was developed between the clinical instructor and the participant. Participants had an increased sense of CPP when they built a relationship of respect and trust with their clinical instructors and felt supported in the learning environment. Likewise, Oermann, Shellenbarger, and Gaberson (2018) note that clinical instructors need to build relationships with their students and that these instructors need to foster a climate of trust and a supportive learning environment. For clinical instructors, learning to build those positive relationships of trust and respect is essential. Clinical instructors are often learners themselves; they need the support and tools to develop competencies to become proficient in their role as facilitator and educator.

Supporting UNS CPP Through Clinical Instructor Development

Literature continues to inform nurse educators of the paramount responsibility that clinical instructors have within undergraduate nursing clinical education (Benner et al., 2010; Melrose, 2022; Oermann, De Gagne, & Phillips, 2018; Oermann, Shellenbarger, & Gaberson, 2018). Clinical instructors must be considered part of the faculty given that they play a crucial role in UNS clinical education, including in their CPP (Benner et al., 2010; Oermann, Shellenbarger, & Gaberson, 2018) and hence their professional development as nurses. However, recent clinical instructor position postings demonstrate that most Canadian undergraduate nursing programs do not require more than an undergraduate-educated nurse to be a clinical instructor. Clinical instructors "have little formal preparation" (Oermann, De Gagne & Phillips, 2018, p. 180). Despite having developed nursing and practical expertise, clinical instructors may not have foundational education about teaching and learning, contributing to "the quality and effectiveness" (Benner et al., 2010, p. 223) of teaching and learning in CP. That is also to say, the clinical instructor "may not have the understanding of the full scope of the academic nurse educator role and may need guidance to understand the nursing curriculum, program, requirements and students" (Oermann, Shellenbarger & Gaberson, 2018, p. 3).

While institutions may provide varying educational and informational sessions, it is crucial to support ongoing teaching development (e.g., adult teaching courses, clinical instructor certification), employee orientation (e.g., the curricular model used by the program, roles, and expectations in CP) and course orientation (i.e., objectives and assignments) and formal mentorship (e.g., supervisor, assigned mentor). Such supports and activities clarify roles and teaching practices and increase confidence in the clinical instructor's development (Benner, 1984; Benner et al., 2010; Goodrich, 2014; Needham et al., 2016).

Educated and experienced clinical instructors are more likely to support students (Benner, 1984; Benner et al., 2010; Botma et al., 2015). The clinical instructor must be able to guide and coach students

in their CPP, knowledge translation (i.e., understanding), and ultimately to use nursing knowledge in practice (i.e., critical thinking, decision-making, problem-solving; Benner et al., 2010; Oermann, De Gagne & Phillips, 2018; Niederriter et al., 2017). Participants in this study described positive experiences with clinical instructors who helped them use knowledge, promoted the development of critical reasoning, and challenged them in a supportive manner. This is similar to Niederriter et al.'s (2017) study of nursing students' (N = 14) perceptions of effective clinical instructors who found that nursing students felt that they "gained more knowledge, developed more critical thinking, and felt more confident with instructors who" (p. 1) built trusting relationships with students, had knowledge and expertise in the CP setting, were effective coaches and role models.

Study Limitations

There were several foreseen limitations to this study. The first identified limitation was related to the recruitment of the sample from one site (i.e., one College of Nursing program). As a result, there is potential that specific responses and findings are unique to the context of the site. The second limitation is due, in part, to the study's sampling method (i.e., purposive sampling) and the recruitment process relying on volunteers. This could result in the potential for *volunteer bias* (Polit & Beck, 2019), and the motivations of the participants are unknown (McGonagle, 2015); thus, it is possible that they participated because they held strong opinions about clinical practice education. The third limitation includes the nature of the study, the retrospective exploration and description of lived experiences, which are limited by the participant's ability to recall events (i.e., memory bias; Polit & Beck, 2019).

Another possible limitation is the potential for researcher bias in consideration of their positionality as an educator in clinical nursing education and experiences within the field. While the researcher's position allows for an experienced perception and critical judgement on the data, "it can [also] impact all aspects and stages of the research process" (Holmes, 2020, p. 3).

