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Lived experiences of clinical instructors in facilitating online related learning experiences among nursing students in the Philippines: Challenges, adaptations, and insights

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Abstract: This study explores the lived experiences of Clinical Instructors (CIs) in facilitating online Related Learning Experiences (RLE) for nursing students during the 2020-2021 academic year in three higher education institutions (HEIs) in Bacolod City, Philippines. Using a qualitative phenomenological approach, in-depth semi-structured interviews were conducted with nine nursing faculty members to understand their motivations, challenges, and adaptations in transitioning from face-to-face to online RLE delivery. Purposive sampling was used to select participants who had prior clinical teaching experience before the COVID-19 pandemic. Findings revealed three major themes: 1) Adapting to Changes in Teaching and Learning, which emphasized the development of new skills, knowledge updates, and emotional adjustments; 2) Challenges in Online RLE, highlighting technical inadequacies, resource limitations, and external constraints such as poor internet connectivity and power interruptions; and 3) Growth and Professional Development, underscoring the instructors' resilience and professional advancement despite these difficulties. The study concludes that enhancing digital infrastructure and revising the nursing curriculum to incorporate technology-driven pedagogies are essential for improving online RLE delivery. These findings provide practical insights for HEIs and policymakers in strengthening faculty training, digital literacy, and resource accessibility, ensuring the effectiveness of online nursing education in future crises.

Keywords: Challenges in online clinical instruction, Clinical instructors' lived experiences, Nursing education during COVID-19, Online Related Learning Experiences (RLE), Technology-driven nursing pedagogy.

1. Introduction

The COVID-19 pandemic has caused the most significant disruption in the history of education, affecting nearly 1.6 billion learners across more than 190 countries and all continents [1]. In response, the Commission on Higher Education (CHED) issued CHED Memorandum Order No. 4, Series of 2020 [2] mandating the adoption of flexible learning modalities, including online platforms, to facilitate education during the pandemic. However, transitioning from traditional classroom-based and face-to-face instruction to virtual learning environments presents a fundamentally different educational experience for both instructors and students [3]. This shift has been particularly challenging in nursing education, where hands-on training and clinical exposure are essential components of learning [4]. The virtual classroom format has introduced numerous limitations and technical difficulties, affecting both the teaching and learning processes not only limited to nursing education [5, 6].

Related Learning Experiences (RLE) in nursing education involve the application of theoretical knowledge in skills laboratories, hospitals, and community settings [7]. Clinical rotations and hands-on training ensure that nursing instruction remains effective and practical [8-10]. However, the shift to online education requires a combination of various elements, including adequate technical support, stable internet access, and appropriate learning resources, to ensure the continuity of quality nursing education [11]. Unfortunately, the pandemic has exacerbated challenges such as limited financial resources, lack of access to necessary materials, poor internet connectivity, and economic constraints, all of which have significantly impacted students' ability to engage in home-based learning [4].

Both educators and students have struggled to adapt to the online learning environment [12]. The transition has not only tested the discipline and accountability of students, but has also raised concerns among educators regarding the effectiveness of online instruction and whether students are truly absorbing the intended knowledge [4, 13, 14]. Despite these challenges, the shift to virtual learning has encouraged educators to explore innovative teaching strategies and adapt to new digital platforms. For nursing educators, particularly Clinical Instructors (CIs), the demand to effectively deliver online RLE while ensuring the integrity of clinical training has been a significant challenge.

1.1. Research Objective

With these having said, the current study aims to achieve the following objectives: (1) to explore the lived experiences of CIs in adapting to the shift from face-to-face to online RLE, particularly in terms of knowledge, skills, and attitudes; (2) to identify the challenges encountered in online RLE, including technical inadequacies and external limitations such as poor internet connectivity and resource constraints; and (3) to examine the strategies employed by CIs to overcome these challenges and foster professional growth in an online learning environment. By addressing these objectives, the study seeks to provide insights that can inform improvements in flexible learning approaches, enhance the integration of technology in nursing education, and support the continued development of effective online clinical instruction.

1.2. Significance of the Study

This study is significant to various stakeholders in nursing education, particularly in adapting to the challenges of online RLE. The findings may provide valuable insights for CHED officials in formulating policies and strategies to enhance nursing education in a flexible learning environment. Nursing administrators may benefit from this study as it highlights the need for curriculum development and enrichment in response to the shift to online clinical instruction. For CIs, the study offers a deeper understanding of the adjustments required in delivering online RLE and preparing students for clinical exposure. Nursing students may gain awareness of the efforts undertaken by their educators to ensure effective online learning experiences. Parents may also find value in understanding the transition from traditional clinical training to virtual platforms, fostering their support for students' learning. Lastly, future researchers may use this study as a reference for further exploration of online clinical education, contributing to a more comprehensive understanding of its challenges and best practices.

2. Literature Review

2.1. Theoretical Framework of the Study

The current study is anchored on two relevant theories: Roy [12] and Roy [13]; Kolb [15] and Ursavaş, et al. [16] both of which provide a framework for understanding how individuals adapt to changes in their environment within the context of teaching and learning in nursing education. These theories help explain the process of adjustment and experiential learning in response to shifts in educational delivery, such as the transition from traditional face-to-face clinical instruction to online RLE.

Roy [12] and Roy [13] developed by Sr. Callista Roy in 1976, views individuals as biopsychosocial beings constantly interacting with their environment. The model suggests that people use both innate and learned coping mechanisms to adapt to changes in their surroundings. Roy describes adaptation as a response to three types of environmental stimuli: focal stimuli (immediate challenges requiring attention), contextual stimuli (background factors that influence adaptation), and residual stimuli (unrecognized or subconscious influences) [16]. In nursing practice, this model emphasizes the role of nurses in modifying stimuli to promote patient well-being [17]. Applied to nursing education, the theory highlights how CIs and students must continuously adjust to new learning environments, such as online RLE, by developing new skills and coping strategies [18].

