



**ERASMUS MUNDUS JOINT MASTER'S DEGREE IN EMERGENCY AND
CRITICAL CARE NURSING (EMJMD NURSING)**

**The Listening Project: A qualitative study on the experiences of pre-registered nurses
during the COVID-19 pandemic in Scotland**

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February 2022

Master's Thesis





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That the Master's Thesis submitted by **Kris Amor N. Calica**, entitled **The Listening Project: A qualitative study on the experiences of pre-registered nurses during the COVID-19 pandemic in Scotland**, carried out under our supervision in the Erasmus Mundus Joint Master Degree in Emergency and Critical Care Nursing, meets the necessary requirements to be approved as a Master's Thesis.

And for the record, and for the relevant purposes, the present certification is issued in Edinburgh on February 4, 2022.

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The Listening Project: A qualitative study on the experiences of pre-registered nurses during the COVID-19 pandemic in Scotland

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(15,366 words excluding tables, figures, references, and appendices)

Abstract

Background: Due to the rapid increase in the number of COVID-19 infections and deaths, academic institutes worldwide were forced to shift to distance learning. Within the period of global lockdown and isolation, student nurses were one of the groups who faced unique challenges due to the limited practical learning environment caused by the transition to online learning and the emergency hiring of nursing students to fill shortages in many health facilities and help in the COVID-19 response.

Aim: To explore the experiences and perceptions of pre-registered nurses in relation to their university education during the COVID-19 pandemic.

Methods: Underpinned by Lizzio's (2011) five senses of student success model, a qualitative approach using peer-to-peer discussion was utilized to explore the experiences of pre-registered nurses during the COVID-19 pandemic. Students who are on their second and final year in the nursing program were invited to participate. Interviews were conducted and transcribed using an online meeting platform. Data were analyzed using the five main stages of framework analysis.

Results: Eleven peer-to-peer discussion with 22 students were conducted. The five themes are linked with the five senses student success model: capability, connectedness, purpose, resourcefulness, and culture, which was strongly linked to their satisfaction in their program. Six sub-themes emerged in the data: confidence and learning process under capability, building relationships and communication under connectedness, and student health professional and mental health consequences of COVID-19 pandemic under purpose.

Conclusion: The situation was a learning opportunity for the students and the university to further support students and build resilience during a pandemic. It is essential for the university to include concepts of transition, pandemic preparedness, work with practitioners, and provide catch up sessions to analyze gaps on their skills and areas where they need further support.

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Glossary of terms

APA PsychInfo- a database of psychology literature produced by the American Psychological Association

COVID-19 (Coronavirus disease 2019)- an infectious disease caused by the SARS-CoV-2 virus

COVID-19 pandemic- an ongoing global outbreak of coronavirus disease 2019 that started in Wuhan China in December 2019

Critical Appraisal Skills Programme (CASP) checklist- a tool with a series of questions to evaluate health-related research studies

Extended Clinical Placement (ECP)- temporary emergency educational standards implemented by the Nursing and Midwifery Council during the Covid-19 pandemic, offered to second and final year pre-registered nurses to undertake a paid clinical placement that aimed to provide a flexible, responsive workforce while ensuring the learning and academic needs of students

EBSCO- stands for Elton B. Stephens Company, a free research database covering a variety of research subjects

General Data Protection Regulation (GDPR)- consist of sets guidelines for the proper collection, handling, and processing of personal information, how data is being used, and procedure on raising complaints

Global Health Crisis- refers to a health issue that concerns many countries in which number of people are dying of diseases

Metasynthesis- a method of conducting a secondary synthesising and analysis of primary qualitative results to provide a more detailed description of a phenomena as well as assessment of the research method

Nursing and Midwifery Council (NMC)- the professional regulator of nurses and midwives in the United Kingdom

Online Learning- a type of education that is conducted through online platforms with the used of internet

PEO- a question format used in formulating research questions in qualitative research based on three concepts: Population, Exposure, and Outcome(s)

Personal Protective Equipment (PPE)- equipment worn by people who are at risk of injury or infection including gloves, masks, and gowns

Peer-to-peer discussion- an activity involving two participants and a facilitator that encourages reflection and sharing of experiences and perceptions with a certain topic or event

Pre-registered nurses- refer to students taking full-time pre-registration Bachelor Nursing programme in four fields of nursing: adult, children's learning disability and mental health with are theoretical and practice components to complete before registration

Quality appraisal- the process of carefully and systematically examining the trustworthiness, value, and relevance of the research study in a particular context

SARS-CoV-2- stands for severe acute respiratory syndrome coronavirus 2 that causes coronavirus disease 19

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Chapter 1 – Introduction

1.1 Introduction and Background of the study

COVID-19 was declared by the World Health Organization (WHO) as a global pandemic in March 2020, causing an unprecedented global health crisis (Collado-boira et al., 2020). The virus has started in Wuhan, China last December 2019 and has continued to spread worldwide, causing more than 220 million cases and 4.56 million deaths worldwide in September 2021 (World Health Organization, 2020). COVID-19 is caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), causing severe illness in the elderly and people with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease, or cancer (Goldman, 2019). Common symptoms are fever, cough, body weakness or fatigue, loss of smell and taste with sorethroat, headache, hemoptysis, and diarrhea as less common symptoms (Hu, 2019). While some become seriously ill and require medical treatment, most people are asymptomatic or experience mild to moderate symptoms and may recover without going to a hospital or any medical treatment (Larsen et al., 2020).

Due to the rapid increase in the number of infections and deaths, governments worldwide were forced to partially or fully closed public places and business establishments, implemented travel restrictions and isolation, and suspended face-to-face classes, to control the spread of infection (Agu et al., 2021; Cengiz et al., 2021). Within the period of global lockdown and isolation, nursing students have been among the groups that experienced unique challenges during the pandemic due to transition to online learning, limited practical learning environment and the emergency hiring of nursing students to fill shortages in many health facilities and help in the COVID-19 response (Beisland et al., 2021; Farsi et al., 2021; Suliman et al., 2021).

In the United Kingdom, nursing schools enforced home-based working, suspended skills and simulation workshops, and deployed nursing students and nurse educators to clinical practice to contribute towards the national COVID-19 response (Carolan et al., 2020). The

COVID-19 situation resulted to student's uncertainties on course progression, future career as registered nurses as well as mental health consequences (Dewart et al., 2020; O'Flynn-Magee et al., 2020; Ulenaers et al., 2020). For instance, Lovric et al.'s (2020) qualitative study on 33 nursing students in Croatia on their experiences of the COVID-19 pandemic notes that students face difficulties concentrating, remembering, and developing motivation during the distance learning. Similarly, Begam & Devi (2020) findings on a cross-sectional descriptive study on 244 Indian nursing student's perceived stress during COVID-19 lockdown confirmed that 61.43% nursing students experienced moderate stress related to lack of resources and distance learning challenges.

The increased workload and the number of nurses afflicted by COVID-19 worldwide have strained nursing's capability to offer care (Jackson et al., 2020). As a result, several countries such as the United Kingdom, Australia, and Spain have implemented the emergency standards allowing student nurses to join the workforce on a paid clinical placement (Carolan et al., 2020; Ramos-Morcillo et al., 2020). While some students perceived it as a sense of achievement by contributing to the greater good, fear and anxiety was also evident due to the nature of the role and acquisition of necessary skills and competencies for safe transition to registration (Swift et al., 2020). Findings from a survey conducted by Cervera-Gasch et al. (2020) with Spanish nursing and medical students during COVID-19 pandemic revealed that 65.3% believed they were not prepared or barely prepared to provide care to COVID-19 patients, however, 74.2% said they would if needed. Studies found that the insufficient preparation and the lack of personal protective equipment (PPE) were the main stressors for students during this pandemic (Aslan & Pekince, 2021; Deo et al., 2020; Fitzgerald & Konrad, 2021).

Given that the COVID-19 pandemic is still a new phenomenon, many knowledge gaps exist on the implication of the experiences of student nurses during the COVID-19 outbreak

(Lovrić et al., 2020). A comprehensive and structured analysis of their experiences during the pandemic offers valuable information in understanding the impact of the crisis, realigning nursing curriculum, and organizing resources and human infrastructure (Ulenaers et al., 2020). Hence, this qualitative study will be conducted to fill the gap in the knowledge and facilitate optimization of current teaching strategies to achieve learning outcomes during a pandemic.

1.2 Theoretical Framework

The student's ability to adjust and adapt to the transition and academic demands plays a significant role in the student's success in the university (Bass et al., 2016). Lizzio (2006) has proposed the five senses student success model (Figure 1), which include sense of capability, connectedness, purpose, resourcefulness, and culture to promote student success and satisfaction with their university education. This framework was adopted in this study because of its focus on university transition experience as well as student satisfaction and successful outcomes across their university education (Larsen et al., 2019) and it has been used and explored in other university-based research studies (e.g., understanding the experiences of midwifery students) (Sidebotham et al., 2015). Sense of capability is the students understanding of their student role and mastery of basic academic knowledge and skills. Sense of connectedness aligns with sense of belonging which refers to how students connect and build relationships with peers and the university. A sense of purpose refers to the student's ability to develop goals, understand the relevance of what they are doing, personal values and mental health. A sense of resourcefulness refers to the ability of the student to balance study and other activities, and ability to navigate university system and the sense of academic culture ties all the four other senses together and ability to understand inclusion, equality, and diversity for personal and professional development (Lizzio, 2011; Pownall et al., 2021).

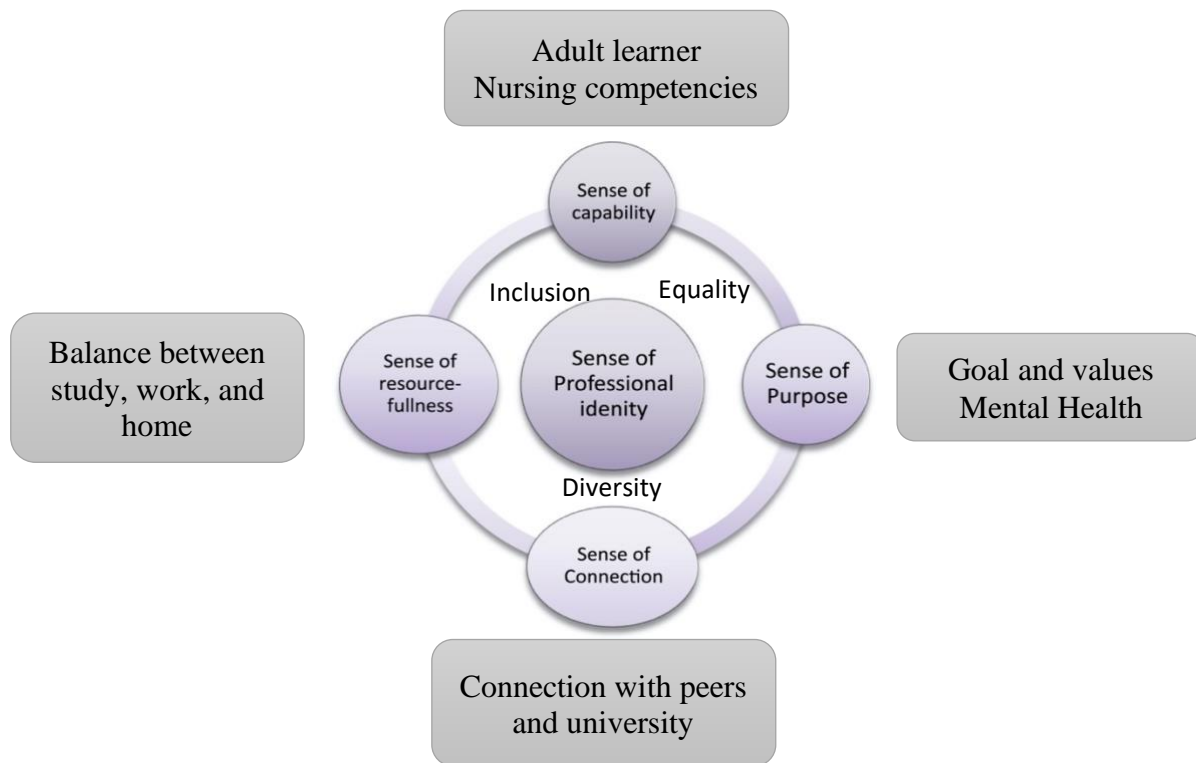


Figure 1.1 Five Senses of Student Success Model (Sidebotham et al., 2015)

1.3 Justification of the study

The recent experience of pre-registered nurses during the peak of the COVID-19 pandemic has highlighted the importance of developing empowered, courageous, and resilient student nurses who can contribute to the healthcare workforce while continuing their nursing education. Support from academic institutions and healthcare organizations is essential to ensure that student nurses feel empowered, enabling them to find the courage to manage their education and difficult situation (Leigh et al., 2020). COVID-19 pandemic presents an opportunity to facilitate evidence-based data, which could significantly affect the level of global understanding of the challenges, needs, and difficulties of nursing students during crises. Including students' voices in re-orienting nursing education in a pandemic is essential to frame academic discussions in optimizing current teaching, best practices, and learning strategies in similar events and ensure the future of the nursing workforce. The findings of this study will add to the limited knowledge and potentially benefit the participants by pointing out the impact of the COVID-19 pandemic on student nurses, address educational gaps, and enable

conceptualization of contingency plans, alternative education strategies and the necessary support and resources needed by students to improve educational experience and achievement of academic success during a pandemic.

1.4 Research Question

What are the experiences of pre-registered nurses in relation to their university education during the COVID-19 pandemic in Scotland?

Aims of the study

1. To explore the experiences and perceptions of pre-registered nurses in relation to their university education during the COVID-19 pandemic through a qualitative approach using peer-to-peer discussion.
2. To relate the student experiences during the COVID-19 pandemic to the five senses of student success model to conceptualize ways to support students during a pandemic.

1.5 Operational Definition

COVID-19 pandemic- ongoing global pandemic of the coronavirus disease 2019

Pre-registered nurses- second year and final year nursing students at Edinburgh Napier University

Peer-to-peer discussion- a novel method of data collection, where two participants share and discuss their experiences about certain event or topic, and the researcher to guide the topic of discussion

Theoretical framework- a structure that introduces, describes, and supports the research problem being studied

Five senses student success model- consist of the five senses, capability, connectedness, purpose, resourcefulness, and culture, that drive students to successful transition in their education

1.6 Dissertation Structure

The dissertation will follow the following structure:

Chapter 2 is the review of literature, which provide an overview of the different findings of studies and relevant literature on the experiences of pre-registered nurses in relation to their university education during the COVID-19 pandemic.

Chapter 3 is the research methodology and methods, which will present the research design, the rationale of using the research approach, and the steps taken in conducting the research. Likewise, this chapter will introduce peer-to-peer discussion as novel data collection method.

Chapter 4 is the research findings which will outline the results of the study.

Chapter 5 is the discussion and analysis of findings that will highlight the study's key findings, its implications for practice, nursing education, and future research. This chapter will also discuss the advantages and disadvantages of peer-to-peer discussion.

Chapter 6 is the conclusion that will summarize the study main points, new knowledge generated, recommendations for institution and future studies.

Chapter 2 – Literature review

2.1 Introduction

This chapter will present relevant literature related to the experiences of pre-registered nurses during the COVID-19 pandemic and use the following research question to examine the literature, “What are the experiences of student nurses in relation to their university education during the COVID-19 pandemic?” It is formulated using the PEO question format, which includes the student nurses as population (P), COVID-19 pandemic as the exposure (E), and university education experience as the outcome (O) (Teesside University, n.d.). This review aims to undertake a meta-synthesis of qualitative research studies exploring the experiences of nursing students during the COVID-19 pandemic to assess the quality of the literature, identify key themes to inform methodology of the study, and identify gaps in the literature in which further studies are needed.

2.2 Methods

A metasynthesis was conducted to explore new insights on student nurses’ experiences during the pandemic (Lachal, 2017). Meta-synthesis is an approach of conducting a secondary synthesising and analysis of primary qualitative results to provide a more detailed description and valuable findings of a phenomena as well as assessment of the research method used in the study (Chrastina, 2018). Walsh et al. (2004) agreed that metasynthesis of qualitative studies has important implications for developing more formalized knowledge and a complete understanding of a phenomenon.

2.2.1 Literature search strategy

A comprehensive search for relevant literature was conducted in EBSCO in the following electronic databases: CINAHL, Medline, and APA PsychInfo. Search terms were used across all databases and are included in Table 2.1. The database search results were then imported to Mendeley Desktop Version 1.19.8 for automatic removal of duplicates.

Table 2.1 Terms used in literature search

“nursing students” OR “pre-registration nurses” OR “undergraduate nurses”
AND
“COVID” OR “Covid-19” OR “coronavirus” OR “pandemic”
AND
“education” OR “learning” OR “university” OR “clinical placement.”
AND
“qualitative study” OR “qualitative research”

2.2.2 Eligibility criteria

The inclusion and exclusion criteria were formulated based on the population, exposure, and outcome (PEO) format as well as the type of evidence sources, year, and countries of publication as shown in Table 2.2. All studies that meet the eligibility criteria were then considered for the review and analysis.