Also, as noted in an earlier section of this discussion chapter, participants experienced two extraordinary events that they described as having impacted their CPP. While it was a strength to have gathered such rich findings, especially in consideration of the nature of the phenomenon, there are, however, some elements to consider. One such consideration is that the majority of the participants' undergraduate experiences occurred during the COVID-19 pandemic. Thus, there is a possibility that some of the findings offer some atypical or unique perspectives or components of the phenomenon, given the context of the pandemic.

Finally, while this study focused on exploring the CPP phenomenon for UNS, evidence suggests that social identities and determinants may have been missed as important influences, as they were not explicitly questioned during the interviews. This is to say that while some elements from intersectionality (Collins, 2021) and social determinants were present within the data described in Chapter 4 (e.g., housing, finances, language), they were not explicitly explored within the context of this study. The researcher realized that intersectionality and social determinants were assumed influences within this study.

Future Research

The findings in this study provided a glimpse at the potential benefits and impact of paid (i.e., employment) experiences in CP settings. While this study provided excellent insight into the UNS CPP, more similar studies must be conducted to determine patterns across contexts (i.e., different programs and size of the program, programs with different clinical models, and when there are no clinical course disruptions). An important avenue for future research is to explore the clinical instructors' and nursing staff's perspectives on and experiences with UNSs' CPP. Gathering perspectives and experiences of the key persons associated with the phenomenon is essential for a more rounded and comprehensive understanding of the phenomenon.

Also, this study did not collect data related to in-person simulations and CPP. A closer look at the role and impact of simulations (i.e., in-person and virtual) on this phenomenon is suggested as this study provided a preliminary view of perspectives and experiences related to CPP and VSims. With more data on UNS CPP, researchers could begin to identify consistent characteristics or features of CPP to inform tool development to measure CPP. Additionally, further research and data on UNS experiences with nursing position-type work are needed (Gamroth et al., 2006) in relation to CPP.

Conclusion

The research findings described CPP from the perspective of nursing student participants. The study contributes to the limited literature in this area. The thematic analysis presented in this study offers insight into students' perceptions and lived experiences regarding CPP. With this study's findings, we can rely on more than anecdotal evidence for understanding UNS CPP. The analysis offered evidence of what influences UNS preparedness for CP, including what and how they are prepared, what they do to prepare for CP, and who informs their CPP. Participants shared how their feelings of CPP (or unpreparedness) influence their emotions, perspectives, reactions, and behaviours. This study provides an initial in-depth description of the phenomenon, its features, and the components that inform and influence the UNS CPP.

Following the findings of this study, we summarize that students experience three types of preparedness related to CP experiences. These three types are represented within the first three themes of this study (i.e., cognitive, psychological, and physical preparedness). An additional two themes provide insight into the influences of the CP environment and CPP sources (i.e., life experiences, preclinical learning, and relationships). The findings of this study show that CPP components share features and are interconnected in participants' overall CPP.

The students' affective/emotive and mental states characterize the first theme, psychological preparedness. The elements within CP environments influenced their perceived psychological

preparedness (i.e., perceived emotional state and ability to interact with the CP environment). It is informed by lived experiences, preclinical learning experiences and relationships with significant persons (including themselves). Undergraduate nursing student participants practiced self-care and sought psychological services and social support (family, peers, mentorship, positive relationships with educators) to facilitate CPP.

The second theme, cognitive preparedness (i.e., cognition, knowledge, and competencies), includes five categories (i.e., types) of knowing (i.e., theoretical, practical, understanding and using, anticipating, and expectations). This theme's findings were substantial as these varying types of knowing were the most referred to components of the phenomenon, and within each feature, theme, and category, knowing was embedded and interconnected.

The third theme, physical preparedness, is also essential for CPP as it includes biophysical and material readiness, specifically, basic physiological needs (e.g., food, sleep), materials (e.g., uniform, equipment), finances, and transportation. The CP environment affected the participants' physical needs to become prepared (e.g., materials, equipment, busing, walking, carpooling). The CP sources (i.e., lived experiences, preclinical learning, and relationships) also inform students about their environment and physical needs.