While, Kolb [15] Experiential Learning Theory [19, 20] describes learning as a dynamic process in which knowledge is acquired through the transformation of experiences. Kolb [15] and Cucinotta and Vanelli [21] identifies four modes of learning: Concrete Experience (direct engagement in an activity), Reflective Observation (analyzing the experience), Abstract Conceptualization (forming theories or conclusions), and Active Experimentation (applying learned concepts in practice). This cyclical process underscores the importance of hands-on learning, which is crucial in nursing education. Kolb's theory suggests that even in an online learning environment, students must be given opportunities to engage in meaningful experiences, reflect on their learning, and apply their knowledge in practice. Together, Roy's and Kolb's theories provide a comprehensive lens for understanding how CIs and students navigate and adapt to the challenges of online RLE.

2.2. COVID-19 as a Global Pandemic Disrupting the Education System

The COVID-19 pandemic has presented unprecedented challenges, disrupting societies, economies, and educational systems worldwide [22]. Since its emergence, the disease has claimed thousands of lives globally, prompting the World Health Organization (WHO) in 2020 to declare it a Public Health Emergency of International Concern [21]. The pandemic has led to the most significant disruption in the history of education, affecting nearly 1.6 billion learners across more than 190 countries and all continents [23]. With cases rapidly increasing, educational institutions, including nursing schools, have faced significant challenges in maintaining academic continuity while ensuring student safety [23].

This health crisis has impacted not only frontline workers and clinical leaders but also the broader educational sector. Schools of nursing, in particular, have had to navigate unique difficulties in preparing the next generation of healthcare professionals [24]. In response, the WHO has recommended the adoption of online education to maintain social distancing, though further research is needed to evaluate its effectiveness. The shift to online learning has exposed numerous challenges associated with flexible learning, particularly in nursing education, where hands-on training is essential [25]. Many academic institutions have successfully transitioned to well-structured online programs, while others have struggled due to inadequate preparation and resources [26]. Educators have had to differentiate between emergency remote teaching and high-quality online education, highlighting disparities in digital learning readiness among institutions [27, 28].

The transition to online education has been especially challenging for nursing programs worldwide. In Spain and other countries, nursing students' participation in healthcare facilities was suspended [29, 30]. Globally, millions of students across 191 countries were affected by the sudden closure of schools and universities [31]. In response, various distance learning solutions were implemented to ensure educational continuity. However, faculty members—many of whom were experts in traditional classroom-based instruction—were suddenly required to adapt to e-learning with little preparation [4]. Similarly, students had to transition from structured, face-to-face learning to self-directed online education, which demanded greater independence and adaptability [31]. This shift was compounded by a pervasive sense of uncertainty and anxiety among students and educators alike [32]. Overall, the pandemic has highlighted the need for robust and adaptable learning strategies to ensure the continued effectiveness of nursing education in the face of global disruptions.

2.3. Nursing Education in the Philippines During the Pandemic

The transition from traditional to flexible teaching and learning modalities has become a crucial necessity in response to the COVID-19 pandemic. According to CHED Memorandum Order No. 4, flexible learning is a pedagogical approach that allows adaptability in terms of time, place, and audience, utilizing various delivery methods beyond traditional face-to-face instruction [33]. While flexible learning commonly incorporates distance education and educational technologies, its implementation varies depending on factors such as technological availability, internet connectivity, digital literacy levels, and institutional resources [33]. Programs and courses are designed to accommodate students' specific needs in terms of learning pace, method, and output [34]. This approach ensures that education remains inclusive and accessible, even during national emergencies when conventional teaching methods are not feasible.

Implementing flexible learning, however, requires a combination of elements, including robust technical support, appropriate learning resources, and adequate infrastructure to facilitate online education. CHED [35] encourages HEIs to leverage technology in several key areas: a) determining appropriate technology levels based on students' connectivity and access; b) establishing multimedia or learning resource centers to support faculty in developing IT-enabled instructional materials; c) utilizing electronic libraries and Open Educational Resources (OER) to supplement flexible learning; and d) integrating Learning Management Systems (LMS) to streamline online course delivery. These measures aim to enhance the quality of nursing education despite the challenges posed by the pandemic, ensuring that students continue to receive comprehensive and effective training.

2.4. Teaching during the Pandemic

The COVID-19 pandemic escalated into a major crisis in the Philippines, prompting immediate adjustments in the education sector. Like schools and universities around the whole, schools in the Philippines implemented various measures, such as postponing graduation ceremonies and modifying grading systems, prioritizing student safety above all else. Faculty members were swiftly introduced to synchronous and asynchronous learning modalities, LMS, and other online modules (software) as part of the shift to remote learning [35]. To facilitate this transition, extensive faculty training and webinars were conducted, equipping educators with the necessary skills to navigate digital learning tools [36]. These professional development initiatives fostered collaboration among faculty members, enabling the creation of institutional guidelines and instructional resources tailored to the new learning modality [4].

Despite these proactive measures, the abrupt shift to online education presented significant challenges, that persisted in all levels of education, may it be at the primary, secondary, or tertiary education [37]. Many issues arise from learning online, such as students and teachers' online fatigue to the increasing problematic internet use of students [38, 39]. Particularly interesting is nursing education, which relies heavily on hands-on clinical experience [3, 40-42]. Limited access to essential learning resources—such as laboratory facilities, hospital exposure, and patient interactions—hampered students' ability to develop the practical competencies required in their field [43]. Furthermore, financial constraints, unstable internet connectivity, and technological disparities created additional barriers to effective learning [30]. Many students struggled to adapt to unfamiliar digital platforms and software, resulting in missed deadlines, reduced engagement, and decreased participation in online classes [44]. This lack of involvement raised concerns among educators regarding the discipline and accountability of students, as well as the overall effectiveness of online instruction [45].

The concept of emergency remote teaching—defined as a temporary shift in instructional delivery due to crisis circumstances [44] which highlights the urgent need for more structured, long-term approaches to online education. Thoughtful planning is required to address existing disparities, such as students' limited access to internet services and technological resources, particularly in remote areas [46, 47]. Furthermore, universities must grapple with ethical considerations surrounding the potential reduction of licensure requirements and clinical practicum hours. COVID-19 has underscored the need

for educational institutions to embrace adaptability, fairness, and social justice while ensuring that nursing students receive comprehensive training in patient care, leadership, and ethics [24].