Table 2.2 Inclusion and Exclusion Criteria

	Inclusion Criteria	Exclusion Criteria
Population	Student nurses or pre-registered nurses, or undergraduate nurses	Other healthcare students
Exposure	<p>Studies that explored experiences and perceptions of student nurses on the transition to online learning, clinical placements or paid clinical placements during the COVID-19 pandemic</p> <p>Studies that explored the impact of the COVID-19 pandemic on student nurses’ mental health</p>	<p>Studies that include nurses and other healthcare student’s experiences during the COVID-19 pandemic</p> <p>Studies that explored experiences of nursing students during another pandemic situation</p>
Outcome	Article outcomes include experiences and perception of nursing students in relation to their university education during the COVID-19 pandemic	Articles outcomes focus on the experiences and perceptions of other healthcare students, or studies including both student nurses and other healthcare students during the COVID-19 pandemic

		Articles outcomes on the experiences and perceptions of student nurses and other students enrolled in other courses during another pandemic situation
Type of Evidence Sources and	Primary qualitative studies Full text articles Studies conducted locally and internationally	All other type of research or grey literature such as editorial, opinion articles, conference paper Articles are not open access
Language	Articles published in English	Articles published using other languages
Year of publication	Articles published between 2020 to 2021	Articles published before 2020

2.3. Search Results

The initial search from the different databases retrieved a total of 106 articles. A total of 33 articles were removed after duplicates removal from Mendeley. A total of 73 articles underwent the screening phase based on titles and abstracts. Twenty-four articles with full text were retrieved and matched against the eligibility criteria. Articles with potential relevance to the focus of the study were included and excluded with reasons based on eligibility criteria. A total of 12 qualitative study articles were included for the analysis. The process of selecting the articles is shown in Figure 2.1 using the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) flowchart.

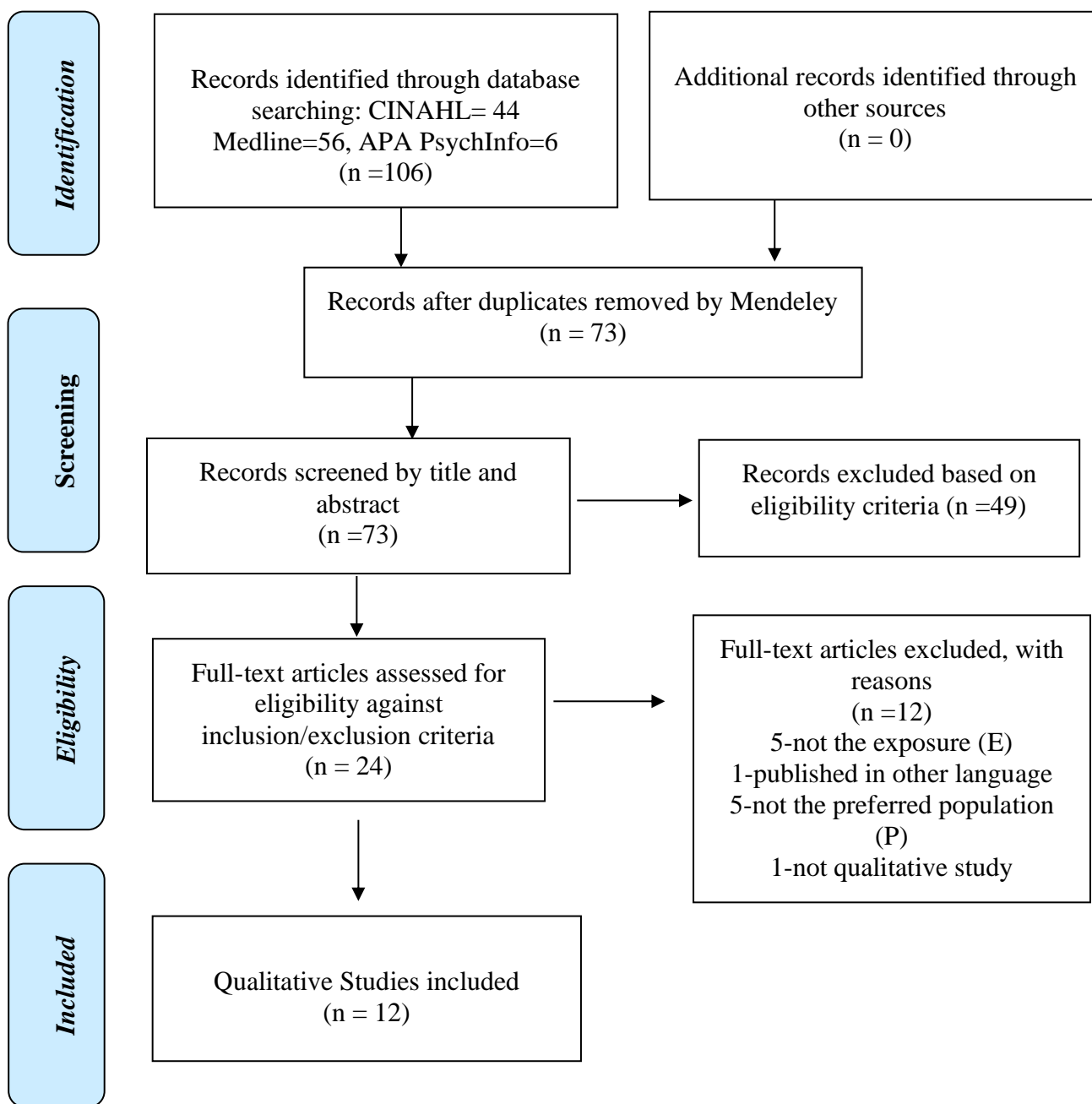


Figure 2.1 Prisma Flow chart

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PloS Med 6(7): e1000097. Doi:10.1371/journal.pmed1000097

2.3.1 Quality Appraisal

Evaluation of the study quality was done after selection of the final articles for the analysis. Toye et al. (2014) and Williams et al. (2020) highlighted that evaluating the quality of the articles is a crucial step in improving the overall rigor of a meta-synthesis that allow readers to make their own assessment and evaluation of the quality of the study, which can further affect the result of a synthesis. Hence, it was decided to rate and assess the quality of the empirical studies included using the Critical Appraisal Skills Programme (CASP) checklist for qualitative studies. The tool presents ten questions and three broad issues including validity of the result, the result of the study, and the study's implication, that need to be considered when appraising qualitative study (Critical Appraisal Skills Programme, 2018). Likewise, the three-point scale criteria was used to weigh the assessment including totally met, partially met, and not met, (Lachal, 2017). Given that the purpose of this synthesis was to describe and provide a comprehensive overview and synthesis of the literature, none of the selected articles was excluded based on quality.

The quality appraisal of the studies shows that all but one of the studies identified a clear aim. It was unclear in 2 of the studies the rationale of the methodology and research design chosen. Half of the studies did not justify the research design chosen in addressing the aim, as two studies have an unclear recruitment strategy. Reflexivity was not considered in the five studies included, as well as the rigor of findings is unclear in 4 studies. Nevertheless, all studies displayed good data collection method, considered ethical issues, and reported clear findings. A detailed appraisal of the included studies is shown in Table 2.3.

Table 2.3 Quality Appraisal of Qualitative Research using the CASP checklist

Author/ year	1. Was there a clear statement of the aims of the research?	2. Is a qualitative methodology appropriate?	3. Was the research design appropriate to address the aims of the research?	4. Was the recruitment strategy appropriate to the aims of the research?	5. Was the data collected in a way that addressed the research issue?	6. Has the relationship between researcher and participants been adequately considered?	7. Have ethical issues been taken into consideration?	8. Was the data analysis sufficiently rigorous?	9. Is there a clear statement of findings?	Comments
Canet-Vélez et al., 2021	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	The researcher mentioned limitation of the study and the importance of the research. Recommendations for nursing education has also been discussed.
Casafont et al., 2021	Yes	Yes	Can't tell	Yes	Yes	No	Yes	Yes	Yes	No discussion on the chosen methodology Reflexivity was not considered Homogenous participants Recommendations on support needed by the student nurses have been discussed
Godbold et al., 2021	Yes.	Yes	Yes	Yes.	Yes.	Yes.	Yes	Can't tell	Yes	The researcher discussed the justification of the method used.
Gómez-Ibáñez et al., 2020	Yes	Yes	Can't tell	Yes	Yes	No	Yes	Can't tell	Yes	No justification on the chosen research design
Heilfert y et al., 2021	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Limit transferability of the results to other settings or populations

Lovrić et al., 2020	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	The research discussed the importance of the study and included recommendations to support students and future studies
Nabavian et al., 2021	No	Yes	Yes	Can't tell	Yes	No	Yes	Yes	Yes	There is no clear identification of the participants in the aim of the study No clear statement on the setting and inclusion criteria of participants
Ramos-Morcillo et al., 2020	Yes	Yes	Can't tell	Can't tell	Yes	Yes	Yes	Yes	Yes	No rationale of the chosen research design
Roca et al., 2021	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Recommendations on the support needed by the students has been discussed
Suliman et al., 2021	Yes	Yes	Can't tell	Yes	Yes	No	Yes	Yes	Yes	Highlighted the need for further research on the effectiveness of online learning platforms in achieving intended learning outcomes of clinical courses. Reflexivity not mentioned
Velarde-García et al., 2021	Yes	Can't tell	Can't tell	Yes	Yes	Yes	Yes	Can't tell	Yes	No justification of the chosen methodology and research design
Wallace et al., 2021	Yes	Can't tell	Can't tell	Yes	Yes	Yes	Yes	Yes	Yes	No justification of the chosen methodology and research design
Totally Met	11	10	6	10	12	7	12	8	12	
Partially met		2	6	2				4		
Not met	1					5				

2.3.2 Study Characteristics

As of the 12 studies, 6 were conducted in Spain (Canet-Vélez et al., 2021; Casafont et al., 2021; Gómez-Ibáñez et al., 2020; Ramos-Morcillo et al., 2020; Roca et al., 2021; Velarde-García et al., 2021), 2 in USA, 1 in England (Godbold et al., 2021), 1 in Jordan (Suliman et al., 2021), 1 in Iran (Nabavian et al., 2021), and 1 in Croatia (Lovrić et al., 2020). Included studies used semi-structured online interviews using Zoom, Skype, and Microsoft teams (n=7), focus group (n=1), face to face interview (n=2), archived letters (n=1), and open-ended questionnaire sent via email (n=1). The research approaches used were as follow: phenomenological approach (n=4), qualitative study framed through constructivist approach (n=2), archival research design (n=1), rapid appraisal approach (n=1), and qualitative inductive approach (n=4). All were conducted between 2020 to 2021 and were published in English.

All the studies included nursing students in different level of nursing course: 8 studies recruited students on their final year of nursing course, one study recruited 3rd year and 4th year nursing students, one included 3rd year students only, while two studies considered all nursing students on different academic level. The total participants in all studies are ranging from 10 to 56 participants with mean participants of 22. There are more female participants identified in each study than male participants except for 1 study who did not include demographic profile of the participants. The articles explored the experiences of nursing students in terms of their nursing education during the pandemic, working during the COVID-19 pandemic, and psychological challenges and coping mechanisms. A detailed description of the characteristic of the studies is shown in Table 2.4.

Table 2.4 Data Extraction Table

No	Author (year) Country	Aims/ Objectives	Study design	Sampling strategy and setting	Intervention/ Exposure	Outcomes	Results
1	Canet-Vélez et al., 2021 The perception of training and professional development according to nursing students as health workers during COVID-19: A qualitative study Country: Spain	To explore the perception of education and professional development of final-year nursing students who carried out health relief tasks during the COVID-19 pandemic.	Qualitative study framed with a constructivist paradigm: semi-structured interview as conversational technique via skype Data Analysis: Content Analysis	Population: Final-year nursing students at the Faculty of Nursing and Physiotherapy, University of Lleida, Spain Sample size: 22 Male-3, Female-19 20-30 years old Mean age: 23 Sampling technique: purposeful sampling based on pragmatic and convenience criteria until data saturation was reached	Work as auxiliary health staff in COVID-19 units (hospitals or nursing homes) or specialised units such as intensive care and emergency rooms	Perception of final year Spanish nursing students who carried out health relief tasks during the COVID-19 pandemic on their Academic preparation, disciplinary professional development and patient care	The students feel that the situation offered benefits in terms of developing skills such as teamwork and interpersonal relationship. They felt a sense of usefulness but also aware that the job involved risks due to lack of education and training.
2	Casafont et al., 2021 Experiences of nursing students as healthcare aid during the COVID-19 pandemic in	To explore and understand the experience of nursing students' roles as healthcare aid in responding to	Qualitative phenomenology design: open face to face interview Data Analysis: Hermeneutic	Population: Fourth year students contracted as healthcare assistants (Has) in COVID-19 units of Hospital Clinic of Barcelona and the Health Hotel.	Work as Has in COVID-19 unit	Experiences of fourth year nursing students as Has during the COVID-19 pandemic	The students valued their experiences as Has during the covid-19 because they were able to gain skills, learn the value of teamwork, able to adapt to the situation and developed different coping mechanisms, although the

	Spain: A phenomenological research study. Country: Spain	the COVID-19 crisis	interpretative approach	Sample Size: 10 (all female) 2 males were excluded due to inclusion criteria (Infected with COVID-19 during the employment period and work in non-COVID-19 units) Sampling technique: Purposive sampling until data saturation			students reported fear and uncertainty of what will happen in the workplace, communication barriers to patients, and unclear role and specific tasks.
3	Godbold et al., 2021 The experiences of student nurses in a pandemic: A qualitative study Country: England	To record and learn from the experiences of students working on clinical placement in a pandemic	Qualitative with rapid appraisal approach: semi-structure interview via zoom Data Analysis: Rapid Analysis technique (Rapid appraisal)	Population: final year students, from all fields of nursing at a University in the East of England Sample Size: 16 15 female, 1 male Sampling method: not mentioned	Extended clinical placement during COVID-19 pandemic	Understanding of the experiences of nursing students on extended clinical placement during the COVID-19 pandemic	The student decided to undergo the extended clinical placement because of the desire to complete the course and considered the situation as unique learning opportunity, although there are some tensions on their role as pre-registered nurse. The finding of the study also revealed understanding of the students on the importance of caring role to patients and their families, and the impact of the pandemic to teaching and learning, and to the personal health and wellbeing.
4	Gómez-Ibáñez et al., 2020	To understand lived	Qualitative phenomenologic	Population: Final-year nursing students	Employed by hospitals to	Understanding of the lived	Students considered the experience as good

	<p>Final-year nursing students called to work: Experiences of a rushed labour insertion during the COVID-19 pandemic.</p> <p>Country: Spain</p>	<p>experiences of Spanish final-year nursing students employed by healthcare services to provide nursing care during the COVID-19 pandemic.</p>	<p>al approach: sociodemographic data and semi-structured online interview</p>	<p>from six Barcelona universities</p> <p>Exclusion: Students who had volunteered and those recruited for administration tasks</p> <p>Sample Size: 22 Female-17 male-3</p> <p>Sampling technique: convenience and snowball sampling</p>	<p>provide nursing care during the COVID-19 pandemic</p>	<p>experiences of final year nursing students employed during the COVID-19 pandemic</p>	<p>opportunity for learning and training and felt highly committed to fighting the COVID-19 pandemic despite facing the unknown, lack of competencies, and fear and uncertainty of their future nursing career.</p>
5	<p>Heilferty et al., 2021</p> <p>Letters from the pandemic: Nursing student narratives of change, challenges and thriving at the outset of COVID-19.</p> <p>Country: USA</p>	<p>To identify themes, present in student narratives about life as a third-year baccalaureate nursing student during the outbreak of the COVID-19 pandemic.</p>	<p>Archival research design</p> <p>Data Analysis: Narrative Analysis of archived letters of nursing students regarding their lives during the pandemic</p>	<p>Population: 3rd year nursing students studying during the covid-19 pandemic</p> <p>Sample size:56 Age: 20-22 years old</p> <p>Sampling technique: archived letters of 3rd year nursing students</p>	<p>Students were enrolled in two other didactic nursing courses, each with brief simulated clinical experiences. They had not yet begun clinical experiences with actual patients, though some students mentioned part-time employment in clinical settings in their letters</p>	<p>Contribute to the lack of knowledge on the experiences of nursing students during the COVID-19 pandemic</p>	<p>The study revealed changes in student's social life, their views of nursing and academic performance as well as challenges on mental health, dying and losses, and finances, and thriving by being positive and looking at the lesson learned.</p>