The fourth and fifth themes include the elements within the CP environment that influence and inform the UNS's perceived knowledge (e.g., events, relationships, and interactions within a climate of trust) and the ability to use knowledge in practice. Furthermore, CP sources include preclinical learning, lived experiences, and relationships with significant persons, which inform the UNS's CPP (i.e., cognitive, psychological, and physical preparedness). The student is informed by the significant persons (i.e., within their CPP) with whom they have a relationship, including clinical instructors, peers, and nursing staff.

Furthermore, this study presents the COVID-19 pandemic and the faculty strike as extraordinary events that impacted the findings. Although these uncommon events provided the opportunity to

examine the phenomenon during CP disruptions, for example, we also need to consider the potential that such events may have contributed to atypical findings in some ways. The COVID-19 pandemic also provided insight into the current nursing education climate and within the clinical settings. The pandemic allowed educators and researchers a unique insight into how disruptions and changes to clinical nursing education impacted UNS's perception of their lived experiences and knowledge development within an undergraduate nursing program. Accordingly, it provides the opportunity to discuss contrasting findings in the literature.

Another consequence of the pandemic was a rapid shift in the delivery method of nursing education (Valiga, 2021). While there were numerous changes and challenges during the pandemic, Valiga (2021) asserts that such substantive challenges and changes have cultivated a culture for "new ways of thinking" (p. 680) about nursing education. Moreover, the post-pandemic era continues to challenge clinical nursing education, with clinical environments remaining highly stressful and strained with short-staffing (Kurtzman et al., 2022) and continued viral outbreaks (Winnipeg Regional Health Authority [WHRA], 2024; Shared Health Manitoba, 2024). Thus, it can be concluded that these experiences are no longer unique occurrences and provide insight into the ongoing climate rapidly becoming a new normal for CP courses with implications for CPP.

The Canada Association for Schools of Nursing (CASN) has acknowledged the growing concerns within nursing education and the ability to adequately "support practice-based learning" (p. 7) and prepare students for their clinical education (CASN, 2022). Nursing educators have begun strategizing and looking at alternative clinical placement options, clinical education models, and approaches. With these findings, nursing educators, coordinators, administrators, health agencies and policymakers are encouraged to work collaboratively to seek alternative possibilities to the current structure of undergraduate nursing clinical education. Benner et al. (2010) called for a radical transformation in nursing education. More than a decade later, living post-pandemic and with ever-increasing complexities

and challenges in the CP environment, changes are taking place in nursing education, and educators need to question whether the changes contribute to diminishing gaps, barriers, and challenges in clinical education. With continued calls for reform and new ways of thinking and doing in clinical nursing education, seeking opportunities for mutually beneficial partnerships is encouraged. Some alternative clinical education models that have begun to emerge and are becoming more popular are the partnership or collaborative clinical education models. The data comparing clinical education models and their impact on UNS CPP is limited. However, the elements and principles within such models align promisingly well with some of the CPP influences seen in this study (e.g., student-clinical instructor ratio, structure, consistency in expectations, familiarity with the environment, and opportunities for paid learning in clinical sites).

The findings of this study offer insight into UNS' views on CPP and contribute to the limited literature in this area. The findings can be used to enhance educators' knowledge and ability to better prepare and support students in their clinical learning. Nurse educators need to help facilitate UNS' sense of preparedness for clinical practice courses, enhancing their self-efficacy. Ensuring adequate support and structure will allow the student to focus on attaining course objectives, developing competencies, and using knowledge to practice within CP courses.

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Appendix A
Letter of Invitation

College of Nursing
University of Manitoba
89 Curry Place
Winnipeg, Manitoba
Canada R3T 2N2
T: 204 474 7452
F: 204 474 7682
nursing@umanitoba.ca

Letter of Invitation

Title of Study: Undergraduate Nursing Students' Perspectives and Experiences with Clinical Practice Preparedness: A Descriptive Qualitative Study

Student Principal Investigator:
Marie-Claude Simpson, RN, BN, MN Student
College of Nursing, University of Manitoba
Umgratt4@myumanitoba.ca

Faculty Advisor:
Wanda Chernomas, RN, PhD
College of Nursing, University of Manitoba
Wanda.Chernomas@umanitoba.ca

Dear Students,

My name is Marie-Claude Simpson, I am a Master of Nursing student at the University of Manitoba. As part of my master's degree in nursing education, I am intrigued to understand undergraduate nursing students' experiences and perspectives on their preparedness for clinical practice. Thus, **I would like to invite you to participate in my thesis study**. The purpose of this research is to explore and describe undergraduate nursing students' experiences and perspectives on clinical practice preparedness.