Understanding the perspectives of nurse educators during this transition is crucial in informing policy decisions and resource allocation. By examining their experiences, educational authorities can develop sustainable strategies for nursing education, ensuring resilience in future crises. The sudden shift to online learning has brought forth both strengths and weaknesses in the current system, offering valuable lessons for improving future instructional models [48]. The long-term impact of this educational shift remains uncertain, making it imperative to refine flexible learning approaches that uphold the integrity of nursing education.

Overall, the reviewed literature underscores the far-reaching impact of the COVID-19 pandemic on global education, particularly in nursing programs, where practical training is integral to competency development. The sudden shift to flexible learning in the Philippines, guided by CHED's policies, exposed gaps in technical readiness, instructional strategies, and resource availability. Teaching during the pandemic required educators to rapidly adapt to new learning platforms while addressing students' struggles with engagement, accessibility, and performance expectations. These challenges align with Roy's Adaptation Model, which emphasizes how individuals—both students and educators—must adjust to environmental changes using innate and learned coping mechanisms. At the same time, Kolb's Experiential Learning Theory highlights the importance of hands-on experience in professional development, reinforcing concerns about the limitations of virtual clinical instruction. The current study aims to explore the lived experiences of CIs in facilitating online RLE for nursing students, particularly in adapting their teaching strategies, addressing challenges, and fostering professional growth in a digital learning environment. By integrating insights from adaptation and experiential learning theories, the study seeks to identify best practices and inform curriculum enhancements, ensuring that nursing education remains effective, even in the face of unprecedented disruptions.

3. Materials and Method

3.1. Study Design

The current study is guided by the objectives, a qualitative phenomenological approach was employed to explore the lived experiences of CIs in facilitating online RLE for nursing students during the academic year 2020–2021. Lived experienced type of phenomenological approach was chosen because it allows for an in-depth examination of how individuals perceive, interpret, and adapt to a phenomenon in study [17, 48, 49]. This design provides valuable insights into the motivations, challenges, and coping strategies of CIs, offering a deeper understanding of their experiences in the evolving landscape of nursing education [50].

Phenomenological studies seek to uncover universal experiences by capturing the personal beliefs, interpretations, and emotions of individuals within a shared context [51]. To achieve this, semi-structured in-depth interviews were conducted, as they allow for flexible and interactive dialogue between the researcher and participants [52]. This method enables respondents to freely express their thoughts, guiding the conversation toward aspects most relevant to their experiences. Semi-structured interviews provide a richer and more nuanced understanding of how CIs navigated the challenges of online RLE, as opposed to structured interviews, which follow a rigid questioning format. The adoption of a semi-structured interview guide allowed the researcher to delve deeper into emerging themes, customizing follow-up questions based on the interview's progression [53]. Open-ended questions were employed to encourage participants to share their perspectives without restriction, ensuring that the data collected remained authentic and reflective of their personal experiences [54]. The flexibility of qualitative inquiry, combined with a phenomenological lens, ensures that this study effectively captures the complexities of CIs' adaptation to online RLE, providing valuable insights into teaching strategies, technological challenges, and professional growth in the digital learning environment [55, 56].

This research design was selected because it aligns with the study's objective of understanding the lived experiences of CIs, particularly their adaptation to the new instructional modalities brought about

by the pandemic. The findings will contribute to enhancing nursing education practices, particularly in the integration of technology-driven strategies, faculty training, and curriculum development. Through this qualitative, phenomenological approach, this study aims to inform future educational policies and pedagogical improvements, ensuring that CIs are better equipped to navigate digital learning environments while maintaining the quality of nursing education.

3.2. Participants and Recruitment Criteria

This study utilized purposive sampling and specific inclusion criteria to select nine CIs or nurse educators who had prior face-to-face clinical teaching experience before transitioning to online RLE due to the COVID-19 pandemic [57, 58]. Purposive sampling, a widely used method in qualitative research, was utilized to identify and select participants who could offer in-depth and meaningful insights into the phenomenon under study [59]. The participants were drawn from three Colleges of Nursing in Bacolod City (is a highly urbanized city in the Western Visayas region of the Philippines and serves as the capital of Negros Occidental province), with each institution contributing three nursing faculty members who met the following criteria: Hold a Master's degree in Nursing, have prior experience teaching face-to-face clinical duty for third- and fourth-year nursing students, do not hold any leadership or administrative position within their respective College of Nursing, and were actively involved in online RLE delivery during the academic year 2020–2021, specifically in hospital ward settings. These Colleges of Nursing each had an enrollment population exceeding 300 nursing students during the study period, further emphasizing the scale and impact of the transition to online RLE. The selection of participants ensured that the study captured firsthand insights from faculty members directly engaged in online clinical instruction, providing a comprehensive understanding of their experiences, challenges, and adaptations in delivering nursing education through digital platforms.

The study involved nine (9) CIs teaching online RLE courses in three HEIs in Bacolod City, Philippines. Table 1 shows the demographics of the nine (9) participants, each given a pseudonym to ensure confidentiality. The participants represent a diverse range of backgrounds in education, clinical experience, and years of teaching, providing rich insights into the challenges and adaptations encountered in online clinical instruction. The age of the participants ranged from 30 to 55 years old, with varying levels of teaching experience, from 2 to 19 years. Seven participants were female, while two were male. One participant (P1: Boyet) holds a PhD in Nursing, while the remaining eight have Master's degrees in Nursing. Their clinical work experience ranged from 3 to 23 years, reflecting a mix of expertise across perioperative nursing, psychiatric nursing, intensive care, emergency nursing, maternal and child health, and community health nursing.

In terms of the online RLE courses, the participants were responsible for a broad range of nursing subjects, including fundamentals of nursing practice, perioperative nursing, maternal and child health nursing, psychiatric nursing, medical-surgical nursing, community health nursing, intensive care nursing, and leadership and management. The diversity of their clinical backgrounds and teaching expertise provided valuable perspectives on the transition from face-to-face to online clinical instruction. The varied demographics and specialization areas of the participants ensured a comprehensive representation of nursing education disciplines, offering insights into the challenges, strategies, and professional growth associated with online RLE delivery during the COVID-19 pandemic.