6	<p>Lovrić et al., 2020</p> <p>Studying during the COVID-19 pandemic: A qualitative inductive content analysis of nursing students' perceptions and experiences.</p> <p>Country: Croatia</p>	<p>To explore the perceptions and experiences of Croatian BSc nursing students regarding the new COVID-19 global</p>	<p>Qualitative study Inductive approach: online questionnaire on sociodemographic and 2 research question sent via email</p> <p>Data Analysis: Conventional inductive content analysis</p>	<p>Population: BSc nursing students, from the Faculty of Dental Medicine and Health in Osijek, Croatia</p> <p>Sample size: 33 29 females and 4 males</p> <p>Mean age: 21</p> <p>Sampling technique: Purposive sampling</p>	<p>Studying at the time of the COVID-19 pandemic</p>	<p>Description of the student's perceptions of COVID-19 crisis and student's experiences while studying during the COVID-19 pandemic</p>	<p>Study revealed knowledge of the students of the spread of misinformation on social networks and the risky behavior of the population. They develop understanding of the role and risk faced by nurses during a pandemic nursing profession.</p> <p>Transportation during the lockdown was a struggle as well as the risk of exposure of staying in the dorm, in clinical setting and worries and fear of infection and the well-being of their family.</p>
7	<p>Nabavian, et al., 2021</p> <p>Experiences of Nursing Students in the Care for Patients Diagnosed With COVID-19: A Qualitative Study</p> <p>Country: Iran</p>	<p>To examine the experiences of nursing students in the care for patients diagnosed with COVID-19</p>	<p>Qualitative method of inductive content analysis: semi-structured and in-depth interviews</p> <p>Data Analysis: Inductive Content Analysis</p>	<p>Population: Final year nursing students</p> <p>Sample size: 10 5 male, 5 female</p> <p>Age: 23-35 years old</p> <p>Sampling technique: Purposive sampling</p>	<p>Exposed in taking care of COVID-19 patients</p>	<p>Description of the student nurses' experiences in taking care of COVID-19 patients</p>	<p>The study revealed fear of infection to themselves or their families, so they concealed their workplace and isolated themselves to reduce family concerns. Family support, seeking refuge in spirituality, listening to music, and reading books were used by the students as coping strategies for stress.</p>
8	<p>Ramos-Morcillo et al., 2020</p> <p>Experiences of Nursing Students during the Abrupt Change from Face-</p>	<p>To discover the learning experiences and the expectations of nursing students</p>	<p>Qualitative approach: semi-structured online interviews</p>	<p>Population: Student nurses enrolled in bachelor and master's degree</p> <p>Sample size: 32</p>	<p>E-learning education during the first month of the confinement due to COVID-19 in Spain</p>	<p>Description of the learning experiences and expectations of students regarding e-learning in</p>	<p>Benefits of online learning include learning theory knowledge but not for clinical skills. Online learning brings more limitations to older students, with work and family responsibilities, living in a</p>

	<p>to-Face to e-Learning Education during the First Month of Confinement Due to COVID-19 in Spain.</p> <p>Country: Spain</p>	<p>enrolled in the Bachelor's and Master's nursing degrees in two Spanish public universities when faced with the abrupt change from face-to-face to e-learning education during the first month of confinement due to the COVID-19 pandemic</p>	<p>Data analysis: Inductive thematic analysis</p>	<p>75% women, 25% men</p> <p>Age: 18-50 years old</p> <p>Mean age: 25.3</p> <p>Sampling technique: Snowball</p>		<p>COVID-19 pandemic</p>	<p>rural environment, and with limited electronic resources.</p>
9	<p>Roca et al., 2021</p> <p>Experiences, emotional responses, and coping skills of nursing students as auxiliary health workers during the peak covid-19 pandemic: A qualitative study.</p> <p>Country: Spain</p>	<p>To explore the experiences and emotional responses of final-year nursing students who volunteered to carry out healthcare relief tasks during the peak of the COVID-19 pandemic, and to identify the</p>	<p>Qualitative study was conducted in the constructivist paradigm: semi-structured interview via skype</p> <p>Data Analysis: Content analysis</p>	<p>Population: Nursing students on their final year of education</p> <p>Sample size: 22 19 female 3 male</p> <p>Age: 20-30 years old</p> <p>Mean age: 23</p> <p>Sampling technique: Purposive sampling</p>	<p>Students who worked as auxiliary health staff in nursing homes, hospitals, or specialized units in contact with COVID-19 patients</p>	<p>Understanding of the experiences, emotional response and coping skills of the students who worked as auxiliary staff during the peak of the pandemic.</p>	<p>The students experience helplessness, anxiety, uncertainty, and suffering while working as auxiliary staff, though they considered the experience as an opportunity to learn and be useful. Likewise, they also expressed concern about possible infection and transmission of the disease to their families. The students also demonstrate adequate coping skills in dealing with the pandemic despite of being a student.</p>

		coping strategies they adopted to deal with this situation					
10	<p>Suliman et al., 2021</p> <p>Experiences of nursing students under the unprecedented abrupt online learning format forced by the national curfew due to COVID-19: A qualitative research study</p> <p>Country: Jordan</p>	<p>To explore and understand the first experience of Jordanian undergraduate nursing students with OL during the COVID-19 pandemic</p>	<p>Descriptive qualitative design guided by a phenomenological approach: focus group</p> <p>Data analysis: Colaizzi's phenomenological method</p>	<p>Population: Undergraduate nursing students from two universities in Jordan (1st to 4th year nursing students)</p> <p>Sample size: 18 14 females and 4 males</p> <p>Sampling technique: Purposive sampling</p>	<p>Online learning during the COVID-19 pandemic</p>	<p>Understand student nurses' experiences during their first use of OL to increase understanding of their encountered opportunities and challenges</p>	<p>The study revealed student experience of helplessness, burdens, and burnout; the need for social and technical support to manage OL; to consider OL as a positive opportunity; and the deficiency of OL in fulfilling the educational outcomes of clinical courses.</p>
11	<p>Velarde-García et al., 2021</p> <p>The challenges of "learning on the go": A qualitative study of final-year Spanish nursing students incorporated to work during the first Covid-19 pandemic.</p>	<p>To explore the perspectives of a group of final-year nursing students who were hired based on a relief contract for health professionals during the first COVID-19</p>	<p>Qualitative exploratory: semi-structured, in-depth interview via Microsoft teams</p> <p>Data Analysis: Thematic inductive analysis</p>	<p>Population: 4th year nursing students</p> <p>Sample size: 18 17 female, one male</p> <p>Mean age: 23.7</p> <p>Sampling technique Purposive sampling until data saturation</p>	<p>Hired under relief contract during the COVID-19 pandemic in Spain</p>	<p>Understand student's perspective on their learning process and their role during relief contracts during the COVID-19 pandemic</p>	<p>The study revealed that students had an undefined mixed role. Learning was described by the students as self-directed, through trial and error and through experiencing critical events. Nevertheless, the situation was a unique learning opportunity. gain confidence, and face fears in clinical environment.</p>

	Country: Spain	outbreak regarding their learning process and their mixed role as students and novice nurses					
12	Wallace et al., 2021 Nursing student experiences of remote learning during the COVID-19 pandemic. Country: USA	To explore pre-licensure baccalaureate nursing students' experiences of the transition to remote learning during the Spring 2020 semester in one of the first states impacted by this transition.	Descriptive phenomenological design: semi-structured interview and survey for the demographic data online Data analysis: Colaizzi's seven-step phenomenological reduction Theory: Meleis' Transition Theory	Population: Junior and senior nursing students enrolled in a baccalaureate nursing program at a university in the Pacific Northwest Sample size: 11 5 juniors, 6 seniors 10 females and 1 male Mean age: 24.6 Sampling technique: Purposive sampling	Remote learning during the COVID-19 outbreak	Description of the experience and perceptions of students transitioning to remote learning during the COVID-19 pandemic	The sudden transition to remote learning resulted in many challenges for nursing students, such as technological challenges, communication challenges, academic relationship changes, role stress, and strain. Despite these challenges, students demonstrated a remarkable sense of resilience and perseverance.

2.3.3 Summary of Findings

Data analysis revealed three major themes with seven sub-themes: 1) Education with two sub-themes: barriers and facilitators of learning, 2) Professionalism with three subthemes: role confusion, learning process, and fear, and 3) Mental health with two subthemes: mental fatigue and coping. The themes map of the analysis is shown in Figure 2.2 and operational definition of themes is listed in Table 2.5.

Table 2.5 Operational definition of themes

Themes	Sub-themes	Operational Definition
Education	Barriers of learning	Refers to the delivery of formal learning and training of students in a nursing course during the COVID-19 pandemic, including the rapid adoption and enforced move to online learning of theory and clinical skills development to prepare students as future healthcare professionals
	Facilitators of learning	
Professionalism	Learning process	Student nurses who either opt-in in paid clinical placement or worked as healthcare assistants or auxiliary nurses to contribute to the national COVID-19 response.
	Role confusion	
	Fear	
Mental Health	Mental Fatigue	Refers to the mental health consequences of the COVID-19 pandemic encountered by the students and coping strategies used by the student to overcome and deal with the challenges.
	Coping	

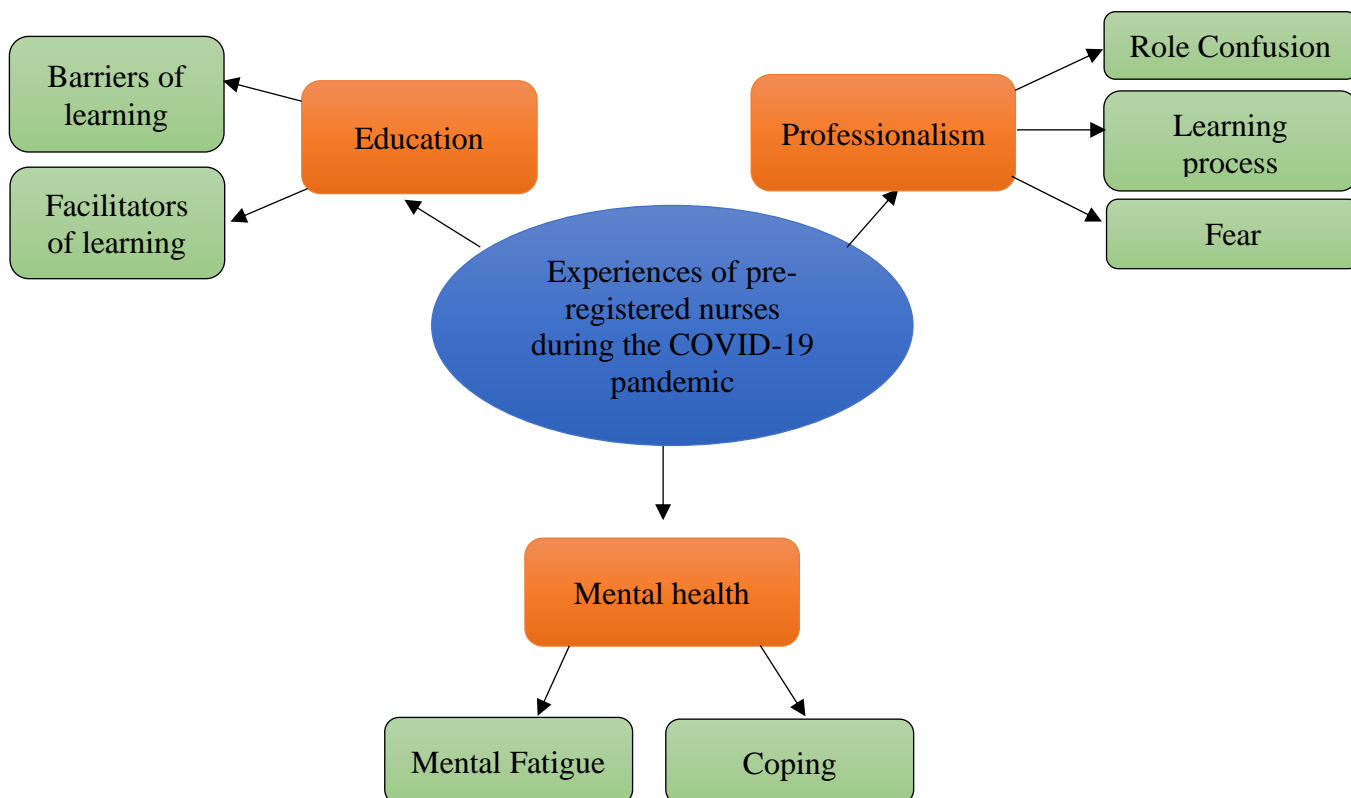


Figure 2.2 Thematic map of data analysis

Theme 1: Education

The COVID-19 pandemic has prompted the rapid transition to online teaching and learning modalities of nursing education programs worldwide. The findings of the analysis revealed barriers and facilitators of learning during the COVID-19 pandemic.

Sub-theme 1: Barriers of learning

Barriers of learning reported by the students were the lack of familiarization to the online teaching pedagogies, limitation of interactions between students and teacher, unattractive assignments, no feedbacks on assignments, and delayed email responses (Ramos-Morcillo et al., 2020; Suliman et al., 2021; Wallace et al., 2021). Technical difficulties were encountered by the students while attending classes, taking quizzes, or submitting assignments (Roca et al., 2021). Some students from the rural areas faced financial difficulties and access to classes due to slow internet, limited mobile data, or no internet at home (Ramos-Morcillo et

al., 2020). Likewise, increased workload and concentration problems were reported by the students, especially for married women who have family responsibilities, while studying at home (Suliman et al., 2021; Wallace et al., 2021). Due to the shift and difficulties in the clinical placements, the limited practical learning environment resulted to missed opportunities in achieving clinical learning outcomes and acquisition of skills that could enhance readiness of students after graduation (Suliman et al., 2021). A student reported,

“Although videos were used to learn technical skills and nursing procedures in clinical courses but without hands-on training, we cannot master these skills.” (S11) (Suliman et al., 2021)

Sub-theme 2: Facilitator of learning

The shift to online learning has given the students flexibility and freedom to re-listen to a more direct, shorter, and enhanced recorded lectures (Ramos-Morcillo et al., 2020). Not having long commutes also have saved them money and time, which they utilized for self-care and better sleep (Wallace et al., 2021). Consequently, the students developed sense of resourcefulness, creativity, efficiency, self-reliance, critical thinking, and problem-solving skills (Suliman et al., 2021).

Theme 2: Professionalism

Further disruption of the pandemic includes the deployment of student nurses to clinical areas to help in the COVID-19 response. The studies highlighted the perceptions of the students about their nursing role, learning and training, and the situation during the COVID-19 pandemic.

Sub-theme 1: Learning Process

The students reported their learning as self-directed, trial and error, learning from critical events and under pressure. A student reported,

“It's been quite staggered, I couldn't count on a nurse to tell me how things were done.” (P4); “during your clinical placements you have a backup, and you have a person behind you, but now you don't.” (P9). (Velarde-García et al., 2021)

Although the students perceived the experience as valuable because of the opportunity to learn professional values, gain real clinical skills, feel valued and part of the team, and understand the role and responsibilities of registered nurses (Gómez-Ibáñez et al., 2020), they encountered difficulties in transferring their skills into the context of a pandemic while their capacity development is still under process (Canet-Vélez et al., 2021; Godbold et al., 2021; Velarde-García et al., 2021).

Sub-theme 2: Role Confusion

The students experienced role confusions, which hinder their activities and skills development due to undefined mixed role and unclear description of tasks while working during the pandemic (Casafont et al., 2021; Godbold et al., 2021; Velarde-García et al., 2021).

“They told me that I was not a student, but just another colleague. My workload was the same as theirs, it didn't matter that I didn't have a degree.” _ (P1). (Velarde-García et al., 2021)

Sub-theme 3: Fear

Although the students felt excited about the new role and proud that they were able to help during the pandemic (Casafont et al., 2021), they've experienced fear and concern about the risk of having lack of education and training (Canet-Vélez et al., 2021), and possible infection and transmission of the virus to their families (Godbold et al., 2021; Roca et al., 2021). As a result, the students isolate themselves and concealed their workplaces to reduce family concerns (Nabavian et al., 2021). A student reported,

“When I arrived home my parents were waiting at the door with a box for my shoes and a bag to keep all the clothes, and then I went straight to the shower. I was terrified that something would happen to them just because I started working as an HA”. (P5) (Casafont et al., 2021)

Theme 3: Mental Health

The analysis revealed impact of the ongoing pandemic to the mental health of students on the positive outcomes of student's education. Two sub-themes emerged in the analysis including mental fatigue and coping.

Sub-theme 1: Mental fatigue

The sudden transition was considered as detrimental and worrisome to students due to the perceived workload, a sense of dislocation and disorientation, distractions of home and family, having an inactive life, and being away from normal academic life (Heilferty et al., 2021). The students encountered uncertainty on course progression and career plans, stress, fear of the unknown and exhaustion that affects their physical and emotional conditions because of the new role and responsibility, the healthcare team, loss and death, the kind of work, and the rules they should follow at the workplace (Casafont et al., 2021; Roca et al., 2021).

Sub-theme 2: Coping

During the COVID-19 pandemic students reported having more time for personal development and new coping activities (Heilferty et al., 2021). They managed to cope with the impact of the COVID-19 by having a supportive network like family and friends, engaging in sports, yoga, and other activities, planning their basic daily routines, following a healthy diet, and or allocating rest periods, which helped alleviate their anxiety, stress, and recurrent thoughts (Casafont et al., 2021). A student reported,

“To offset the stress you mean, don’t you? Well, I first organized my rest because when I get upset, I lose my appetite and if my sleep is disturbed ..., then the first thing I did was to stick to that, going to bed at 9 o’clock and reading ...”. P1_ (8674-8928) (Roca et al., 2021).