This research has been approved by the Research Ethics Board at the University of Manitoba, Fort Garry campus.

If you choose to volunteer your time for this study, you will participate in a 45-75 minutes interview. During the interview, you will be asked about your experiences and perspectives on how you feel and prepare for clinical practice.

The interview would take place at time that is convenient for you, virtually by videoconference using Zoom and will be recorded and transcribed. All recordings are confidential, will be securely stored and will only be accessible by the primary investigator and potentially by my advisor for supervisory purposes.

If you have completed at least two clinical placements and have not yet started your senior practicum, you are the ideal participant for this study. If you are interested in becoming a participant or would like to know more about the study, please contact me by email or phone.

Please note that participating in this study is entirely voluntary, and there are no consequences for not participating. By participating, the information you share will help inform educators about practices related to clinical practice preparedness.

Also, to thank participants for their time following each interview, they will be given a **$25.00 e-gift card for Amazon.**

Thank you for your consideration,
Kind regards,
Marie-Claude Simpson, RN, BScN, MN (student)
umgratt4@myumanitoba.ca
Cell: [redacted]

Appendix B
Recruitment Email

Title of Study: Undergraduate Nursing Students' Perspectives and Experiences with Clinical Practice Preparedness: A Descriptive Qualitative Study

Subject: **Invitation to participate in a research study**
Attachment: **Letter of Invitation**

Hello Students,

My name is Marie-Claude, I am currently completing my master's of nursing academic requirements. In short, I am in the process of conducting research for my thesis. I am **recruiting nursing students who have completed Nursing Practice 1 and 2 and are enrolling in or currently registered for Year 3 or Year 4 to participate in a study** exploring undergraduate nursing students' experiences and perspectives on clinical practice preparedness.

This research has been approved by the Research Ethics Board at the University of Manitoba, Fort Garry campus.

Also, to thank participants for their time following each interview, they will be given a **$25.00 e-gift card for Amazon.**

I have attached a **Letter of Invitation** to this email that provides more information about the study and how you would participate.

Should you be interested or have any questions, please do not hesitate to contact me via email (umgratt4@myumanitoba.ca) or call me at [redacted].

Faculty Advisor:
Wanda Chernomas, RN, PhD
College of Nursing, University of Manitoba
Wanda.Chernomas@umanitoba.ca

Thank you,

Marie-Claude Simpson RN, BN
MN Student, College of Nursing

Appendix C
Consent Form

College of Nursing
University of Manitoba
89 Curry Place
Winnipeg, Manitoba
Canada R3T 2N2
T: 204 474 7452
F: 204 474 7682
nursing@umanitoba.ca

CONSENT FORM

Title of Study:

Undergraduate Nursing Students' Perspectives and Experiences with Clinical Practice Preparedness: A Descriptive Qualitative Study

Principal Investigator:

Marie-Claude Simpson, RN, BScN, Masters Student,
College of Nursing, University of Manitoba
Phone: [redacted]
Email: umgratt4@myumanitoba.ca

Thesis Committee:

Wanda Chernomas, RN, PhD, Associate Professor (Advisor) College of Nursing, University of Manitoba
Email: wanda.chernomas@umanitoba.ca

Jo-Ann V. Sawatzky, RN PhD, Senior Scholar & Professor Emeritus, College of Nursing, University of Manitoba

Richard Hechter, PhD, Professor,
Faculty of Education, University of Manitoba

Sponsor: College of Nursing Endowment Fund Graduate Student Research Grant

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

Purpose of this Study

This study aims to explore and describe undergraduate nursing students' experiences and perspectives on clinical practice preparedness. Moreover, this study seeks to identify what students think influences their preparedness for clinical practice. Thus, while a retrospective lens is applied to this study, the focus is not on the students' clinical performance outcomes but on how they perceive and experience the phenomenon of preparedness and what they think influences their preparedness for clinical practice.