Table 1.

Background demographics of the participants.

| Participant (Pseudonyms) | Gender | Age | Education | Clinical work | Years teaching | RLE courses |
|-----------------------------|--------|-----|-----------|------------------|-------------------|--|
| P1: Boyet | Male | 55 | PhD. | 23 | 18 | Perioperative nursing, medical surgical nursing, emergency nursing, & critical care nursing. |
| P2: Marissa | Female | 30 | Masters | 4 | 2 | Fundamentals of nursing practice, nursing care management, & community health nursing. |
| P3: Martina | Female | 49 | Masters | 5 | 19 | Psychiatric nursing, community health nursing, & gerontology theoretical foundation. |
| P4: Macy | Female | 40 | Masters | 14 | 14 | Maternal and child health nursing, operating room nursing, & psychiatric nursing. |
| P5: Mariel | Female | 46 | Masters | 3 | 6 | Fundamentals in nursing, health assessment, maternal and child health nursing, & community health nursing. |
| P6: Cecilia | Female | 51 | Masters | 12 | 6 | Fundamentals in nursing, & maternal and child health nursing. |
| P7: Laurence | Male | 38 | Masters | 5 | 15 | Intensive care nursing, health assessment, nursing leadership and management, & psychiatric nursing. |
| P8: Angela | Female | 35 | Masters | 5 | 3 | Maternal and child nursing practicum. |
| P9: Jamie | Female | 34 | Masters | 3 | 3 | Nursing care management, medical- surgical nursing, & advanced nursing practice in nutrition, metabolism, and endocrine health. |

3.3. Interview Protocol and Procedure

A researcher-made, semi-structured interview guide was developed to gather in-depth insights from CIs regarding their lived experiences in facilitating online RLE during the COVID-19 pandemic. To ensure face and content validity, the interview guide was reviewed by a practicing *Guidance Counselor* and/or a *Psychology professor*, ensuring its relevance, clarity, and alignment with the study's objectives [60]. The semi-structured interview format allowed for a flexible yet focused exploration of key topics [61]. While the guide provided a framework for discussion, the interviewer had the freedom to adapt, rephrase, or probe deeper based on the participant's responses. This approach ensured a natural and dynamic conversation, enhancing the richness of the data collected [52]. The interview protocol included initial background questions to establish rapport and create a comfortable, low-anxiety environment for participants. To ensure accuracy and credibility, audio recording and note-taking were employed during the interviews. Transcriptions were later reviewed for reflection and thematic analysis. Participants were given the option to schedule follow-up discussions either online or face-to-face, depending on their availability and preference [62].

The overarching research questions explored how CIs conducted online RLE during the pandemic, including the challenges, adjustments, and professional growth they experienced. The following are sample probing questions aligned with the study's three major themes:

3.3.1. Adapting to Changes in Teaching and Learning

- Can you describe how you transitioned from face-to-face clinical instruction to online RLE?
- What new skills did you develop to facilitate online clinical instruction?
- How did you update your knowledge to align with online teaching methods?
- How did you feel about this transition, and what were the most significant adjustments you had to make?

3.3.2. Challenges in Online Related Learning

- What were the most significant difficulties you encountered in conducting online RLE?
- How did technical issues (e.g., internet connectivity, power interruptions) affect your teaching experience?
- What resources or tools did you lack while facilitating online RLE?
- How did students respond to online RLE, and what challenges did they express to you?
- Can you share any instances where you felt particularly frustrated or challenged in adapting to online RLE?

3.3.3. Growth and Professional Development

- Despite the challenges, what positive experiences or milestones have you achieved through online teaching?
- How did using technology as a learning tool change your approach to teaching?
- In what ways have you grown professionally as a clinical instructor during this transition?
- How do you think this experience will shape the future of nursing education?
- What recommendations would you give to fellow clinical instructors facing similar challenges in online RLE?

This refined approach ensures that data collection is systematic, insightful, and aligned with the study's objectives, while allowing participants to express their experiences in a meaningful and unrestricted manner.

3.4. Data Analysis Method

Data analysis was conducted using [54] Six Steps in Qualitative Research. The first step involved organizing and preparing the data by transcribing interviews, scanning materials, and cataloging all visual content. The second step required reading, reviewing, and reflecting on the gathered data to gain a general sense of its overall meaning and to assess data saturation. In the third phase, the data were coded, with significant statements identified and grouped into major thematic insights. During the fourth step, the coding process facilitated the development of detailed descriptions of participants, settings, and the emerging major themes and subthemes. Finally, in the fifth step, the researcher interpreted the data, drawing conclusions that accurately reflected the participants' experiences. Lincoln and Guba [52] criteria were employed to ensure trustworthiness in the study. Credibility was established by having participants review their transcribed interviews to confirm that they accurately captured the in-depth discussions. Transferability was addressed using thick descriptions, enabling potential users to relate the findings to other contexts. Dependability was maintained by ensuring consistency in the study's processes and findings, while Confirmability was achieved by minimizing researcher bias, ensuring that the results were firmly rooted in the participants' responses. Collectively, these criteria ensured that the interpretations of the findings were clearly derived from the data.

3.5. Ethical Guidelines

This study adhered to strict ethical guidelines to ensure the privacy, confidentiality, and voluntary participation of all respondents. Approval was obtained from the *University Research Ethics Review Office*, and all ethical principles—including respect for persons, confidentiality, and informed consent—were rigorously observed throughout the research process. Formal permission to conduct the study was sought through a letter addressed to the Dean of the College of Nursing, with follow-ups conducted through phone calls or in-person visits as necessary. Prior to data collection, informed consent was obtained from all participants, ensuring they fully understood the purpose, scope, and voluntary nature of their involvement in the study. To protect participants' identities, pseudonyms were assigned, and all personally identifiable information was kept strictly confidential. The collected data were securely

stored and accessible only to the researcher. All data were used solely for academic purposes and were stored in password-protected storage. To further safeguard confidentiality, all records and files will be permanently deleted after two years from the completion of the study.