2.4 Discussion

This synthesis of qualitative studies explores the experiences of nursing students during the COVID-19 pandemic. Analysis of the studies revealed three major themes: education, professionalism, and mental health, which is aligned to the five senses student success model. Barriers and facilitators of learning under education is aligned with the sense of capability, connectedness, and resourcefulness. Learning process, role confusion, and fear under

professionalism is aligned with the sense of purpose and culture while mental fatigue and coping is aligned with sense of purpose.

Education

The analysis revealed academic changes, challenges, and needs of student nurses while studying during the COVID-19 pandemic. The students were concerned about academic performance and achievement with the online learning because of the new learning environment, technical issues, and change in family dynamics but also appreciated the flexibility of recorded lectures and the saved time and money from not commuting to school (Ramos-Morcillo et al., 2020; Suliman et al., 2021; Wallace et al., 2021). This is consistent with previous literature where online learning was an essential alternative teaching strategy during the COVID-19 lockdown due to its flexible learning environment and enhanced utility of time (Bdair, 2021) but also challenging due to the limited interactions between the lecturer and the students, accessibility to resources, and time management, which compromised the quality of learning (Khalil et al., 2020; Olum et al., 2020). In terms of practical skills, students preferred the hands-on clinical skills in gaining competencies and confidence, which was agreed by Farsi et al. (2021) where clinical practice is considered as essential part of nursing education in acquiring necessary skills to prepare students to registration. According to the five senses of student success model, students who are proactive in navigating the challenges of their whole university experience, with stronger connection with university and who are better prepared for university through mastering of knowledge and skills tend to be more successful in their education (Lizzio, 2011). Therefore, students who develop a sense of capability, connectedness, and resourcefulness tend to be more successful in their academics, more satisfied, and persistent with their studies (Zimmerman et al., 2019).

Professionalism

At the beginning of the pandemic, many organizations canceled clinical placements due to a shortage of PPE and the high risk of infection (Carolan et al., 2020). But in some countries,

overwhelming demands on health systems due to the increasing number of COVID-19 cases has led nursing organization's decision to deploy nursing students as additional staff and to meet required clinical experiences and hours (Canet-Vélez et al., 2021; Casafont et al., 2021; Gómez-Ibáñez et al., 2020; Nabavian et al., 2021; Velarde-García et al., 2021). Decisions of the students whether to join or not were mainly dependent on different factors such as professional identity, moral obligation, an opportunity to learn, frustration on the missed opportunity, fear of infection, desire to protect themselves and the others, and a sense of feeling undervalued and unrewarded outside of the pandemic (Collado-boira et al., 2020; Swift et al., 2020). According to the sense of purpose and culture of the success model, students' ability to understand the relevance of what they are doing, set clear goals, and ability to appreciate the core values and ethical principles of the university are more committed and persistent when the work gets challenging and will find their study more rewarding and will inform their approaches towards academic success and positive relationships with other students and staffs (Zimmerman et al., 2019).

Mental health

The findings of this analysis shows that students experienced anxiety, uncertainties, isolation, role stress and strain, inability to create peer relationships, increase workloads, and fear of the unknown (Casafont et al., 2021; Roca et al., 2021; S. Wallace et al., 2021). Evidence shows that there was a heightened concern among the students about the COVID-19 but also its impact on their daily routines, financial issues, isolation, the shift to online learning, and uncertainties on course progression and graduation (Deo et al., 2020; Savitsky et al., 2021). Aligned with sense of purpose of the student success model, students' need a strong sense of personal value, goal setting, and ability to access mental health support, especially during the pandemic. Developing students' sense of purpose enables better engagement with the discipline of their study and their capacity to set personal goals (Lizzio, 2006). Previous literature recommended the need to pay attention to signs of emotional exhaustion such as

bored, sad, worried, irritable, and even depression, to reduce its negative impacts on student's achievement and retention in the university (Garc et al., 2021; Rohmani & Andriani, 2021).

2.5 Limitation of the review

This review included only primary qualitative research conducted during the COVID-19 pandemic and may not apply to other pandemic diseases. Given that the COVID-19 pandemic is still a new phenomenon, the evidence in this synthesis is relatively new. Furthermore, this review reflects only the perceptions and experiences of nursing students and cannot be generalized with students of other professions. Lastly, the review only considered articles published in English and excluded articles published in different languages.

2.6 Identification of gaps in the literature

COVID-19 pandemic has challenged the delivery of quality education of nurses. It has provided the opportunity to explore the benefit of technology in delivering quality education, which is considered the ultimate way to continue or complete the curriculum. While going through the literature, the studies explored experiences and identified challenges faced by the students during the COVID-19 pandemic; however, to the researcher's knowledge, there was no in-depth analysis on the effect of these experiences to the preparedness of the students to join the workforce after graduation as well as the impact of their experiences on their core competencies like knowledge, clinical skills, critical thinking, and decision-making skills. The quality of skills the student acquired in classes and student preparation is essential in ensuring quality and successful nursing care provision, especially in dealing with critical situations (Porter, 2013). Aligned with the sense of capability of the student success model, the ability of the student to understand their role as student learner and mastering of academic knowledge and skills including their own expectations is essential in student's preparation for the higher education environment and ability to commit to study (Zimmerman et al., 2019).

Consequently, this study will be conducted to explore the experiences of 2nd and 3rd year nursing students at Edinburgh Napier University to gain insight into their experiences,

change in perspective and meaning personally and academically. Methodologically, no studies in the literature have explored the use of peer-to-peer discussion as a method of collecting qualitative data. Thus, this study will introduce this novel methodology of data collection guided by a theoretical framework to structure the semi-structured interview. This new approach may provide a more candid insight into the experiences of the students since it is a peer conversation rather than the traditional academic-student discussion. Lastly, the findings of this study will contribute to filling the gap of the existing literature and add to the limited knowledge of Scottish students as well as global understanding of experiences of student nurses in relation to their university education during the COVID-19 pandemic.

Chapter 3 - Research Methodology

This chapter explains the study methodology and methods, including the study design, study setting, the nature of the participants, sampling technique, data collection, ethical considerations, and an overview of the data analysis process.

3.1 Study Design

Guided by the student success model, a qualitative design using the framework method approach was adopted in this study. A variety of qualitative research methodologies are commonly used to study experiences. For instance, grounded theory aims to develop theories grounded in the study data, ethnographic approach was designed to create an in-depth understanding of culture, phenomenology aims to understand peoples' experience of a particular phenomenon and how they make sense and give meaning to the experience, and other generic qualitative methods that involve coding and formulation of themes (Teherani et al., 2015). Meanwhile, framework method is an approach to qualitative data analysis that consist of systematic structure in managing and analysing large volumes of data that can highly produce structured outputs of summarised data, and has been found to provide useful guidance to novice researchers (Hackett & Strickland, 2019). This method is not aligned with a particular epistemological, philosophical, or theoretical approach, which means that it can address different type of research questions and can be adapted for deductive, inductive, or abductive approach to data analysis giving the researchers freedom and flexibility in designing their research in relation to the aims of the research (Parkinson et al., 2016). Furthermore, the thematic framework and matrices are central to this approach, which enables the researcher to immerse and familiarise themselves with the data and systematically label, classify and organise data in relation to main themes, concepts, and categories (Hackett & Strickland, 2019). Thus, this approach was adopted because it addresses the aims of this study and explore pre-defined areas in the theoretical framework, but also open to discovering and exploring new concepts in the nursing students' experiences during the COVID-19 pandemic.

3.2 Study Setting

The study was conducted at Edinburgh Napier University (ENU) School of Health and Social Care, the largest midwifery and nursing education provider in Scotland. The standard Bachelor of Science in nursing programme in the United Kingdom offers four specialty courses: adult nursing, child health nursing, mental health nursing, and learning disabilities nursing. Students are required to complete 50% of theoretical and 50% of practice components with local NHS Trust providers, private, voluntary, and independent health facilities that meet the NMC educational standards. During the COVID-19 lockdown in Scotland, all modules, including the clinical courses, were taught using online approaches, recorded videos, and simulations uploaded to the Moodle platform of the school. Clinical placements were suspended, with the option to opt-in to extended clinical placements for the second and final-year nursing students (Nursing and Midwifery Council, 2021). For more information of the extended placement and NMC emergency standards for pre-registered nurses, see Table 3.1.

Table 3.1 Extended Clinical Placement

The Nursing and Midwifery Council (NMC) implemented the temporary emergency educational standards for nursing students in March 2020 as a direct result of the COVID-19 pandemic that aims to provide a flexible, responsive workforce while ensuring the learning and academic needs of students. The extended clinical placement (ECP) was offered to second and final year pre-registered nurses to undertake a paid ECP to support the health and social care workforce but also remained as students. Those who chose to opt-in will take 80% practice and 20% theory instead of the standard 50%:50% (Nursing and Midwifery Council, 2020).

3.3 Participants and sampling strategy

Participants of the study were pre-registered nurses of ENU who were studying during the COVID-19 pandemic. They were chosen as registration because of their recent exposure to COVID-19 lockdown while studying their nursing course. A purposive sample from 2nd year and 3rd year nursing students studying in different fields of nursing were recruited to ensure

range and diversity of experiences and perceptions of the pandemic. The inclusion and exclusion criteria of the participants is shown in Table 3.2.

Table 3.2 Eligibility Criteria

Inclusion Criteria	Exclusion Criteria
Undergraduate 2 nd year and 3 rd year nursing students of ENU enrolled during the COVID-19 pandemic	Undergraduate nursing students who are not enrolled in ENU during the COVID-19 pandemic
Consent to participate in the study	Undergraduate students who are enrolled in other courses during the COVID-19 pandemic
	Students who are not willing to be audio/video recorded during the interview.

3.4 Recruitment strategy

Following the ethics approval of the study, the researchers disseminated and circulated information of the study to the prospective participants through an invitation flyer (Appendix A), a short PowerPoint presentation, and by module coordinators during induction program and tutorial sessions of the students. Students were informed that participation is voluntary and are free to withdraw at any time without giving any reason. Interested students were asked to contact the researchers via email to express their intent to participate in the study. The recruitment and data collection phase continued until the month of October 2021. The procedure of recruitment is shown in Figure 3.1



Figure 3.1 Flowchart of recruitment strategy

3.5. Data Collection Procedure

A semi-structured interview as peer-to-peer discussion was used to collect data. This method refers to an activity that involves a facilitator who is more focused on steering the discussion rather than participating and two participants engaging in an open-ended, collaborative conversation, and exchange of ideas and experiences to facilitate further thinking, reflection, and understanding of certain topic or event (General Pharmaceutical Council, n.d.). This method facilitates comfortable environment, easy establishment of trust and rapport between participants, development of confidence and understanding as they match their views with peers and create a window for the facilitator to learn and understand the individual's thoughts as the exchange of ideas occurs (Hunukumbure et al., 2017; Payne-Gifford et al., 2020). Hence, this study adopted this technique to facilitate a free flow of information from participants and capture their lived experiences. This method has been used by Canet-Velez et al.'s (2021) study as conversational technique in exploring the perceptions of nursing student's training and professional development as health workers during COVID-19 pandemic.

Students who expressed interest in taking part were contacted by the researcher via email and provided information of the study (Appendix B) and the privacy notice (Appendix C). If the student has no questions and willing to proceed, a copy of the consent form (Appendix

D) and topic guide were sent via email before setting a mutually convenient date and time of interview. Peer participants were second-year and third-year nursing students enrolled in ENU during the COVID-19 pandemic. Each pair was matched based on the similarity of their university level and field of nursing specialties.

To observe social distancing, all interviews were conducted online via Microsoft teams with a duration of 45 to 120 minutes. The meeting only includes the two participants and the researcher to maintain privacy. Each session encompassed an introduction, recording of consent, a discussion of the confidentiality of the information, a clear explanation of the anonymization process, and an explanation of the role of the researcher, which is to listen and prompt the discussion with topics to keep the conversation flowing. Additionally, field notes were collected to note participants' behavior and the researcher's personal reflections of the methodological aspects of data collection. All interviews were recorded and transcribed verbatim. Confidentiality was ensured by assigning numbers to each participant and transcripts. All video/audio recordings and transcripts were saved on a password-protected computer with restricted access and were deleted one month after the analysis. A debrief form (Appendix F) was sent to each of the participants after each meeting and data were anonymized. The number of participants was determined by data saturation, where no new data or themes emerged in the discussion. The summary of data collection procedure is shown in Figure 3.2

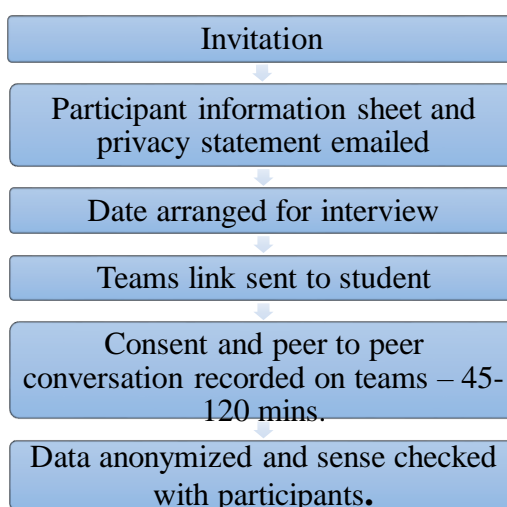


Figure 3.2 Flowchart of the data collection procedure

3.5.1 Data collection instrument

The researchers formulated an interview guide with six open-ended questions topics aligned to the five senses of student success model to collect data. The recording and transcript of the peer-to-peer discussions were conducted through Microsoft teams. The discussion was facilitated by the researcher, who listens and provide prompt questions to keep the conversation flowing.

3.5.2 Reflexivity

The discussions were facilitated by a researcher who is a post-graduate student in nursing and had the same experience with the transition to online learning during the COVID-19 lockdown but have no direct academic relationship with the participants. The students were given 10 practice hours to account for allotting and arranging time for the interview, reflecting on the questions prior to the discussion, participation, and verification of the transcripts. The data collection includes the researcher prompting the participants with the guide topics and probing questions if necessary. However, due to the limited experience of the researcher in conducting interviews, further exploration of the discussions might not be carried out.

3.6 Data Analysis

The interviews were recorded and transcribed using Microsoft teams' recording and transcription feature. The recordings and transcripts were downloaded and stored in the University's secure server for the anonymization process. The anonymized transcriptions were uploaded in NVivo software release 1.5.1 for coding and analyzed following the 5 stages of framework analysis method including from familiarization and management of data through the development of interpretation (Hackett & Strickland, 2019). The clear, logical, and sequential steps increased the reliability and dependability of the results obtained. Credibility and accuracy of the data were ensured by validating the findings from the participants and with the research supervisor. Figure 3.3 shows the five-step process of framework analysis by Ritchie and Spencer (1994) (Johnson et al., 2017).

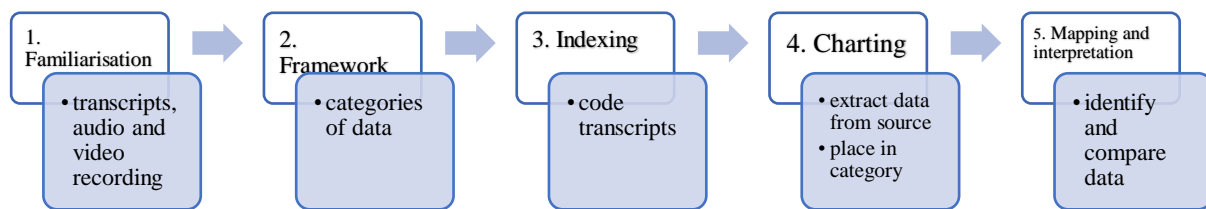


Figure 3.3 Five step process of framework analysis by Ritchie and Spencer (1994)

3.6.1 FIVE MAIN STAGES OF FRAMEWORK ANALYSIS

Stage 1. Familiarisation. The researcher read and re-read the transcript generated from Microsoft teams to get the essence, meaning, identify themes and see individual differences from the data. The transcripts were verified by listening to the recorded interviews after the completion of each session.

Stage 2. Identifying a thematic framework. The anonymized transcriptions were analyzed using the NVivo software to code significant words, statements, or phrases from the participants and aligned to the theoretical framework of the study. Each statement was contextualized by attaching the participants number to preserve anonymity.

Stage 3. Indexing. Preliminary analysis of significant codes was done and was classified into sub-themes. The significant statements were organized into meaningful units and categories were aligned to the theoretical framework. Another member of the research team then performed a sense check to ensure the themes were credible and reliable in the context of the data presented.

Stage 4. Charting. The findings were analyzed, and a detailed description of the findings was written as per the aim of the study to identify the final coding framework.

Stage 5. Mapping and interpretation. After the themes were extracted and formulated, the themes were presented in a map to see how the themes relates to each other and gain better understanding of the data. Operational definitions of the themes were aligned to the topic guide and theoretical framework.

3.6.2 Rigour

Lincoln and Guba's framework quality criteria was used to establish the trustworthiness of the data gathered (Alexander, 2019). Credibility was established through triangulation and member checking. The transcripts of the interviews and the codes were reviewed by the participants and were encouraged to provide comments on the statements and correct any variations. Sense check was performed by an expert research supervisor who supervised the process of interview, coding, and ensure that themes were credible and reliable in the context of the data presented. Transformability was shown using detailed and thick descriptions of the data while dependability and conformability were achieved using an inquiry audit, audit trail and reflexivity.