Participants

You are being asked to participate in this study because you are an undergraduate nursing student who has completed at least two clinical courses and has not started their final practicum. Approximately 10 - 15 participants will be asked to participate. Should you agree to participate in this study, you will meet

virtually with the primary investigator for an individual interview. Such personal interviews are a rich source of quality information. Participants in the study will be asked to participate in one 45-75-minute interview. During the interview, the primary investigator will ask open-ended questions about your experiences preparing for clinical practice. These questions help us understand your perspective and lived experiences.

The interview will take place at a time that is convenient for you. The primary investigator will meet with you virtually using the videoconferencing Zoom app. Participants are encouraged to find a quiet and private location for the interview, such as a private office or room. The session will be recorded with both audio and visual via Zoom, as well as a separate digital audio-recording device for backup. The audio recordings will be transcribed by an automated transcription service provided by NVivo software, to ensure accurate reporting of the information that you provide. The investigator will also take notes during the interview. The session is confidential and will only be shared with Dr. Chernomas in her role as an advisor. Participants' names and other identifying information will be omitted from the transcript. The recording will be stored on the UM cloud service OneDrive accessible only to the primary investigator and advisor. Also, recordings will be deleted once the transcriptions have been completed and anonymized, approximately December 2022.

Risks and Discomforts

There are no anticipated physical risks to participants of this study. There are minimal risks to participating in this study, however, as you may find talking about your experiences to be upsetting or emotional. You do not have to answer any question that makes you feel uncomfortable or that you find too upsetting. Should you need any additional help or support, the investigator will have information available for you to access the student counselling services at the University of Manitoba.

Benefits

Participation in this study may not help you directly, but the information gained may help nurse educators and researchers by providing insights about clinical practice preparedness as experienced by nursing students, and thus may also benefit nursing students in the future.

Costs

There is no cost to you to attend the individual interview. However, you will be asked to download the free videoconferencing Zoom app to a mobile smart device, tablet, or computer before the session. But, again, there is no associated cost.

Payment for participation

You will be given a $25 electronic gift card to Amazon for your participation in this research study.

Confidentiality

We will do everything possible to keep your personal information confidential. Your name will not be used in any study related publications. A list of names, addresses and codes (ex. Jane Doe, jdoe@myumanitoba.ca, UNS005) of participants will be stored in a secure file using the U of M cloud services, OneDrive. This list is used to contact participants interested in receiving a result summary, for sending the honorarium and completing data collection. The list will be deleted following data analysis, approximately June 2023. The primary investigator and advisor are the only ones to have access to your personal information. If the results of this study are presented in a meeting or published, nobody will be able to tell that you were in the study. Please note that although you will not be identified as the speaker, your anonymized words may be used to highlight a specific point. For example, *"I felt*

encouraged when…" (participant UNS006). The collection and access to personal information will comply with provincial and federal privacy legislation.

The interview recordings will be transcribed and used within the research process. Your name will be omitted from any transcript or notes. The recording will be stored with the UM cloud services, OneDrive, only accessible to the primary investigator and advisor. Recordings will be kept secure and deleted once transcriptions have been anonymized, approximately December 2022. Transcriptions will be kept for seven years. Only the primary investigator and advisor will have access to them and know your name except as described below.

Some individuals or groups may need to check the study records to ensure all information is correct. These individuals or groups are the Research Ethics Board of the University of Manitoba, (responsible for the protection of people in research and has reviewed this study for ethical acceptability), the Manitoba Center for Nursing and Health Research (MCNHR), faculty advisor (Dr. Wanda Chernomas).

Current laws require that allegations of certain offences against children or persons in care be reported to the legal authorities. Due to the nature of clinical practice activities, wherein student nurses are responsible for vulnerable individuals, should any information be presented where there is a concern about a person's health and life, the primary investigator will be obliged to report it to the appropriate authorities.

Additionally, all records will be kept in secure UM cloud service, such as OneDrive, and only those persons identified will have access to these records. If any of your research records need to be copied, your name and all identifying information will be removed. No information revealing any personal information such as your name, address, email, or telephone number will be accessible electronically.