4. Results and Discussions

This section shows the various resulting themes collected through the semi-structured with the nine CIs. Thematic analysis was used to collect and classify the recurring patterns and significant statements from the interview transcripts, providing various insight into the participants' lived-experiences [63]. In total three emerging themes were collected: 1) Adapting to Changes in Teaching and Learning, 2) Challenges in Online Related Learning, and 3) Growth and Professional Development.

4.1. Adapting to Changes in Teaching and Learning

The transition from face-to-face clinical instruction to online RLE posed significant challenges for CIs, requiring them to develop new skills, update their knowledge, and navigate personal and professional struggles. This theme encompasses three subthemes that highlight the instructors' journey in *embracing creativity, acquiring digital competencies*, and *overcoming emotional and technical barriers* to ensure effective online nursing education.

Subtheme 1: Acquiring New Skills – Embodying Creativity

The sudden shift to online learning required CIs to develop digital literacy, explore new teaching strategies, and maximize available resources to ensure effective knowledge transfer. Many participants expressed that while they initially struggled with technology, they eventually became more creative and adaptable in their teaching approaches. Macy reflected on her growth, stating: "I learned to embrace technology, and I became more creative in my presentations and discussions to catch the attention of my students." Martina shared a similar experience: "I learned to be creative in my approach to teaching by applying various strategies." While, Cecilia emphasized the importance of creativity in engaging students, stating: "It also became a way to nourish our creativity so that we can get their cooperation and participation." Boyet also highlighted the use of simulation techniques, demonstrating adaptability despite limitations in face-to-face interactions: "The Clinical Instructor in charge was able to come up with a simulated nursing process instruction, doing the role of the patient." Similarly, Laurence noted how instructors made use of available resources at home: "We had to be creative in terms of utilizing the available resources at home."

Beyond creativity, technological proficiency became an essential skill for effective online instruction. Marissa emphasized the importance of mastering digital tools: "Ability to manage the application we are using is very important. It is very effective if you are knowledgeable in delivering your concept through the help of technology." Another key skill CIs had to develop was sensitivity to students' mental health, acknowledging the emotional strain students faced due to the pandemic. Macy stated: "I learned to be more sensitive about their mental health. If the students' anxiety is lessened, they become more effective in performing their procedures." Furthermore, Boyet also recognized the importance of collaboration among CIs, stating: "In online learning, you have to collaborate with other clinical instructors so you can compare notes and find effective strategies. We actually learn from each other." These statements reflect how CIs embraced creativity, improved their digital literacy, and adjusted their teaching approaches to maintain student engagement and ensure effective learning experiences despite the limitations of online RLE, which has become an important facet of nursing education amidst the COVID-19 pandemic [64].

Subtheme 2: Updating One's Knowledge

To effectively transition to online teaching, CIs actively sought professional development opportunities through webinars, training sessions, and online conferences [65]. Many recognized the need to enhance their knowledge of digital platforms and adopt evidence-based teaching strategies to deliver quality nursing education. Boyet shared how attending training sessions was crucial for adapting to the new mode of teaching: "The first thing we needed to do was to attend orientations and seminars. We needed to plan a different strategy in delivering our lessons to students." In addition, Martina expressed her

enthusiasm for international learning opportunities, stating: "I was able to attend an international conference by Patricia Benner, one of the nursing theorists I teach about. So somehow, I gathered firsthand information from her." Laurence emphasized the importance of staying updated with current nursing practices: "I made sure to keep myself updated with the latest trends in nursing, research, and evidence-based practices." These findings suggest that CIs actively sought professional growth through continuous learning, ensuring they remained competent in delivering online RLE effectively.

Subtheme 3: Surfacing One's Sentiments – Overcoming Challenges

While CIs demonstrated adaptability, they also faced significant emotional and technical challenges during the transition to online RLE. Many described the experience as overwhelming, exhausting, and frustrating, especially due to lack of technical skills, poor internet connectivity, and increased workload. Macy highlighted the demanding nature of online teaching: "Enhancing nursing students' knowledge and skills through an online platform is quite challenging." Jamie also expressed similar concerns about the digital divide in nursing education, stating: "It was challenging. We all wondered how to conduct classes online, especially in a third-world country like the Philippines. It's exasperating to think about students in farflung communities." While, Laurence reinforced the limitations of online learning for nursing students, emphasizing the need for hands-on experience: "Nursing is a skill-based profession; we need hands-on practice and kinesthetic learning." Furthermore, Cecilia echoed these concerns, stating: "It is very difficult to demonstrate procedures online instead of doing them face-to-face with students."

Moreover, CIs felt overwhelmed by the increased workload that came with online teaching. Jamie shared: "It was tasking. The workload doubled, plus we had to post everything in the Learning Management System." Despite these struggles, many CIs developed patience, resilience, and a positive mindset to navigate the challenges. Cecilia stated: "Being in this situation has increased my patience in dealing with students." Laurence emphasized the importance of understanding students' struggles, stating: "Sometimes we go the extra mile, stretching our patience, taking time to listen to their concerns." Angela also highlighted the need for compassion in teaching, recognizing students' financial and emotional struggles: "As clinical instructors, we need to understand that students are trying hard to get good grades. Knowing the tuition, they pay, we need to give them considerations." Mariel, despite the difficulties, expressed fulfillment in her role: "At the end of the day, I am still happy that my students are learning from me, even in an online platform."

These findings affirm Roy's Adaptation Model, which suggests that individuals adjust to environmental changes through innate and learned coping mechanisms. CIs embraced creativity, enhanced their technical skills, and demonstrated resilience, allowing them to adapt to the challenges of online RLE. Their ability to modify their teaching strategies aligns with Roy's concept of adaptive responses to stimuli, ensuring the continuation of effective nursing education. Additionally, Kolb's Experiential Learning Theory is supported by the participants' active engagement in learning new skills, attending training sessions, and integrating digital tools into their teaching practices. Their willingness to adapt and innovate reflects the process of experiential learning, where individuals acquire knowledge through direct experiences and continuous self-improvement. The study's objectives—to explore the lived experiences of CIs in online RLE, examine the challenges faced, and identify opportunities for professional growth—are reflected in the three major themes identified. While technical inadequacies, emotional struggles, and increased workload posed significant barriers [66], CIs developed new skills, updated their knowledge, and cultivated resilience, ensuring quality nursing education despite the limitations of online learning. Moving forward, institutions must support CIs through ongoing training, technical assistance, and curriculum development, ensuring they are equipped with the necessary skills and resources to navigate future challenges in digital nursing education.