3.7 Ethical considerations

Approval to conduct this research was gained from the School of Health and Social Care Ethics Committee of Edinburgh Napier University (Appendix G). Confidentiality, privacy, and participants' well-being were observed throughout the study. Each participant was given participant numbers for anonymization and maintain confidentiality. The participants were encouraged to ask questions and express uncertainties before the start of the discussion. Likewise, written, or recorded consent was obtained at the beginning of each session. Participants were informed that participation is voluntary and may withdraw from the study at any time without giving any reason. A debrief form containing information about the study and services they can access was emailed to each participant after the interview. All recordings and transcription were kept confidential in the University's secure server electronic data which is password protected and were deleted after the anonymization process. The anonymized transcription was uploaded in NVIVO software for coding, which can only be access by the researcher. Dissemination of the results of the study will be done through research conferences and publication in academic journal.

Chapter 4 - Research Findings

This chapter presents the analysis of the data gathered from the peer-to-peer discussion of the study participant's experiences during the COVID-19.

4.1 Study Participants

A total of 22 pre-registered nurses (20 females and 2 males) at ENU School of Health and Social Care volunteered to take part in the peer-to-peer discussion that lasted for a minimum of 37 minutes to 120 minutes. The students are in different level of education: 2nd year and 3rd year and are specializing in different field of nursing: Adult Nursing, Child health nursing, Mental health nursing and Learning disabilities nursing. Of the 22 participants, fourteen were 3rd year nursing students and eight were in second year. Therefore, the students were in their first and second years when the pandemic and lockdown happened and had different experiences - e.g., no placements for first years and paid placements were offered to the second year. During the COVID-19 lockdown, clinical placements in all health facilities in Scotland were cancelled and the extended clinical placement, offered to the second and final year nursing students in Scotland, was implemented to help in the National COVID-19 response and replace required clinical hours of students to complete their nursing course. A summary of the participant characteristics is shown in table 4.1.

Table 4.1 Participants Characteristics

Study Participant	(n)
Student nurses	22
Sex	
Female	20
Male	2
Level of Education	
Second year	8
Third year	14
Field of nursing	
Adult Nursing	12
Child health nursing	4
Mental Health nursing	2
Learning disability	2

4.2. Study Findings

The findings of the study included five themes with six subthemes based on the student success model: capability, connectedness, purpose, resourcefulness, and culture. Capability was sub-divided into two sub-themes: confidence and learning process. Two subthemes emerged in connectedness: building relationships and communication. Purpose was sub-divided into two sub-themes: student health professionals and mental health consequences of COVID-19 pandemic. The thematic framework of the data analysis is shown in Figure 4.1. To understand the terms used in this study, operational definitions and description of the themes is shown in Table 4.2.1.

Figure 4.1 Thematic framework of the data analysis

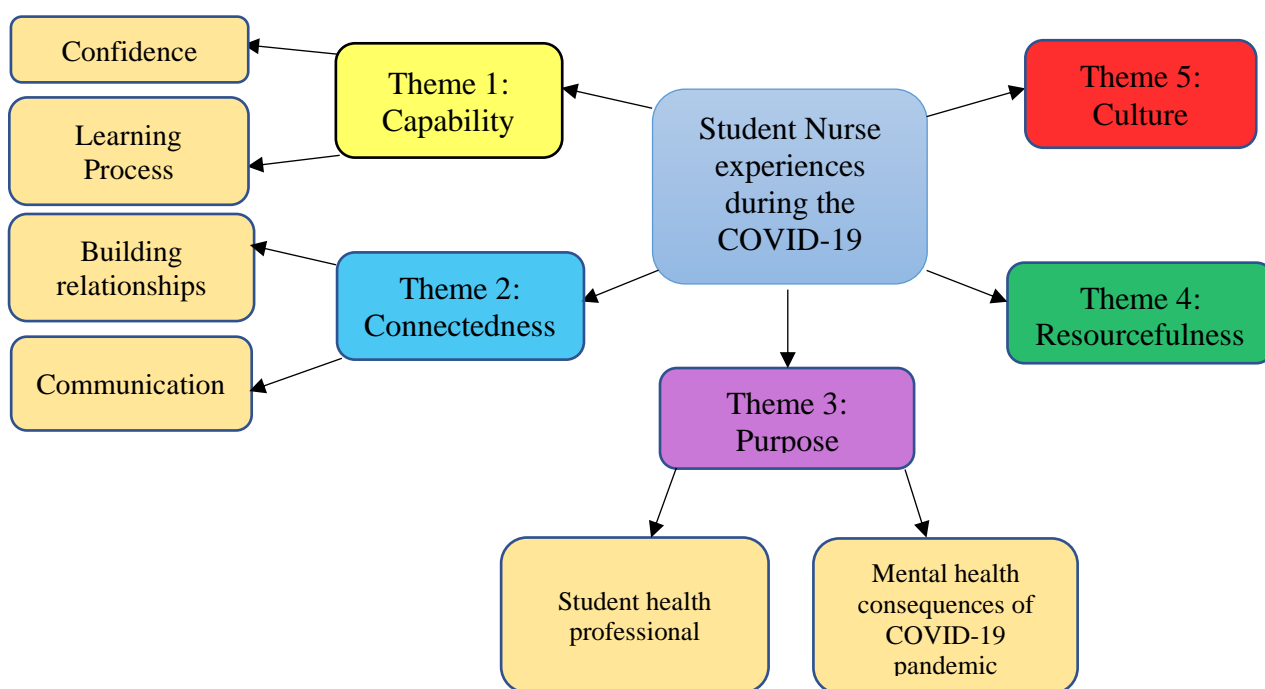


Table 4.2 Operational Definitions of the themes

Themes	Sub-themes	Definition and description	Research Prompt
Capability	Confidence	Refers to student's ability to understand their student role and mastering of academic knowledge and practical clinical skills that enables	During the lockdowns, your role as a student and studies have been affected, can you reflect on what this has meant for you?
	Learning Barriers		

		them to adapt, be flexible and move beyond competency.	
Connectedness	Building relationships	Refers to the students' sense of belongingness, integration, building and satisfaction with their relationship to their peers and the institution that may influence the student commitment towards their education.	The shift to online learning has changed how we communicate with our university community (peers and academics). Can you reflect on how this has affected your relationship with peers and as a university student?
	Communication		
Purpose	Student Health Professional	Refers to the students' ability to develop realistic goals, a sense of vocation, and engage with the discipline, which helps them to be focus and motivated in pursuing and attaining goals	How do you perceive your identity as a student health professional?
	Mental Health consequences of COVID-19 pandemic		Has the pandemic affected your mental health in anyway?
Resourcefulness		The ability and willingness of the students to learn in different and possible ways to navigate university system and ability to access and use available resources to achieve goals and outcomes of learning.	There has been a blurring of home, professional and student life during this time- can you talk us through what this has meant for you?
Culture		Refers to the ability of the students to understand inclusion, diversity, and equality that enable them to develop personal and professional identity to become productive, develop talents, and maximize strengths.	What has the university experience over the last year meant to you in terms of equality diversity and inclusion?

4.2.1 Capability

Capability is defined as the student's ability to understand their role as student learner including mastering of academic knowledge and practical clinical skills, which enables them to adapt, be flexible, gain confidence and move beyond competency on their nursing role. Two sub-themes have been described by students including confidence and learning process.

4.2.1.a. Confidence

One of the themes that emerged in the data is the impact of the pandemic to the student's confidence. Table 4.3 presents the frequency of the codes in the data.

Table 4.3 Codes frequency of Confidence

Codes	Transcript/Participants																					
	T1		T2		T3		T4		T5		T6		T7		T8		T9		T11		T10	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
<i>Learning opportunity</i>	✓	✓	✓	✓	✓			✓		✓		✓			✓	✓		✓			✓	✓
<i>Lack of practical skills</i>		✓				✓	✓		✓	✓		✓	✓			✓	✓	✓	✓	✓	✓	

Almost all students reported that not having practical skills and time to practice compromised their confidence and readiness in clinical performance. Although they were provided a lot of knowledge in the theory classes, the students reported that they lack confidence in the integration of theory into clinical practice, which is more evident with students in lower years who need visualization of the procedure and a time to practice before going to placements. A student reported,

...when it came to the skills class, I think that was definitely lacking...I would not be confident doing IM or an IV or not IV subcutaneous injection just from looking at a video. (P18, T9)

Despite the initial feelings reported by some students, participants who were in placements considered working in the clinical area as a good opportunity for learning and training, though the learning was tough and difficult. They were given more opportunity to do things that they were not normally allowed to do due to staff shortages and increase workloads. The exposure and experience they have acquired made them more confident in the skills that they could use into practice in the future:

... I got about so much confidence because and I know it sounds bad because of how many staff are off I had to step up, so I got that opportunity and my confidence when I leave second year was on high. (P5, T3)

4.2.1.b Learning Process

The shift to online learning during the peak of the COVID-19 crisis in the country provoked several reactions and responses among students on their learning process. Table 4.4 shows the frequency of codes in the data.

Table 4.4 Codes frequency of Learning Process

Codes	Transcript/Participants																					
	T1		T2		T3		T4		T5		T6		T7		T8		T9		T11		T10	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Challenges of Online learning	✓	✓	✓	✓	✓			✓	✓	✓		✓			✓	✓			✓		✓	✓
Benefit of Online learning	✓						✓	✓		✓	✓	✓	✓	✓	✓		✓			✓	✓	
Clinical placement						✓			✓	✓	✓		✓	✓				✓		✓		
Technical issue					✓	✓		✓	✓			✓			✓	✓	✓	✓	✓	✓	✓	✓

Some students expressed difficulties and struggles with the reduced opportunities for class discussions, asking questions, and getting answers. One student said:

...it greatly reduced opportunities to join in class discussions, ask lecturers extra questions you know. (P12, T6)

Two students felt uncomfortable with students who don't participate in class and with camera off: *Like don't put cameras on, don't look directly at the camera, don't speak in less spoken to and I felt that is quite limiting (P19, T11)*, while three students considered skipping class and just learn through the recorded lecture due to classes that were spent more of chatting and talking that were mostly dominated by confident students rather than sticking to the lecture topics:

... it did sometimes feel like absolute here for half an hour or more, we've done nothing so far, but chat and I'm I was like there were times I just thought of not coming. (P1, T1)

One student expressed that this has compromised the quality of the input.

...I feel as if maybe the quality of the input was compromised at times just because there is so much chatter and so much you know people just taken on

the role of telling their story. (P2, T1)

At the technical level, some students reported that they had encountered episodes of technical issues while attending classes, taking exams, or submitting assignments. A student reported,

... 'cause a lot of the time we were goin' on Webex calls and there be like two seconds I'm having technical issues...and then as even as the time where you should be learning (P7, T4)

Despite some degree of difficulty with the online learning, students perceived positive outcomes such as more interactive classes, ability to re-listen to recorded lectures, learn at their own pace, and save money. The following were some of the thoughts of the students on the benefit of online learning:

...one of the good things was there was no commuting time (P11) ...I did save money. (P12, T6)

...it was flexible so you could do it in it you could do it whenever throughout the day (P21, T10)

In clinical placements, students perceived that the learning was limited due to the lack of mentoring, lack of time, understaffing, and increased workload of the staffs:

a lot of time nurses are like oh its quicker if I've done it or 'cause you've not done it before or that patients in distress or I'll just do it quickly...they don't want to take the time to teach it. (P7, T4)

But some students also mentioned that learning may also depend on the kind of mentor you have, the staffs on duty, and the kind of area they are assigned to. A student stated,

..my second one was medical, so it's cardiac and respiratory and it was good for learning, but I think who your mentors and your supervisor makes such a massive difference. (P10, T5)

4.2.2. Connectedness

Connectedness is defined in this study as the way the students communicate with their peers and the university during the pandemic. Two themes emerged in the data including building relationships and communication.

4.2.2a. Building relationships

Students described the negative impact of the pandemic on the quality of university experience of meeting and knowing other students and staffs in the university. Table 4.5 shows the frequency of codes in the data.

Table 4.5 Codes frequency of building relationships

Codes	Transcript/Participants																					
	T1		T2		T3		T4		T5		T6		T7		T8		T9		T11		T10	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Peers	✓	✓	✓		✓	✓				✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	
Academic staffs	✓	✓							✓	✓	✓		✓	✓	✓				✓	✓	✓	

The students reported the missing social element of their experience because they couldn't see each other on campus, form group discussions, or meet other students.

It's not being massively easier to sort of connect with the wider year group...I literally don't know their names... I don't know who they are, but never recognize them... It was quite hard to form, especially quick, close relationships and friendships in that situation (P20, T11).

But technology had helped them to keep in touch and get support from peers and the academic staff:

There's always some that jump in and give a bit of advice... or you know we can jump on a call and chat through and yeah, everybody was supportive. (P2, T1)

With the academic staff, some of the students maintained good relationship and able to get support from their tutor and lecturer while some of the students felt the missing connection on the relationship due to the circumstances. Two students agreed on this:

You don't really feel like they're getting to know you. You don't really feel like you're getting to know them. (P9, T5)

So they're helping you without really registering who you are and that's not a fault of them, it's just you know, the circumstance. (P10, T5)

4.2.2b. Communication

The pandemic also affected how the students communicate to their peers and to the

university. Table 4.6 shows the frequency of codes in the data.

Table 4.6 Codes frequency of communication

Codes	Transcripts/Participants																					
	T1		T2		T3		T4		T5		T6		T7		T8		T9		T11		T10	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Peers		✓		✓		✓		✓	✓	✓		✓	✓				✓		✓	✓	✓	
Academic staffs	✓		✓	✓	✓		✓	✓	✓	✓		✓	✓		✓	✓		✓		✓	✓	✓

Some students reported forming their own group chats through social media platforms like

WhatsApp, which enhanced peer-to-peer interactions. One student reported,

We've gotta kinda group chats among our cohort and everybody kept in touch and add a member. (P2, T1).

However, an inconvenience mentioned was that sometimes some students have a hard time putting in questions, get answers, follow conversations, or distracted by the notifications due to the many messages being sent at the same time:

...with WhatsApp groups and things you feel a bit lost in the conversation. Sometimes you know you ask a question and then ten other people have put something else up so your questions gone by then. (P9, T4)

Meanwhile, communicating with the university and academic staff provoked positive and negative experience from the students. Examples of negative experience provided by the students were unanswered or delayed email responses, and difficulty of asking questions in online classes, forums, or discussion boards. Some students stated,

...with the PDT thing, you know sending emails, not getting responses for weeks (P4, T2)

..what I found frustrating was when I would post on the discussion board and then I would have to email the lecturer that I've actually put a discussion on three weeks ago (P6, T3)

Meanwhile, positive experience was also reported by students such as getting fast email responses, great support from the university, easy to access Moodle and an improvement on their communication skills. Two students said the following,

I really actually like using Moodle. I think it's very handy and it's very easy to access and all the workbooks... and anyone that's whoever is your module leader and staff is very helpful when you need advice on how to access the workbooks... the email system is good, people get back to you straight away and there's also a padlets for students if they have questions to ask on certain topics and the lecturer will get back to you and answer all the pinks and all the students can kind of communicate on that one padlet (P22, T10)

4.2.3 Purpose

Purpose is defined as the students' ability to develop realistic goals, a sense of vocation and engagement with the discipline which helps them to focus and stay motivated in pursuing and attaining goals during the pandemic. It has been described in this study by how the students perceived themselves as student health professionals as well as how they cope with the mental health consequences of the COVID-19 pandemic.

4.2.3.a. Student Health Professional

The COVID-19 pandemic has given the students an unfamiliar, challenging, and unique experience because of the things they witnessed and encountered in the clinical area. Table 4.7 shows the frequency of codes in the data.

Table 4.7 Codes frequency of student health professional

Codes	Transcript/Participants																					
	T1		T2		T3		T4		T5		T6		T7		T8		T9		T11		T10	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Part of workforce	✓	✓	✓		✓	✓						✓		✓	✓				✓			
Roles and treatment	✓		✓	✓	✓	✓	✓	✓			✓	✓		✓	✓				✓			
Impact of covid-19	✓	✓			✓			✓					✓		✓							
Opt-out: safety			✓	✓		✓																
Learning					✓	✓	✓	✓			✓	✓	✓		✓	✓		✓				

Some students described their initial experience as a reality check on the negative impact of the pandemic on the healthcare workforce, the healthcare system, the patients and their family. They have understood the importance of following the COVID-19 protocol such as social distancing and isolation. One student reflected,

... the reality set in of actually these people are really, really unwell. The staff are dropping like flies because there is a virus there that everybody else catch in. The PPE was at that point there was rumors of it running...running out of masks and stuff or like having to kind of be aware of the PPE that you were using and try to make it kind of stretch out as long as you could. (P2, T1)

Students who decided to opt-in in the paid clinical placement reported that they were eager, keen to be involved and be part of the team, although, there were some high expectations of people from them. Being trusted with responsibilities made them feel like a registered nurse, valued, useful, respected and helping in a bigger sense. A student reported,

Valued and useful... that was nice just to sort of valued, you felt part of the team. I felt like you were helping in the bigger sense of things (P1, T1)

Meanwhile, reasons of opting out of the paid clinical placements were safety issues and learning purposes. Two students stated the following in their discussion,

...you're getting offered like yeah homes and places that were high risk so I chose to opt out and just to work where I felt it was safe on as a nursing assistant on the bank (P4, T2)

This is aligned with the opinions of some students where the transition to the role of student to nurses did not provide real learning experience because they were doing care assistants jobs, or different roles in one that they need to remind the nurses that they are still student and wanted to learn.