Your personal information and the information you provide as a participant in this study will not be used or disclosed by the university for other purposes, unless permitted by *The Freedom of Information and Protection of Privacy Act* (FIPPA). The information you provide will be used by the University for the purpose of this research project, and for appropriate communication as required. If you have any questions about the collection of your personal information, contact the Access & Privacy Office (tel. 204-474-9462), 233 Elizabeth Dafoe Library, University of Manitoba, Winnipeg, MB, R3T 2N2.

All data will be destroyed approximately June 2030.

Voluntary Participation/Withdrawal from the Study

Your decision to take part in this study is voluntary. You may refuse to participate, or you may withdraw from the study until the data collection process is complete, approximately December 2022. As a student, your participation or discontinuation in this study will not constitute an element of your academic performance nor will it be part of your academic record at the University of Manitoba. No negative consequences will come should you choose to withdraw from the study.

Disseminating Study Results

The results of the study will be included in the investigator's thesis. Such master's thesis' are published with the University of Manitoba archives, such as MSpace, and accessible to University of Manitoba patrons. Furthermore, the study's findings may also be accepted for publication and/or presentations at various professional functions.

Interest in receiving a summary of findings

Participants interested in receiving a brief summary of the study data may request the information with the investigator directly at umgratt4@myumanitoba.ca. Interested participants can expect a summary of results by approximately January 2023.

Faculty advisor: Wanda Chernomas, RN, PhD. Wanda.chernomas@umanitoba.ca

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation. The University of Manitoba may look at your research records to see that the research is being done in a safe and proper way. This research has been approved by the Research Ethics Board at the University of Manitoba, Fort Garry campus. If you have any concerns or complaints about this project, you may contact any of the above-named persons or the Human Ethics Officer at 204-474-7122 or HumanEthics@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and reference.

I consent to audio/visual recordings _____ *(initial)*

Participant's name (Print) _____

Participant's Signature: _____ **Date:** _____

Researcher's Signature: _____ **Date:** _____

Appendix D
Interview Approach and Guide

Title of Study: Undergraduate Nursing Students' Perspectives and Experiences with Clinical Practice Preparedness: A Descriptive Qualitative Study

Student Principal Investigator:
Marie-Claude Simpson, RN, BN, MN Student
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Wanda Chernomas, RN, PhD
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A. Interview Process/Guide
B. Demographic profile/questions
C. Interview questions
D. Field notes guide & Post interview procedures

A. Interview Process/Guide

1. Developing researcher-participant relationship: Introductions & "small talk"
2. Review the consent form & the purpose of the interview
3. Answer participant questions
4. Obtains verbal consent from the participant
5. Start recording the session and confirm participant consent.
6. Complete demographic profile
7. Start with the leading question from the interview guide
8. Facilitate the conversation; use prompts when needed.
9. End of the interview, provide time for the participant to add or clarify any information.
10. Stop the recording
11. Answer participant's questions
12. Thank the participant and ensure participant has a copy of the consent form with researcher contact information

Interview date: _____ Length of interview: _____
Participant code: _____ / Pseudonym: _____

Script

Thank you for agreeing to this interview. Your contribution to this study is appreciated. As stated on the consent form, you can decide to withdraw at any time during the research process. Your confidentiality will be maintained; no personal information will be shared with other then my advisor and myself. Neither will any personal or identifying information be included in study related publications or presentations. A little reminder that the interview will be recorded and transcribed. You can ask to have the recording stopped at any time, and no explanation is needed. You can choose to refuse to answer any question. The purpose of this study is to explore and understand your perception and experiences with clinical practice preparedness, and I will ask you several questions to learn how you view clinical practice preparedness and what experiences you've had.

Do you have any questions before we begin and I start recording? Once I begin recording, I will repeat the purpose of the study and ask you your consent once again.