4.2. Challenges in Online Related Learning

The shift from face-to-face clinical instruction to online RLE during the COVID-19 pandemic presented numerous challenges for CIs. Participants encountered technical inadequacies and actual

limitations that impacted the effectiveness of online teaching. These challenges were classified into two subthemes: Confronting technical inadequacy and encountering actual limitations and highlighting the technological, infrastructural, and accessibility-related difficulties faced by both educators and students. Subtheme 1: Confronting Technical Inadequacy

Lack of technical expertise - One of the most pressing challenges faced by CIs was the lack of technical expertise in using LMS, video conferencing tools, and digital teaching applications. Many instructors had limited digital literacy and were given little time to prepare for the sudden shift to online learning. This finding supports Colindres, et al. [10] assertion that instructors specializing in traditional face-to-face teaching were forced to quickly adapt to e-learning despite insufficient preparation. Boyet expressed his frustration over the rushed training: "For me, one of the issues is that we were informed late that it would be purely online, and the training was rushed." He also emphasized the struggles of non-tech-savvy instructors, stating: "If you're a clinical instructor and you're not tech-savvy, that's another issue. You really need training. You need to know how to record videos and use the LMS." Marissa also shared how the transition required significant adjustments: "I had difficulty because we had to shift from face-to-face to learning management teaching. We had to adjust a lot." While, Martina highlighted the technical issues affecting content delivery, saying: "Another issue is the technical aspect, like the sound and quality of the video." Jamie echoed these concerns, pointing out limited training opportunities: "We lacked training and technical skills due to the short time for preparation. We were subjected to training, but there was little time." Altogether, these statements illustrate how CIs were expected to facilitate online RLE without adequate digital training, leading to stress, anxiety, and inconsistent teaching delivery.

Lack or non-availability of resources - Beyond technical expertise, CIs struggled with the lack of resources needed to conduct effective demonstrations and simulations in an online setting. Unlike in face-to-face instruction, where clinical skills are demonstrated using actual medical equipment, the online setup required instructors to find creative ways to simulate procedures. Boyet emphasized the difficulty of demonstrating perioperative procedures without proper equipment: "As much as I would like to explain certain topics, especially in the operating room, I don't have all the instruments and equipment. I can't demonstrate them properly." Macy noted that students also faced difficulties in performing procedures due to a lack of materials at home: "Sometimes, students cannot perform procedures because they don't have the available resources in their homes." While, Mariel shared how CIs had to borrow materials from their school laboratories just to conduct demonstrations: "We had to borrow materials from the school laboratory, bring them home, and use them for demonstration purposes." Similarly, Laurence described the limitations of home-based learning, saying: "At home, students don't have the proper resources. Some use a teddy bear, while others have nothing at all." Angela further stressed the scarcity of instructional materials, stating: "It's hard because one of the issues is that there aren't enough materials available." In addition, Jamie emphasized that students relied on makeshift setups, stating: "During the first semester, due to the sudden shift to online teaching, some students had to use their cellphones for everything." These findings highlight the unequal access to resources, affecting both educators and students, which ultimately hindered the effectiveness of online RLE that echoes previous findings [27].

Subtheme 2: Encountering Actual Limitations

Lack or poor internet connection - A major challenge encountered by CIs was poor internet connectivity, which frequently disrupted live lectures, simulations, and student participation. Due to unstable connections and limited data plans, many students struggled to attend classes, while instructors faced difficulties in delivering content smoothly. Boyet highlighted how connectivity issues led to class suspensions: "One of the main issues is connectivity. If your internet is weak, everyone gets affected. Then I just send a message: 'Guys, we will resume our class.'" Martina echoed this, stating: "I think one of the biggest issues during online RLE was connectivity, especially for students using mobile data only." Furthermore, Macy emphasized how students with limited data were disadvantaged: "Internet connections are sometimes unstable. I can't hold make-up classes because some students only have limited data. Sometimes, they also struggle to access learning websites." Mariel noted that both teachers and students struggled with internet issues,

stating: "We encountered a lot of obstacles regarding internet connectivity—both students and teachers had problems." Cecilia expressed frustration over students potentially using internet issues as an excuse: "During online teaching, the main issue was connectivity. I don't even know if students are telling the truth when they say they have connection problems. It's difficult when you can't see their faces." Lastly, Laurence highlighted how connectivity issues directly impacted student participation: "A huge percentage of students don't have a signal or internet connection, so they can't participate." Altogether, these statements demonstrate how unreliable internet access negatively affected student engagement, class continuity, and overall learning outcomes.

Experiencing power interruptions - Power outages further exacerbated the difficulties of online learning. With electricity disruptions, classes were suspended or dismissed, leaving less time for skill-based learning and assessments. Boyet described the challenges of conducting classes during blackouts (a term commonly used to describe power disruption in the Philippines): "Another issue is brownouts. You can use mobile data, but it's not enough. And if it's a total blackout, there's nothing you can do but reschedule." While, Martina confirmed that power interruptions shortened RLE sessions: "Occasionally, power interruptions cut short our duty hours." Mariel also linked blackouts to attendance issues, stating: "Since we encountered brownout issues, I had problems in getting 100% attendance." Furthermore, Laurence emphasized that power interruptions, combined with internet problems, made learning even more difficult: "One of the biggest challenges for students is the lack of signal, internet connection, or power interruptions." Angela suggested that instructors needed to be more flexible in scheduling make-up classes: "You need to give extra time for students, especially those dealing with internet and power issues." These findings highlight how external limitations, such as power outages and poor connectivity, directly impacted the effectiveness of online RLE, requiring instructors to constantly adjust their schedules and expectations [67].