And I think a lot of this staff forgot that were not nurses. So, they were quite yeah, they were more happy for us just do like the CSW work... So, you had to remind them on...I'm still here to learn. (P6, T3)

On the other hand, for some students the placement was helpful in filling the knowledge gap. One student stated,

I was on a covid ward, and it was one of my best experiences and I feel that I was included in a nursing team, and I was able to see things that I felt were gaps in my knowledge (P16, T8)

4.2.3.b. Mental health consequences of COVID-19 pandemic

With the transition to online learning and cancellation of clinical placements, the

students reported uncertainties while studying during the pandemic. Table 4.8 shows the frequency of codes in the data.

Table 4.8 Codes frequency of mental health consequences of COVID-19 pandemic

Codes	Transcript/Participants																					
	T1		T2		T3		T4		T5		T6		T7		T8		T9		T11		T10	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Anxiety	✓	✓	✓	✓				✓		✓		✓		✓					✓	✓		
Emotions	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓			✓	✓
Coping mechanism	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓

In the initial stages of the pandemic, students described intense worry accompanied by immense uncertainty on their course progression. The students associated their anxiety with the unknown: “...the biggest challenges as well as not knowing when everything would be normal again.” (P6, T3), and the uncertainty with the course. The students reported the following:

... we were worried that you were going to be pushed back a year as well. 'cause you didn't know if you were going to be like complete hours in that as well. (P8, T4)

I've just felt I was getting nothing out of it, and I was like I'm not going to know, i'm not going to be prepared in two years. (P18, T9)

Many students stated that they felt overwhelmed, exhausted, frustrated, experienced low moods worried and even experienced depression brought by the situation, having to catch required clinical hours, increased workloads, technical issues, and expectations from people. Some students reported,

... I'll do the paid placement and I'll be able to do that, and I'll home school and I'll do all these things and then kinda halfway in year, started realizing that actually I was starting to become quite upset (P2, T1)

... It was the 2nd part I had uploaded it, and everything had went through but there had been an error and that like somebody said they couldn't see it...For me it was really stressful...I was thinking ...I have failed, and I was crying, and I was like I've submitted it. (P12, T6)

The feeling of isolation, being away and not being able to see their own family contributed to their worries as well. A student stated,

... it is very mentally draining, not being able to see people not being able to go out, not being able to just do normal day to day activities (P22, T10)

Interestingly, despite the negative effects of the COVID-19 pandemic, students reported some positive outcome of the pandemic such as improvement of resilience, motivation, new coping activities, and opportunity to focus on personal growth and development. In addition, the support from their families, peers, from university or from anyone helped them to overcome all the mental health consequences of the COVID-19 pandemic. For instance,

I think the pandemic has made me more resilient (P12, T6)

I started practicing self-care and I was doing different things that I enjoyed, and I got into...swimming and water sports and Gelato paddle board in a lot of outdoor activities (T3)

4.2.4 Resourcefulness

Resourcefulness is defined as the ability and willingness of the students to learn in different and possible ways to navigate university by generating ideas, able to access and use available resources and knowing what to do during uncertainties to achieve goals and outcomes of learning while studying during the COVID-19 pandemic. The frequency of codes in the data is shown in table 4.9.

Table 4.9 Codes frequency of Resourcefulness

Codes	Transcript/Participants																					
	T1		T2		T3		T4		T5		T6		T7		T8		T9		T11		T10	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Balance Increase workloads	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
Family and home		✓	✓			✓			✓	✓	✓	✓			✓	✓			✓	✓		
Resources		✓						✓	✓		✓	✓	✓	✓	✓				✓	✓		
Disturbance	✓				✓		✓	✓	✓			✓				✓	✓		✓			

All students agreed that the context of confinement has caused a blur between student life and their homes. Separating their responsibility in school and at home was challenging, especially those with caring responsibility. Even resources such as laptop and space for learning was also a challenge. A student stated,

... the kids were at home all the time...we don't have a big space... We don't have an office space or a spare room or anything like that for him to work in or for me to work in so there are sometimes when...all in laptops and iPads trying to do our work and it was just. Yeah, I don't ever want to have to do that again. (P2, T1)

The students mentioned that initially remote learning doesn't bother them but as days went on it becomes boring and lonely: “*it does get bored and it does get really monotonous, slow*” (T11) but the students acknowledged that they must find ways to navigate school. A student reported,

I did buy a new laptop because I think it's my laptop wasn't kind of it, so I needed to get a new one, so that's obviously a big you know expense and I couldn't have done without that (P10, T5)

Furthermore, the students also emphasized the distractions and disturbances while doing the online classes causing lack of concentration. Some of the reasons they mentioned were having family members around, mobile phones, responsibilities at home, and disturbances from the background noise:

... a lot of people were like joining in from home and there's kids running about or their dogs coming in an hour or... delivery at the door or, you know we've got stuff going on. (P1, T1)

4.2.5 Culture

Culture is defined in this study as the experience of students of being included, respected, treated fairly and equally that enable them to develop the knowledge and skills they need to engage, become productive and achieve the maximum benefit of the university. The frequency of codes in the data is shown in table 4.10

Table 4.10 Codes frequency of Culture

Codes	Transcript/Participants																					
	T1		T2		T3		T4		T5		T6		T7		T8		T9		T11		T10	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Inclusion and equality	✓	✓			✓	✓		✓	✓	✓		✓	✓		✓	✓	✓	✓	✓			✓
Support	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓		✓					✓
Services	✓	✓	✓	✓			✓										✓	✓				

The students discussed about their experiences as positive and was able to feel involved and supported, particularly when they feel vulnerable, by the university and the team in their placements, although they feel that they have missed opportunities of learning. Some students stated,

...there was more support in place there. You know you could phone to get a counselor. You could phone to get support. (P4, T2)

with exams we get extra time...they gave everybody the extra time to include everybody because they understand that it's not just people have learning difficulties during this pandemic that are struggling or struggling (P5, T3)

However, some students felt that the university didn't consider the different situations of students, especially for students with kids, and expressed it as lack of support and consideration or it took a long time and persistence to get the support:

I think that Napier took for granted that everyone had different things going on at home and in different situations. (P12, T6)

Year two students felt they were at disadvantaged on the markings, not getting the same benefit as the 3rd year students, left out and not the priority. A second-year student during the pandemic reported,

I feel like the university focus more on like the first years and then like it was like the third years as well like we were always like left out in the middle and it was like more...well they're more of a priority because they've just started then obviously it's a lot harder for them or their qualifying (P7, T4)

Meanwhile, for a student to be able to cope and feel included during the confinement and distance learning, students should have access to resources such as laptop, Wi-Fi, social media account, and even a space. A student reported a great support from the university on access to the resources needed for the online learning, which made her feel supported and happy for the services provided:

You know, the laptop that I received was top grades. I was given a voice recorder to help with the recording, tutorials and lectures and stuff... it was a great a great service and they've been in touch with me throughout my time at university (P2, T1)

(Note: P=participant, T=transcript)

Chapter 5 - Discussion and Analysis of Findings

The study sought to explore the experiences and perceptions of pre-registered nurses in relation to their university education during the COVID-19 pandemic. This chapter presents the discussion and analysis of the key findings of the study in relation to the five senses of student success model and existing literature. Additionally, the advantages and disadvantages of peer-to-peer discussion, the strength and limitation of the study, and implication to practice will be presented.

5.1. Advantages and disadvantages of peer-to-peer discussion

Peer-to-peer discussion is a new method of data collection that consist of two participants who engage in an open-ended discussion about their experiences and perceptions of a certain topic or event, and a researcher who listens and provide topics to keep the conversation flowing. This method has been adopted in this study due to its several benefits and advantages in data collection. First, this method provided a protected space for the students to speak openly and honestly that enables a free-flowing information, even with difficult topics (Payne-Gifford et al., 2020). The participants were given opportunity to choose partner who are on similar level or specialty and with similar shared experience, which facilitates comfortable environment and removal of barriers, which hinders person's ability to present feelings or ideas effectively (Abdul Malek et al., 2016; Perez et al., 2010). Hence, the protected space encourages both participants to be active in the discussion and benefit from the diverse experience (Lucas, 2009). As the participants verbalized explanations, students can identify gaps in the knowledge, learn from the insights, and construct new information and common representation of the event (Hunukumbure et al., 2017). Likewise, the researcher was also given opportunity to capture lived experiences, feelings, and emotions, which could contribute to the generation of information on the method and the topic (Chi et al., 1994). Additionally, based on the researchers' experience, this method is flexible since it can be carried out either personal

or through online meetings on a mutually convenient time. For online meeting, digital platforms like Microsoft Teams have videoconference, recording, and transcript features that offer benefits like interactivity, personal connections, ease of use, and accessible transcript that could save time and effort in the verification and validation process (Archibald et al., 2019). Additionally, the technology is compliant with the General Data Protection Regulation (GDPR), which added to the reliability of the technology in terms of data protection and privacy of the users, which allows anonymity for the users to share personal feelings and sensitive topics (Microsoft, n.d.).

Although the method present advantages and benefits in gathering data, a common problem encountered with peer discussion was the balance of the discussion, which could affect the learning or exchange of knowledge and concepts between the participants, as one participant may dominate the discussion, or both participants could be passive. This can be minimized by encouraging them to write down ideas and concepts on the topic before the scheduled discussion and structuring student discussions (Lucas, 2009). Another is a possible alteration of perceptions due to the differences in experiences and ideas between the participants that could result to anxiety and uncertainties (Helgeson et al., 1999). Lastly, based on the researcher’s experience, delayed meetings could occur due to availability issue, technical issue, and resources such as quiet space, laptop or mobile, and internet connections for online discussion. Table 5.1 shows the summary of the advantages and disadvantages of the method.

Table 5.1. Summary of advantages and disadvantages of peer-to-peer discussion

Advantages	Disadvantages
Protected space to speak openly	Balance of the discussion
Remove barriers of communication such as interpersonal barriers	Generate limited data if participants are both passive
Capture lived experiences through a free-flowing information	Emotional consequences (e.g., uncertainties)

Ability to choose peer partner	Availability issue of the participants and the researcher
Generation of new ideas and knowledge	Technical issue for online meeting
Learn common things	Need access to resources (laptop, mobile, internet connection) for online meeting
Flexible (personal or online meeting)	
Easy to organize	

5.2. Discussion and analysis of the key findings of the study

This section will present the key findings of the study in relation to the existing literature.

5.2.1 Capability

One of the most important factors for students' success in education is capability (Stephenson, 1992). In the context of this study, the student success model suggests that succeeding in the university includes mastering of core concepts, theories and practical skills in nursing that enable the students to perform confidently in giving care to the patients and navigate distance learning during the pandemic (Pownall et al., 2021). Previous literature clearly emphasized that student's transition to higher education can be challenging because of the need to adjust and adapt to the university ways of learning, academic workloads, and meeting academic standards and expectations, which is exacerbated by the current pandemic (Pownall et al., 2021; Zimmerman et al., 2019). The findings of this study shows both positive and negative effects of the pandemic on the student's capability as manifested on their confidence and perceptions of their learning process.

5.2.1.a Confidence

Panduragan et al. (2011) argued that confidence level is an important factor for student nurses to be effective and innovative in rendering patient care. Previous research has already described the impact of COVID-19 pandemic on the level of confidence of nursing students. For instance, findings of Gómez-Ibáñez et al. (2020) and Casafont et al. (2021), reported that

exposure of the students to the real clinical environment has given them many knowledge and confidence that they could use in practice and future employment. In contrast, Velarde-García et al. (2021), Suliman et al. (2021), and Collado-boira et al. (2020) reported that the students faced difficulties in clinical courses and application of knowledge caused by limited practical learning environment and lack of hands-on clinical skills, which negatively affect the student's clinical readiness upon graduation. This is consistent with the result of this study where exposure to the clinical area as well as the opportunity to be part of the workforce has increased their level of confidence, although, students faced difficulties in remembering and applying theoretical knowledge in practice. Therefore, to address this in the future, the university should include concepts of transition and pandemic preparedness in the nursing curriculum, provide catch up sessions to the students that could facilitate a space for students and the teachers to analyze gaps on their skills and areas where they need further support. The university could also arrange and address this problem by more closely working with practice areas and practitioners to identify specific knowledge and skills gaps. Alternative approaches in supervision and mentoring could also be implemented like peer support where senior students support junior students both in simulated and practice environment,

5.2.1.b Learning process

Learning process is another important aspect of the student's university experience to develop sense of capability (Sidebotham et al., 2015). Nursing curriculum's pedagogical design to support the students to develop skills and degree of competence was dependent on theory class and exposure to the clinical area (Wallace et al., 2021). The findings of this study shows that the students view the use of technology as positive in terms of learning theoretical knowledge due to its flexibility on recorded lectures, although, the quality of learning was compromised due to the limitation of class discussions, access to resources (e.g., laptop and Wi-Fi), occurrence of technological issues, and uncondusive learning environment. It can also

be noted that the reduction of practice learning environment and the lack of mentoring and supervision in clinical placement has affected the acquisition of practical skills of the students. These results are consistent with the previous literature, where students faced challenges while working as auxiliary staff (Velarde-García et al., 2021), with the quality of interaction with the professor (Ramos-Morcillo et al., 2020), technological issue, changes in classes and exams process, but also appreciated the flexibility of the recorded videos (Wallace et al., 2021).

The situation was a learning opportunity for the university to further support students transition to online learning. The university has continued to improve services to ensure achievement of learning outcomes and maintain good educational standards for students. For instance, the skills resources for university work, workshops, and tutorials, one to one advice, and peer learning were provided to help and support student achieve academic success. The digital support partnership project was also launched to learn from the experiences of the students and ensure everyone is supported. That said, over 50% of ENU student nurses who were part of the pandemic support graduated one month earlier, which reflects the resilience of the students as well as effectiveness of the changes in the programme. Hence, it is essential for the nursing educators to develop educational approaches and curricula that prepare future student nurses to overcome pandemic situation. Academic institutes must also strive to ensure appropriate learning activities and strategies such as flexibility in the learning environment to provide opportunity for the students to observe and learn procedures in the clinical placements and meet learning outcomes.

5.2.2. Connectedness

Students' success in their education depends on their sense of connectedness and sense of belonging. A student with strong sense of connection with other students, lecturer, and other university personnel are more likely to have high motivation, enjoyment and be successful in their learning (Farrell et al., 2018; Pedler et al., 2021). The findings of this study revealed

positive and negative changes in building relationships and communication of students to their peers and academic staffs.

5.2.2.a Building relationships

The lack of in-person activities in the university posted difficulties in building new relationships for the students. Some academic staffs were reported by the students as helpful and supportive, though, the concept of knowing was missing. Social media group chats helped them maintain connection with other students and staffs, although, faces or names of the group members were not familiar to them. A similar finding was reported by Heilferty et al. (2021), where the students illustrated both supportive and unhelpful faculty during the pandemic.

The university has been very supportive in terms of the integration of the students to the university. Necessary support has been provided to the students by providing platforms such as Teams, instant messaging, and discussion boards to provide opportunity of peer discussions and to raise questions. Additionally, face-to-face sessions with students and staffs were also implemented to reconnect post lockdown. Previous literature suggest that academic institute should ensure promotion of effective learning experience during a pandemic by creating opportunities of interactions as well as positive attitudes and perceptions through creating learning strategies such as peer-to-peer support and mentoring, and discussion boards to give students an opportunity to collaborate, build opportunities to interact, and foster sense of belonging (Jorgenson et al., 2018; Pownall et al., 2021). Student's interpersonal connections to peers and staff enable better quality of relationship, better adjustments, attachments, and achievement of the students in higher educations (Makara et al., 2015).

5.3.2.b Communication

The study revealed changes and challenges with how students communicate with their peers and the university. The social media group chats, which served as mode of communication presented challenges to the students on keeping up with the conversation, but

also acknowledged the ease of connecting and getting support from their peers. Meanwhile, some students reported fast email response from the academic staff but also experienced delayed email response or no response at all. Results of this study also resonates to previous studies who described deteriorating relationship of the students and faculty due to unanswered emails, lack of office hours, missing feedbacks, and difficulty of asking questions (Wallace et al., 2021) but also had good interaction and fast email response (Ramos-Morcillo et al., 2020). Pownhall et al. (2021) highlighted that communication and interaction with peers and instructors is an essential element for student satisfaction, motivation, overcoming barriers, and academic success during COVID-19 pandemic. Additionally, educators that act as confidants, role models and mentors have a critical, positive impact on students' academic performance, development of resilience and attitudes in academic achievement as well as on their long-term success in life (Holdsworth et al., 2018).