B. Demographic profile/Questions

Age:

Gender (open to participant's description/self-definition):

Admission date (to the College of Nursing; term/year):

Part-time OR Full-time student:

Current year/term enrolled in the program:

Clinical courses completed:
NRSG 2540 Nursing Practice 1 *(year 2); NRSG 2542 Nursing Practice* 2 *(year 2)*
NSRG 3540 Nursing Practice 3 *(year 3)*; *NRSG 3542 Nursing Practice* 4 *(year 3)*
NGRS 4530 Nursing Practice 5 *(year 4); NRSG 4570 Nursing Practice* 6 *(year 4)*

Currently enrolled in a clinical course Nursing Practice*:*
NSRG 3540 Nursing Practice 3 *(year 3)*; *NRSG 3542 Nursing Practice* 4 *(year 3)*
NGRS 4530 Nursing Practice 5 *(year 4); NRSG 4570 Nursing Practice* 6 *(year 4)*

Have you completed or attended higher education outside of nursing:

Do you work during the academic year?

Approximately how many hours per week do you work?

C. Interview Questions

Guide for probing questions

Probing questions:	Neutral/nondirective probes (Polit & Beck, 2017)
How did that make you feel?	Is there anything else ?
What did you do? How did you react/respond?	Go on.
What do you feel you learned doing that?	Are there any other reasons?
What did you especially like/dislike about the experience, if anything?	How do you mean?
	Could you please tell me more about that?
	Would you tell me what you have in mind?
	There are no right and wrong answers; I'd just like to get your thinking.
	Could you please explain that?
	Could you please give me an example?

1. Please tell me where you were placed for each of your clinical practice courses completed and in what term you completed each?
2. Being prepared for clinical practice or clinical practice preparedness is something we talk about as part of nursing education. What does clinical practice preparedness mean to you?
3. When you think about the clinical practice courses you completed, what did you do to prepare for clinical practice? *(Consider asking about each clinical experience, ask for an example: Nursing Practice 1; 2; 3; 4; 5; 6 ?)*

   i. When you prepare for clinical practice, are there resources to read or review or information to know as part of your preparation? Can you tell me about that?
   ii. When you prepare for clinical practice, do you consider self-care activities? Can you tell me about that?
   iii. When you prepare for clinical practice, do you consider psychomotor skills? Can you tell me about that?
   iv. What clinical courses, settings or other reasons have influenced how you prepare for the next practice experience? How did you change your preparation based on your past experiences?
4. How did you learn what you need to do to be prepared for clinical?
   i. What or who helped you with learning about? being prepared for clinical practice?
   ii. What do you think about theory courses and their role in helping you with preparedness for clinical practice?
   iii. What do you think about simulation labs and their role in helping you with preparedness for clinical practice?
   iv. What do you think about skills labs/courses and their role in helping you with preparedness for clinical practice?
   v. How about earlier clinical courses and their role in helping you with preparedness for later clinical courses?
5. Tell me about a time when you felt or thought yourself prepared for clinical practice and what that was like for you?
   i. How was this experience different from other times?
6. Tell me about a time you felt unprepared for clinical practice and what was that like for you?
   i. What lead you to think you were unprepared for the clinical practice?
7. Reflecting on a time that you felt prepared and a time when you felt unprepared what did you learn from these experiences about clinical practice preparedness?
   i. What did you learn about yourself?
8. What prevents you from being prepared for clinical practice?
   i. Can you tell me an example?
   ii. Can you think about anything in your clinical practice experiences?
   iii. Does anything in your school life prevent you from being prepared?
   iv. Does anything in your personal or family life prevents you from being prepared?
9. What is most helpful in being prepared for clinical practice?
   i. Can you share an example where this was helpful?
   ii. Can you think about anything in your clinical practice experiences?
   iii. Does anything in your school life help with being prepared for clinical practice?
   iv. What about anything in your personal or family life that is helpful with being prepared for clinical practice?
10. What is most challenging in being prepared for clinical practice?
11. Is there anything I did not ask you about clinical practice preparedness that you would like to share with me?

D. <u>Field Guide: Post Interview Procedures</u>
   1. Recording reviewed
      a. Note completeness
      b. Any problems with the audio or recording issues
      c. Objective findings
   2. Notes:

    a. Investigator's assumptions, reflections (impression and ideas), and objective findings.
    b. Possible follow-up questions
3. Reflections
    a. Content
    b. My communication
    c. My reactions
    d. Participant communication
    e. Participant reactions
4. Future considerations: communication, prompts, questions, clarifications.
5. Consult with advisor