The challenges faced by CIs align with Roy's Adaptation Model, which emphasizes how individuals respond to environmental changes. The lack of technical expertise, resource limitations, and poor connectivity required instructors to develop coping mechanisms to adapt to the online learning environment. This adaptation was not immediate or seamless, but rather an ongoing process of trial and error, resilience, and continuous learning. Furthermore, Kolb's Experiential Learning Theory suggests that learning occurs through active engagement with experiences. In this study, CIs experienced firsthand the challenges of online RLE, allowing them to reflect on their struggles, adjust their teaching methods, and improve their technical skills. The study's objectives—to examine the lived experiences of CIs, identify barriers to effective online RLE, and explore opportunities for professional growth—are clearly reflected in this theme. While the lack of training, resources, and stable connectivity posed significant obstacles, CIs developed workarounds and adapted to new teaching methodologies. Moving forward, institutions must invest in training, technological infrastructure, and resource accessibility to mitigate these challenges and enhance the quality of online nursing education.

4.3. Growth and Professional Development

The COVID-19 pandemic not only challenged CIs in facilitating online RLE, but also served as a catalyst for growth and professional development. This theme explores how CIs transformed challenges into opportunities, leading to technological adaptability and increased resilience. The two subthemes that emerged from this theme are: *Using technology as a learning tool* and *becoming more resilient*. Subtheme 1: Using Technology as a Learning Tool

To effectively transition to online teaching, CIs actively engaged in training programs, explored various LMS, and adapted to new teaching strategies. While initially intimidated by technology, they developed confidence in navigating digital platforms, integrating online resources, and creating engaging lessons. Boyet highlighted how online learning pushed him to become more tech-savvy: "One of the milestones was that I learned so many things. One is how to do research. That's already an advantage that I have because of online learning. I learned to be techier—to know where I could get the materials for my topic." He further emphasized the convenience and efficiency of online teaching: "Another milestone is that I was able

to multitask. I could reach students even though we were online. Another advantage is that I was also safer." Similarly, Martina noted how learning new applications and exploring the internet enhanced the quality of teaching: "When it comes to milestones, I think being able to explore the internet more and use more applications helped a lot. The students' learning was not shortchanged because all concepts were discussed, and experiences were shared through various methods and strategies." Macy echoed this sentiment, stating: "I learned to embrace technology by utilizing different apps and multimedia—not just pure lecture." While, Mariel recognized the importance of improving digital literacy to make lessons more engaging: "I hope to improve my computer skills to make my presentations more appealing to students, especially using computer graphics." Jamie also observed how both instructors and students adapted to the digital setup over time: 'After a semester of adapting, I saw that students were able to upgrade their workspace. They created a little corner for themselves. And as for me, as a clinical instructor, I also improved my workspace." She also implemented innovative engagement strategies to encourage student participation: "For attendance and participation, I was able to improve myself and how I could encourage active participation and recitation from students. I would give incentives like additional points to motivate them to attend classes regularly. We had online quiz bees in Kahoot! Zoom surveys, chat box discussions, and reaction buttons. We all really had fun. They became more excited to attend my classes." Angela reflected on the collaborative learning process, stating: "Before the end of every semester, I could see progress. The students learned to use the resources they had, and you could see that they were very skillful. They really wanted to learn, and they read a lot. They did research. They learned from me, and I learned from them. It was truly a collaborative effort to survive this situation." These findings affirm Roy's Adaptation Model, which emphasizes that individuals must continuously adjust to environmental changes. The CIs embraced technology, developed digital skills, and refined their teaching methods, ultimately leading to a positive adaptation response [68].

Beyond technological adaptation, CIs developed emotional resilience in the face of challenges brought by the pandemic. They learned to navigate uncertainties, overcome self-doubt, and maintain a positive outlook despite increased workload and teaching limitations. Jamie highlighted resilience as the key milestone of the experience: "I could really say that our biggest milestone is resiliency. Despite everything the challenges brought by the pandemic—we were able to rise, surpass, and overcome. By 2030, there will be a shortage of 20 million nurses worldwide. It is satisfying to know that we were still able to train globally competitive young nurses who will soon be our future frontliners. I believe this is my way of contributing to healing the world." Similarly, Macy reflected on how the experience helped her grow as an educator: "Despite the challenges brought by the pandemic, I learned a lot as an educator from my students. I became more sensitive to their mental health. If students' anxiety is reduced, they become more effective in performing their procedures." She further shared how experience played a crucial role in her adaptation: "As time went by, I learned how to handle my own fears and adapt to the different changes in the educational system. At the end of the day, experience is the best teacher." Furthermore, Laurence emphasized how resourcefulness and initiative became vital in overcoming challenges: "The milestone is that they were able to adapt to this new normal setup. They were able to learn, maybe not 100%, but they are still learning. Another milestone is that we had to learn to be resourceful and take the initiative in finding equipment that they could use at home for their nursing procedures." Angela highlighted how students' determination and eagerness to learn inspired her: "By the end of the semester, I could see their progress. They were resourceful, eager, and determined to learn. That made me realize that we were in this together. We both had to learn how to adjust." These reflections align with Kolb's Experiential Learning Theory, which posits that learning occurs through direct experience, reflection, conceptualization, and experimentation. CIs faced challenges head-on, learned from experience, and adapted their teaching strategies, reinforcing the holistic learning process described in Kolb's model.

Altogether, these findings support Roy's Adaptation Model, as CIs demonstrated adaptability in the face of change, particularly in their use of technology and their ability to maintain resilience despite the challenges of online RLE. The study also validates Kolb's Experiential Learning Theory, as CIs engaged in active learning through real-life experiences, allowing them to develop new skills and

Subtheme 2: Becoming More Resilient

improve their teaching methodologies. The study's objectives—to explore the lived experiences of CIs, identify challenges in online RLE, and uncover opportunities for professional growth—are clearly reflected in this theme. While the transition to online teaching was initially met with difficulties, CIs embraced technology, learned new skills, and cultivated resilience, ensuring the continuation of quality nursing education despite adverse conditions. Moving forward, institutions must support faculty development through continuous training, mentorship programs, and resource allocation. By fostering an adaptive and resilient teaching workforce, nursing education can continue evolving to meet future challenges while maintaining its commitment to excellence in clinical instruction.