On reflection, the occurrence of a health pandemic is unpredictable, and nothing could have prepared anyone for the crisis, but the experience could lead to a better, prepared, and positive developments for similar situations in the future. For instance, the university has started the "ask me anything" peer support system for students who need help and support. For the academic staff, a regular office hour should be set and provided for students to set expectations, ask their questions, and provide assurance that they will get a respond to their emails to lessen uncertainties and anxiety.

5.2.3 Purpose

A sense of purpose is another essential key to student's success in the university compounded on student's personal values, goals, and motivation to continue with their education (Lizio, 2006). Sharma & Yukhymenko-Lescroart (2018) stress that awakening student's sense of purpose contribute to the degree of commitment, academic performance, and persistence in their education. Furthermore, having sense of purpose is also tied to the

psychological well-being of the student to achieve success in their education (Pownall et al., 2021). In the context of this study, sense of purpose was aligned to how the students perceived themselves as student health professionals and the mental health consequences of COVID-19 pandemic.

5.2.3.a Student Health Professional

The findings of this study suggest understanding of the students on the seriousness of the COVID-19 pandemic and were keen and eager to be part of the workforce. The willingness of the students to join the workforce was reported in previous literature (Gómez-Ibáñez et al., 2020; Roca et al., 2021), where the students felt highly committed in fighting the COVID-19 but also fear the safety of their family, which affect their decision to undertake the paid clinical placements. This finding differs from the findings of Gomez et al. (2020), where student decided to join the workforce despite fear of infection and finds ways to protect those close to them.

Missing element of learning was also reported by the students due to lack of supervision and their different roles during the placement. This result is similar to those reported by Casafont et al. (2021), Godbold et al. (2021), and Velarde-García et al. (2021) where the students experienced undefined mixed role while working during the pandemic, which hinder their activities and skills development. Nevertheless, the students described the knowledge and experience they have gained as useful in filling knowledge gap, and acquisition of missed practical skills opportunities. Bøe & Debesay, (2021) highlighted that clinical placement is an important aspect in developing competencies of student nurses where a good learning environment and learning outcomes of the students is highly dependent on the collaboration and support of the staffs on mentoring and supervision. Therefore, to ensure the quality of clinical placements of students, it is paramount to pay attention to the factors affecting their learning and address barriers to facilitate learning through working with practice partners to

identify gaps in their knowledge and skills and implement simulation and practice-based learning. Likewise, development of sense of purpose of students could be done by providing counselling sessions to be as clear as they possibly can about their choice of degree, see the relevance of their course of study and develop their strengths and talents.

5.2.3.b Mental Health consequences of COVID-19 pandemic

The shift to distance learning combined with changing family dynamics, uncertainties and increased workloads has significantly caused physical stress and anxiety to the students. Students transitioning in an unfamiliar environment can experienced stress, poor mental well-being, and failure to adjust, which can impact students' persistence and university achievement (Turner et al., 2017). According to previous research, nursing students experience stress even in normal circumstances, commonly attributed to fear and uncertainty, working in unfamiliar environment, and clinical knowledge and performance (Hamadi et al., 2021). The findings of this study revealed additional increase in the level of stress among nursing students due to social isolation, increased academic workloads, technical issues, and uncertainties with the course. Similar finding was reported in previous literature (Casafont et al., 2021; Heilferty et al., 2021; Suliman et al., 2021), where uncertainties, stress, and fear were experienced by the students, mainly because of the new role and responsibility in the clinical placements, workload, changes in family dynamics, loss and death, social isolation, and inactive life. The university have seen high numbers of students deferring or delaying assessments, taking a break in training, or leaving the profession during the pandemic, which was also reported by some students during the discussion. Savitsky et al. (2021) highlighted in their articles on anxiety and coping strategies of nursing students during the COVID-19 pandemic that mental health consequences of the pandemic can result to loss of motivation and poor academic performance, which can affect student success and retention.

Along with the implementation of the social distancing during the peak of the COVID-

19 pandemic is the inability of the usual coping strategies of the students but they viewed themselves as strong individuals capable of dealing with the challenges of the lockdown, ability to have a balance and a clear sense of purpose and see the positive side of things despite of the unfavourable situations like the development of new coping strategies such as gardening journal writing, and more time for self-care practice. This finding is consistent with the finding of Nabavian et al. (2021), where students reduced psychological stress over time by employing coping strategies such as family and spiritual support and reading books. The study revealed the value and importance of resilience in developing positive perspective and career goals, manage academic workloads, and cope with pressure of study, work, and life.

On account of the findings, educators should adjust module requirements and workloads normally structured with the face-to-face to account to the changing learning environment of the students during a pandemic to limit learning difficulties and the social and emotional effects of the situation (Pownall et al., 2021; Sarmiento et al., 2021). The university has always been sensitive to the importance of mental health, and more with the long-lasting mental health effects of COVID-19 on the students. A well-being and inclusion team was implemented to provide counselling, mental health support, and disability inclusion services to support and help students maximize their potential in their university education.

5.2.4 Resourcefulness

Student's achievement of educational success was dependent on the students' sense of resourcefulness, which means the ability of the student to proactively seek available strategies and resources that they could use to successfully navigate and overcome challenges in their studies. During the peer discussions, several students, especially those with caring responsibilities, discussed facing challenges and hardships on finding balance on their time and the different aspects of their life. Juggling online study, academic module requirements, and clinical work as well as family commitments created considerable stress for many. This result

is similar to those reported by Suliman et al. (2021) and Wallace et al. (2021), where the shift to online learning led to student's increased responsibility outside of their academic workloads, and concentration problems, especially for married women who have school and family responsibilities. Another finding of this study revealed that time management and access to resources were essential in dealing with the overwhelming course workload and overcoming multiple barriers of learning during the pandemic, though it cost them money. Therefore, university should frame support to the students such as access to resources, facilitate jobs that help students' financial needs as well as workshops and trainings that could increase student's skills and competencies to land part-time jobs, keeps them on track, and reduce attrition rates. However, working and studying could also be tiring for the students, so flexible learning approaches such as asynchronous activities like media viewing with video annotation to mark up and identify important parts, reading, and homework to optimized and allow students to manage time in giving valued feedbacks, give time to understand the topic and the use of polling strategies like a twitter-like platform to ensure discussions and interactions, and encourage students to set the topics and direction of the lectures (Cassidy et al., 2016). It should be noted that Edinburgh Napier have done reasonable mainstreaming adjustment policy where lectures slides are given in advance, lectures are recorded, and exams are online with extended completion times to further support student's achievement of learning outcomes.

5.2.5 Culture

A sense of academic culture is demonstrated by a student's ability to engage in the university environment and being culturally competent (Zimmerman et al., 2019). Sidebotham et al., (2015) have interpreted this sense as creating a sense of identity as students' progress to their program. In the context of this study, this includes student's understanding of inclusion, equality, and diversity in every aspect of their university experience. Findings of this study revealed that students perceived accessing support services as helpful and advantageous in

terms of their capability in navigating their course and the transition to online learning. Furthermore, the support given by the university and staffs in their clinical placements was considered by the students as inclusive as they were given services like mental health support. However, for some students, they felt that differences on their personal background and situation were not considered, especially for matured students who have caring responsibilities aside from the academic requirements in every module. The feeling of not being a priority by the university were felt by students who are in second year during the pandemic, as they felt left out during the transition to online learning. Hence, to achieve full potential of the students, university should promote environment where students feel valued, empowered, treated fairly, and supported (Pownall et al., 2021). It is significant that students can share their knowledge, skills, and understanding with others to encourage and strengthens learning, promote positive learning experience and motivation while also ensuring social inclusion and connection (Sanger & Gleason, 2020). Also, it is important for academic teachers to consider that the level of support vary in every student and depends on individual needs such as accessibility, abilities, and preferred modes of receiving and processing information. The university have also implemented changes such as putting information and materials in a predictable place, to facilitate easy and simple navigation to the course and online learning platforms, communication of expectations in the course and content to reduce stress and anxiety of students while on distance learning.

5.3 Strengths and Limitations of the study

5.3.1 Strengths of the study

This study includes pre-registered nurses on different level of education and specialty to collect diverse and wider range of perspective as well as achieve comparison of the experiences during the COVID-19 pandemic

Next, this study utilized a qualitative approach with the use of a theoretical framework to structure and gather data in a systematic way. Literature have described the use of theoretical framework in qualitative study aids in structuring the method and research question, guide the selection of relevant data, interpretation and relate explanations of the underlying causes or phenomena (Collins & Stockton, 2018). Furthermore, a new methodology of gathering qualitative data was used in this study that adds to the literature of qualitative research. A total of 11 peer-to-peer discussions with 22 participants was conducted to explore experiences of nursing students during the pandemic.

Another strength of this study is that the peer discussion was facilitated by a researcher who was not involve in the nursing module of the participants, which helped in reducing bias. Furthermore, the researcher is also a registered nurse studying a master's degree during the pandemic and there to listen during the discussion, which could have helped the students to feel comfortable in sharing challenges and difficult topics in normal circumstances and added strength of the method over focus group discussion.

Lastly, to the researcher's best knowledge, this is the first study conducted in Scotland that explores experiences of pre-registered nurses during the Covid-19 pandemic. This study adds to the limited knowledge on the difficulties and challenges faced by the students during the pandemic that could provide basis in improving and realigning nursing curriculum.

5.3.2 Limitations of the study

Among the limitation of this study, the study was conducted in one department of a university in Scotland, thus the results may be different from other institution. However, the findings of this study are consistent with the previous literature, hence, the data collected in this study could be transferable to other institutions. Additionally, a sample of participants from other educational backgrounds who are also studying during the COVID-19 pandemic would reinforce the consistency of the present study.

For health safety issue, data gathering was conducted using online platforms, which may limit personal interactions between the participants and the researchers. However, the online platforms offer features like videoconference, recording and transcription, which is not available with other means of conducting interview like telephone. Likewise, online platform could produce transcript after each session which is accessible for participant's validation and verification of the data.

The proportion of the participants is another limitation of this study, of the 22 participants of the study, only 2 were male. However, these data do not represent gender bias since 8% of the student nurse's population are males and the 2 participants could be a representative of the male population in this study.

Another limitation of this study was that differences on students' perception and experiences before the pandemic was not assessed. However, the occurrence of a pandemic is also unpredictable, hence, comparisons is not possible, and this could possibly done once the pandemic is over.

Lastly, there's a risk of selection bias since the participants in the study were self-selected and there's a possibility that only those motivated participants choose to take part of the study. However, self-selection of participants is common across all research, and it can be avoided by providing detailed description of the research design, describing the characteristics and relevance of the target population to the wider population, clear description of the selection criteria, and the target frame (Pannucci & Wilkins, 2010). In addition, the total number of participants in this study is consistent with the previous study in the literature and purposive sampling was used in this study where participants who are thought to share most information relevant to the study are chosen and produce maximum variation within a sample (Anderson, 2010).

5.4. Implications for practice

This study has many implications in different aspects of nursing education, training, and research. For academic institute, this study can serve as a basis in building resilient and agile curriculums during a pandemic. Nursing education can use this as a basis in building policies for online education that could help in achieving learning and training outcomes of student to guarantee the development of highly competent nurses for the provision of quality and safe nursing care. Likewise, nursing educators need to create positive learning environments with effective and efficient means of communication. It is also essential for staff nurses to reinforce support and mentoring of students in clinical placements for them to understand their professional role. This study documented student's acknowledgement and appreciation of the great importance of professional values such as teamwork, adaptability, caring attitude, mental health, and the development of resilience that allow them to better cope with critical situations. Given the relevance of these values, an effort should be made to enhance their development and incorporation in all aspects of the student's education. In addition, it is necessary to create an environment that allows students to share their emotions and feelings generated by the pandemic. The students have shown capability to respond to the challenges, but this must be enhanced during their learning and training by integrating support and management of emotions, working with practice areas to identify gaps in knowledge and strategies to fill these gaps, and development of emotional self-care strategies into the academic curriculum content to guarantee good mental health of students all throughout their education.

Chapter 6 - Conclusion and Recommendations

This chapter will present the conclusion and recommendations to academic institutes and for future research studies based on the findings and analysis of the data.

6.1 Conclusion

A qualitative study was conducted in ENU School of Health and Social Care. This study enabled the researcher to explore and gather the experiences and perspective of second and final-year pre-registered nurses of ENU regarding their university education during the COVID-19 pandemic using the five senses of student success model. Purposive sampling was used in selecting participants until data saturation. Peer to peer discussion, a valuable novel qualitative methodology, was successfully used in the 11 conversations to collect rich data.

The findings in the analysis reveal new opportunities of understanding the perspectives and needs of pre-registered nurses during a pandemic. Scottish pre-registered nurses consider the experience of online learning to be challenging but also beneficial in acquiring theoretical knowledge. The students rely on technology to stay connected but also acknowledged the missing element of socialization. However, it can be noted that the university has been very supportive since the transition to online learning by providing online platforms that provided opportunity of peer discussions and integration.

The students greatly value exposure to the practice learning environment as well as care experiences, which embedded a sense of capability and purpose. Students preferred hands-on experiences to ensure proficiency rather than learning with recorded clinical videos. Although the students perceived the pandemic as an opportunity to gain experience, knowledge, and understanding of the seriousness of the situation in the clinical placements, the quality of learning was also compromised due to undefined role as well as lack of mentoring and supervision. The supervision provides assurance and confidence on their tasks and responsibilities as well as providing best care to the patients.

Anxiety, uncertainty, worries, and stress were common among students brought by the increased academic workloads, different learning environment, lack of socialization, and juggling between university life, work, and family. The implementation of online learning brings more limitations to students who have family responsibilities and with work. Nevertheless, reflections from the students provide insights on the development of personal resilience, new coping activities, growth, maturity, and improved adaptability. Fostering a sense of culture that support inclusion, diversity, and equality in which students can develop themselves to the fullest during the pandemic, can sustain the integration, satisfaction, and capability of the student sense of academic success at university.

Finally, the result of this study has identified institutional and personal issue that affect student's experiences and without appropriate support may affect positive educational outcome and mental health consequences. With the incoming academic year still in crisis, there's a need to develop teaching strategies adapted to students' healthcare competencies and preparation in a pandemic (Cervera-Gasch et al., 2020). Hence, this could be a basis for the institution to prepare nursing students, improve their readiness and coping skills in the time of a pandemic.

6.2 Recommendations for Academic Institutes

1. To further support the development of the students' senses of success, the university should include and continue to evaluate student experiences using the five senses of success model and determine the value, applicability, and acceptance of the model in assessing academic success of students.
2. Although the university has provided many support services and access to resources during the pandemic, further understanding should be done to explore ways and strategies to improve these services and resources.

3. Online learning provides a meaningful and promising innovative potential in the future and delivery of nursing education. A combination of an offline and an online teaching modality can be integrated into the nursing curriculum for lifelong learning.

6.3 Recommendations for future studies

1. Further research is recommended on peer-to-peer discussion as data collection method to increase the method's credibility and validity in collecting qualitative data.
2. Further research on the experiences of other university students during a pandemic could further increase generalizability of the findings of this study.
3. Research studies comparing the student experiences during a pandemic and post pandemic can be done to identify gaps, best practices, and ways to build resilience.
4. Further understanding from the student's perspective on reasons in opting in and out of the paid clinical placements could result in the development of strategies that could increase their willingness and readiness to join the workforce during a pandemic.

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Appendices

Appendix A: Listening Project Invitation Flyer

Edinburgh Napier
UNIVERSITY

THE LISTENING PROJECT

The Experience of HealthCare students during COVID-19 pandemic

As a student affected by the COVID-19 pandemic, we would like to invite you to participate in our research study exploring your experiences during the COVID-19 pandemic. This research study aims to find out the different experiences and perceptions of students during the COVID-19 pandemic and gain insights into its impact on your university education.

- This study has full ethical approval
- The interview will take place online at a time convenient to both participants and the researcher
- The study will involve peer-to-peer discussion and will be recorded
- The whole process will take 1-2 hours

For more information, please contact:
Dr. Ruth Paterson, Lead investigator
r.paterson@napier.ac.uk

Kris Calica,
40513815@live.napier.ac.uk

If you would like to talk to someone about the study who is not a member of the research team, please contact Dr. Janette Pow at j.pow@napier.ac.uk

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Appendix B: Study Information Sheet



Study Title: The Listening Project: The Experience of Health and Social Care students during the COVID-19 pandemic

Invitation and brief summary

We invite you to participate in a listening research study on topics related to health and social care experience during the COVID-19 pandemic. As a student affected by the COVID-19 pandemic, we have invited you to participate in the study to find out your experiences and perception of the impact of the COVID-19 pandemic on your educational experience.

The education of health and social care students is crucial for the future of the workforce. However, the COVID-19 pandemic has caused stress and anxiety due to the changes to the learning strategies and uncertainties on achieving students' necessary skills and competence in the field of healthcare. This study explores and documents students' experiences during the COVID-19 pandemic and its impact on healthcare education. The study will take place in person through a peer-to-peer discussion and will include 15-20 health care students at Edinburgh Napier University.

Before you decide to participate, please read and understand the purpose and information of the study carefully. Your participation in this research is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate, note that it will not be taken against you. Feel free to ask us for more information or any part of the study that is not clear.

What is involved?

The study will take place in person at a time convenient to both the participants and the researcher. The study will involve a peer-to-peer discussion of the participants' experiences and a session recording by one of the research team members. The whole process will take 1-2 hours. Consent will be obtained before you participate in the study.

What would be taking part involve?

First, you will be asked to sign the consent before the discussion and recording started. A member of the research team will guide the discussion and will start and stop the recording. The discussion will take 1-2 hours of your time to gain insights into your experiences during a pandemic and explore areas of improvement.

What are the possible benefits of taking part?

There are no direct benefits to participating in the study, but the research will help educational institutions develop additional strategies for improving nursing education during a pandemic. The study seeks to expand and add to the limited body of

Participant information sheet.

knowledge on nursing students' experiences during the COVID-19 pandemic. This study will support the development and improvement of nursing education during and beyond the COVID-19 pandemic.

What are the possible risks to taking part?

The risks of joining the study are small, but you will have to take 1-2 hours out of your time to participate in the peer-to-peer discussion of your experience.

Whom have we asked to participate?

We have invited all second and third-year nursing students enrolled in Edinburgh Napier University during the COVID-19 pandemic.

How will my information be kept confidential?

The study team will take measures to protect your confidentiality during and after the study. All data and recorded discussions will be kept securely in accordance with the Data Protection Act (1998) and GDPR legislation 2018. All data collected as part of the study will be stored securely on a password-protected secure server that only the research team will access. Your name and other personally identifiable information will not be included in the research database. All data will be anonymized and will be kept confidential at all times.

What will happen to the results of this study?

The information that we get from doing this research study will only be used in ways that will not contain your personal information. You will not be identified in any publication from this study or in any data files shared with other researchers. We may be legally required to show information to university staff external to the research team, who are responsible for monitoring the safety of this study. Before sharing any data, it will be anonymized so that you cannot be identified. The results will be shared through publication and conference presentations for other interested people, or other researchers may learn from our research.

What will happen if I choose not to take part now or at a later stage?

Participation is voluntary, and participants are free to withdraw at any time without giving a reason. If you choose to withdraw, we will destroy any data we have collected with you. However, this may not be possible once the data is anonymized, and you will be advised of this should this happen.

Who has reviewed this study?

This research proposal has been reviewed and approved by the Edinburgh Napier University research governance and ethics committee. Partner Universities and NHS Health Boards have also granted permission.

If you have a concern about any aspect of the study or for more information, you may contact the investigators:

Dr. Ruth Paterson, Lecturer and Principal Investigator, Edinburgh Napier University: R.Paterson@napier.ac.uk

or

Ms. Kris Amor Calica, Nursing Masters student, Edinburgh Napier University: 40513815@live.napier.ac.uk

Independent advice

If you would like to speak to someone not connected to the study but with experience of research projects, please contact:

Dr. Janette Pow, Lecturer, Edinburgh Napier University at j.pow@napier.ac.uk

Appendix C: Study Privacy Notice

Privacy Notice

(to be appended to the Participant Information and Informed Consent Forms)

Name of Research Project: What were health care student experiences during the COVID-19 pandemic?

Aims

1. To explore the health care students experiences and their implications for nursing competencies during the COVID-19 pandemic.
2. To explore strategies to address the educational gaps and conceptualize an approach to improve nursing education during a pandemic situation

Description of Project: This study explores health care students' experiences during the COVID-19 pandemic to inform recommendations on improving educational support when faced with a similar event. A qualitative approach will be adopted in this study through a peer-to-peer discussion to collect the data.

Data Controller	Edinburgh Napier University
Purposes for collection/processing	The research question is: What were health care student experiences during the COVID-19 pandemic. Aims <ol style="list-style-type: none">1. To explore the health care students experiences and their implications for nursing competencies during the COVID-19 pandemic.2. To explore strategies to address the educational gaps and conceptualize an approach to improve nursing education during a pandemic situation
Legal basis	Art 6(1)(e), performance of a task in the public interest/exercise of official duty vested in the Controller by Statutory Instrument No. 557 (S76) of 1993 as amended, e.g. for education and research purposes. Where sensitive personal data is being processed the additional bases from Article 9 is: Art 9(2)(j) for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes. This research project does not intend to collect or process any special category personal data e.g. political opinions that can be associated with you or your identity. Please do not provide

<p>Whose information is being collected</p>	<p>any specific information of this type in your responses (e.g. names, places, dates, organisations) to research questions or during focus group discussions. In the unlikely event that special category personal data is collected, the University relies on Article 9(2)(j) for processing.</p> <p>Health and social care students who are matriculated on a pre-registration programme of study in the school of health and social care.</p>
<p>What type/classes/fields of information are collected</p>	<p>Please refer to data collection tool for full information. Participants will be identified and invited to participate from the online MOODLE platforms and via programme leads. No data or informatics will be extracted from the MOODLE site.</p> <p>On the consent form participants will be asked:</p> <ul style="list-style-type: none"> • <u> N_a_m_e </u> • <u> E_m_a_i_l </u>
<p>Who is the information being collected from</p>	<p>During the peer to peer discussion data on their perceptions of the COVID pandemic and the impact on their studies will be explored using Chesters 5 points to student success. Specific details on the questions to be asked are detailed in the qualitative topic guide document, but relate to perceptions of capability, connectedness, purpose, resourcefulness and culture.</p>
<p>How is the information being collected</p>	<p>Data is being collected directly from you as the participant in the study.</p> <p>We have identified you through your programme leader and MOODLE space that is connected to your programme.</p>
<p>Is personal data shared externally</p>	<p>Online qualitative interviews will be recorded on MS Teams and then transcribed onto a word document and imported into a secure online qualitative data storage platform, NVIVO and stored on the x drive. All textual data will be processed, anonymised and stored electronically as plain text data, and as an NVIVO file. No identifiable data will be stored.</p>
<p>How secure is the information</p>	<p>No it is not, we are only contacting you because we know that you are a student in the school of health and social care. We will not share any personal data with any external source.</p> <p>The data will be stored on on a secure University drive (X drive) that can only be accessed by the research team.</p> <p>For services provided locally by Information Services, information is stored on servers located in secure University datacentres. These datacentres are resilient and feature</p>

access controls, environmental monitoring, backup power supplies and redundant hardware. Information on these servers is backed up regularly. The University has various data protection and information security policies and procedures to ensure that appropriate organisational and technical measures are in place to protect the privacy or your personal data. The University makes use of a number of third party, including "cloud", services for information storage and processing. Through procurement and contract management procedures the University ensures that these services have appropriate organisational and technical measures to comply with data protection legislation. The University is Cyber Essentials Plus accredited.

Who keeps the information updated

The chief investigator will be responsible for the research team ensuring any information pertaining to the study is kept up to date.

How long is the information kept for

Consent forms = 6 years
Audio recordings = kept until transcription completed (within 31 days).
Transcriptions (pre anonymisation) = retained for 31 days to allow verification of meaning with participant. At the end of the research analysed and anonymised data will be kept securely for ten years and then will be destroyed as per Edinburgh Napier University guidance on the safe disposal of confidential waste. All electronic files containing data will be deleted from the secure university server.

Will the data be used for any automated decision making

No

Is information transferred to a third country? Outside the EEA and not included in the adequate countries list.

No

You can access all the University's privacy notices using the following link:
<https://staff.napier.ac.uk/services/governance-compliance/governance/DataProtection/Pages/statement.aspx>
You have a number of rights available to you with regards to what personal data of yours is held by the University and how it is processed – to find out more about your rights, how to make a request and who to contact if you have any further queries about Data Protection please see the information online using the following URL: <https://staff.napier.ac.uk/services/governance-compliance/governance/DataProtection/Pages/default.aspx>

Appendix D: Study Consent Form

Edinburgh Napier University Research Consent Form

The Listening Project: The Experience of Student Nurses during the COVID-19 pandemic

Edinburgh Napier University requires that all persons who participate in research studies give their written consent to do so. Please read the following and sign it if you agree with what it says.

1. I freely and voluntarily consent to participate in the listening research project on student's experience during the COVID-19 pandemic to be conducted by Dr. Ruth Paterson, a staff member at Edinburgh Napier University.
2. The main goal of this research study is to explore views and experiences during the COVID-19 pandemic. Specifically, I have been asked to participate in a peer-to-peer discussion which should take no longer than 2 hours to complete. Furthermore, I have been informed that the discussion will be audio recorded, analyzed, and stored according to the privacy statement.
3. I have been told that my responses will be anonymized. My name will not be linked with the research materials, and I will not be identified or identifiable in any report subsequently produced by the researcher. In addition, any data shared as part of a data-sharing agreement will be anonymised, and my data will not be shared.
4. I also understand that I am free to leave or withdraw at any time if I feel unable or unwilling to continue the process during data collection. I am aware that my participation is entirely voluntary, and I may withdraw from this study without negative consequences. However, I also understand that after data has been anonymised or after the publication of results, I understand that it will not be possible for my data to be removed as it would be untraceable at this point.
5. I am free to decline any particular question or questions I do not wish to answer.
6. I have been given the opportunity to ask questions regarding the study, and my questions have been answered to my satisfaction.
7. I have read and understood all the above statements, the attached privacy statement and consent to participate in this study. Furthermore, I understand that my agreement is not a waiver of any legal rights and that I will have a copy of the informed consent form for my records.

Please tick the box on the following:

- I agree to participate in a peer-to-peer discussion of the research topic
- I agree to be contacted via email by one of the research team

Name and signature:..... Date:.....

Email address:

Appendix E: Interview Guide

Listening project: topic guide.

Thank you very much for agreeing to participate.

Please find enclosed the areas we will cover in our peer-to-peer discussions. Over the next few days, it may be helpful to reflect on the questions below and perhaps take some notes for the interview.

Ensure the student has read the topic guide and had the opportunity to ask any questions.

The first part of this interview is to record your consent to participate. I will work through the consent form and we can record your response. I will allocate you a participant number to ensure that we have a record of who said what and we can verify your transcript and request any points for clarification if necessary.

Work through the points within the consent form.

Our role in this is to help the conversation flow using some of the questions we circulated as prompts. What we would like this to be is a conversation between the two of you rather than an interview.

So to start the conversation off can you talk about your experience in general since the start of the pandemic.

1. During the lockdowns, your role as a student and studies have been affected, can you reflect on what this has meant for you with regards lectures, workshops and practical sessions?
2. The shift to online learning has changed how we communicate with our university community (peers and academics). Can you reflect on how this has affected your relationship with peers and as a university student?
3. How do you perceive your identity as a student health professional?
4. Has the pandemic affected your mental health in anyway?

Appendix F: Debrief Form



The Listening Project: The Experience of Health and Social Care students during the COVID-19 pandemic

Invitation and brief summary

We invited you to participate in a listening research study on topics related to health and social care experience during the COVID-19 pandemic. As a student affected by the COVID-19 pandemic, we wanted to find out your experiences and perception of the impact of the COVID-19 pandemic on your educational experience.

The education of health and social care students is crucial for the future of the workforce. However, the COVID-19 pandemic has caused stress and anxiety due to the changes to the learning strategies and uncertainties on achieving students' necessary skills and competence in the field of healthcare. This study explores and students' experiences during the COVID-19 pandemic and its impact on healthcare education. This debrief for offers some information following the interview.

We will anonymise all data to ensure your privacy is protected and ensure that access to any anonymised data is stored on a secure university server. Should you wish to withdraw your data from the study please do get in touch with the research team. If you choose to withdraw we will destroy any data we have collected with you, this may not be possible once the data is anonymised and you will be advised of this should this happen.

Sometimes participants in research find some aspects of a study distressing, if this is the case, there are a number of people you can speak to about how you are feeling. If you would like to speak to someone about the research not connected to the study Dr. Janette Pow (j.pow@napier.ac.uk) is available to contact.

If participation has been distressing it may be helpful to speak to student health and wellbeing services. The link to their services can be found here:

<https://my.napier.ac.uk/wellbeing-support-and-inclusion/counselling-and-mental-wellbeing>

Otherwise a member of the research team is always very happy to speak to you to answer any questions you may have. Thank you for your time.

Ruth Paterson Principal Investigator,
Associate Professor.
Email r.paterson@napier.ac.uk
Tel 0131-455-5663.

Appendix G: Oath of Confidentiality

Oath of Confidentiality

EDINBURGH NAPIER UNIVERSITY

OATH OF CONFIDENTIALITY – RESEARCH STUDENT (General Data Protection Regulation and Data Protection Act 2018)

Full name	Kris Amor Calica	Matriculation No.	40513815
Course	ERASMUS MUNDUS JOINT MASTER DEGREE IN EMERGENCY AND CRITICAL CARE NURSING	School	Edinburgh Napier University
<p>I acknowledge that for the purposes of my dissertation/research project at the University, I will have access to the personal information of living identifiable individuals. I recognise that I have a duty of confidentiality in relation to this information and am bound by the provisions of the Data Protection legislation and the University's obligations under the legislation.</p> <p>As a University research student I undertake to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> only ever access and process personal information in order to carry out my research <input type="checkbox"/> never use any such data for any purpose other than to perform my research <input type="checkbox"/> never disclose the data to any other person at the University <u>except</u> where appropriate to my research supervisor and/or other authorised person <input type="checkbox"/> never disclose any data to any individual or organisation external to the University, (other than an external examiner/supervisor as required) in accordance with the legislation <input type="checkbox"/> securely retain the data in both electronic and manual format at all times. Manual/paper records/data to be kept in a locked container and electronic data to be stored only on the University's ICT network/systems as per guidance provided online at: https://staff.napier.ac.uk/services/governance-compliance/governance/DataProtection/Pages/ProcessingDataforResearch.aspx . <input type="checkbox"/> securely dispose of the data in accordance with relevant retention requirements and University policy <input type="checkbox"/> adhere to the obligations set out above and below during my period of research and after it has ended <p>I understand that:</p> <ul style="list-style-type: none"> <input type="checkbox"/> disclosure or processing of personal information outside these terms will only take place in consultation with my research supervisor and/or Governance and Compliance Services <input type="checkbox"/> where relevant, I am bound by the University's Information Security, Manual Data Security policies and Data protection Policy and CoP to which I have been directed (see link above) <input type="checkbox"/> I may be subject to disciplinary proceedings for failing to observe these obligations 			
Signed	<i>Krcalica</i>	Date	June 16, 2021
Witness (staff member)			
Name			
School		Post held	
Signed		Date	

Appendix H: Ethics Committee Approval Letter



Applicant: Ruth Paterson
School: SHSC
Reviewed by: School of Health and Social Care Integrity Committee
Date: 2 September 2021
Our Ref: 2781763

Dear Ruth

Re: Ethics Application: The listening project – 2781763

Further to your application for ethical review to undertake a research study at Edinburgh Napier University, I am pleased to inform you that the committee is able to give your application a favourable ethical opinion. Your study is now able to proceed. It is your responsibility to inform the SHSC ethics committee when your study has been completed.

Please adhere to data management policy for the storage and destruction of data, see:

<http://staff.napier.ac.uk/services/research-innovation-office/Documents/Research%20Data%20Management%20Policy.pdf>

May I also remind you of the need to apply to the Research Integrity Committee prior to making any amendments to this study or of any changes to the duration of the project? Any proposed changes in the protocol should be submitted for reassessment as an amendment to the original application. All documents related to the research should be maintained throughout the life of the project, and kept up to date at all times. If your study is funded please ensure to upload your ethical review letter and data management forms on worktribe.

Please bear in mind that your study could be audited for adherence to research governance and research ethics. We wish you well with your study.

Regards,

Coral

Coral Hanson
Convenor School of Health and Social Care Integrity Committee

Appendix I: Dissertation Supervision Record

Date	Time	Location	Point for discussion
May 27, 2021	4:15-5:00 pm	Teams	Dissertation topic and submission of the research study for ethical consideration Literature search for the background of study, development of the background of the study and theoretical framework of the study
June 23, 2021	11:00-11:30 am	Teams	Submission of the documents to the ethics committee Discussion on the methodology Discussion on the data collection date
July 19, 2021	10:00-11:00 am	Teams	Update on the ethics approval Discussion on the data collection procedure Discussion on prospective participants
August 25, 2021	10:00-11:00 am	Teams	Discussion regarding invitation of participants, improvement of the invitation flyer, and powerpoint presentation to prospective participants
September 27, 2021	1:00-2:00 pm	Campus	Feedback on Chapter 1-Introduction and Chapter 2-Literature review Anonymization of transcripts
October 12, 2021	4:00-5:00 pm	Campus	Refinement of themes and subthemes in Literature review Formulation of themes map and operational definition Discussion on Research methods
October 27, 2021	3:00-5:00 pm	Campus	Feedbacks on Chapter 2 and Chapter 3 Presentation of anonymized transcripts NVivo teaching supervision
November 11, 2021	11:00-12:30 pm	Campus	Use of Nvivo Coding in Nvivo Feedbacks on result section
November 27, 2021	1:00-2:00 pm	Teams	Feedback with
December 17, 2021	12:15-1:00 pm	Teams	Feedback with Chapter 5-Discussion Discussion with the submission of the dissertation draft in Turnitin on January 3
January 12, 2022	11:00 am-11:45 am	Teams	Discussion of Feedback on the dissertation draft Discussion of the PowerPoint presentation and mock test