5. Conclusion and Recommendations

This study explored the lived experiences of nine CIs in facilitating online RLE for nursing students during the 2020-2021 academic year in three HEIs in Bacolod City, Philippines. Using a qualitative phenomenological approach, in-depth semi-structured interviews provided insights into the motivations, challenges, and adjustments faced by CIs as they transitioned from traditional face-to-face clinical instruction to online RLE delivery. Three major themes emerged from the study. The first theme, Adapting to Changes in Teaching and Learning, highlighted how CIs developed new skills, updated their knowledge, and experienced both positive and negative emotional responses as they navigated the transition to online RLE. The second theme, Challenges in Online Related Learning, revealed technical inadequacies, including a lack of expertise and resources, as well as external constraints such as poor internet connectivity and power interruptions. The third theme, Growth and Professional Development, emphasized that despite these difficulties, CIs demonstrated resilience, adaptability, and a commitment to professional growth in the face of an evolving educational landscape. Finally, the study affirms Roy's Adaptation Model by demonstrating that CIs were able to adapt to changes in nursing education, using both innate and learned coping mechanisms to respond effectively to challenges. Likewise, Kolb's Experiential Learning Theory is supported, as instructors gained knowledge and skills through direct experiences, adjusting their teaching approaches to meet the demands of online RLE. Based on the study's findings, the following recommendations are proposed.

For the CHED: Utilize the study's findings to inform the development of policies, plans, and strategies that enhance nursing education through technology-driven pedagogies and more robust

digital learning infrastructures.

For HEIs: Ensure stable internet connectivity in nursing schools, particularly in remote and underserved areas, to facilitate seamless online learning. Invest in faculty training programs to strengthen CIs' technical skills in managing online RLE effectively. Improve LMS by integrating user-friendly platforms that allow for efficient delivery of online clinical instruction.

For Nursing Administrators: Enhance the nursing curriculum by integrating simulation-based learning tools, digital case studies, and other interactive resources to compensate for the lack of hands-on clinical exposure. Implement mentorship programs where experienced CIs can guide new faculty members in adapting to online teaching methodologies. Provide continuous professional development opportunities, including webinars, workshops, and technical training, to support faculty adaptation to online RLE.

For CIs: Actively participate in training sessions and capacity-building programs to enhance their digital literacy and online teaching competencies. Utilize available open educational resources (OER), ebooks, and virtual laboratory simulations to create engaging and interactive online clinical instruction. Develop strategies for overcoming technological limitations, such as pre-recording lessons in anticipation of internet or power disruptions.

For Nursing Students and Parents: Nursing students should be encouraged to develop self-directed learning habits, maximizing available resources despite online learning limitations. Parents should be made aware of the challenges associated with online RLE and encouraged to support their children's learning by ensuring access to necessary technological tools and a conducive study environment.

For Future Researchers: Future studies can further explore the long-term impact of online RLE on students' clinical competencies and professional readiness. Comparative research between online, blended, and face-to-face RLE models may provide deeper insights into the most effective pedagogical approaches for nursing education in a post-pandemic setting.

Limitations of the study: This current study also has several limitations. The small sample size of nine participants from three HEIs in Bacolod City limits the generalizability of findings to broader nursing education contexts. Additionally, the study relied on self-reported data through semi-structured interviews, which may have been influenced by recall bias or personal interpretation. The limited time frame, focusing solely on the 2020-2021 academic year, captures only the initial stages of adaptation, leaving questions about long-term impacts and sustainability of online RLE. Variability in technological resources, such as internet connectivity, device accessibility, and digital literacy, may have also influenced participant experiences, making it difficult to fully account for disparities across institutions. Furthermore, the study did not include student perspectives, which could provide a more holistic understanding of the effectiveness of online clinical instruction. Changing educational policies and institutional responses to flexible learning further impact the relevance of findings over time, necessitating continuous evaluation and adaptation. Future research could address these limitations by expanding the sample size to include diverse nursing institutions, conducting longitudinal studies on faculty adaptation, integrating student perspectives, and exploring the efficacy of hybrid or blended learning approaches post-pandemic. Despite these limitations, the study underscores the resilience, adaptability, and professional growth of CIs, offering valuable insights for improving flexible learning strategies and digital infrastructure in nursing education.

In sum, the sudden shift to online learning due to the COVID-19 pandemic has emphasized the challenges and opportunities in nursing education. While technological barriers, resource limitations, and instructional difficulties initially posed setbacks, CIs in the Philippines have demonstrated resilience, adaptability, and professional growth. Moving forward, nursing education should continue to evolve, integrating innovative digital teaching strategies while preserving the hands-on experiential learning that is fundamental to the nursing profession. Through collaborative efforts among educators, institutions, and policymakers, online RLE can be further refined and improved, ensuring that nursing students receive quality education and training—regardless of the learning modality.

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Transparency:

The authors confirm that the manuscript is an honest, accurate and transparent account of the study that no vital features of the study have been omitted and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Competing Interests:

The authors declare that they have no competing interests.

Authors' Contributions:

Y.M.R., L.A.A.C., and S.M.T.; methodology, Y.M.R., L.A.A.C., and S.M.T.; software, G.S.C.; validation, Y.M.R., L.A.A.C., S.M.T., and G.S.C.; formal analysis, Y.M.R.; investigation, Y.M.R., L.A.A.C., S.M.T., and G.S.C.; resources, Y.M.R., L.A.A.C., S.M.T., and G.S.C.; data curation, Y.M.R.; writing—original draft preparation, Y.M.R.; writing—review and editing, Y.M.R., L.A.A.C., S.M.T., and G.S.C.; visualization, G.S.C.; supervision, L.A.A.C. and S.M.T.; project administration, Y.M.R., L.A.A.C., and S.M.T.; funding acquisition, Y.M.R., L.A.A.C., S.M.T., and G.S.C. All authors have read and agreed to the published version of the manuscript.

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