Entrepreneurial Competencies of Professionally Practicing Nurses: Basis for A Framework

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Abstract:
Nurse entrepreneurship includes starting and running a business with the abilities needed to make a profit, and it provides a realistic and innovative method for professional nursing practice. However, because nurse entrepreneurs lack experience, business knowledge, and competencies, they require entrepreneurial education in the relevant field to develop the necessary capabilities. There is a need to develop a framework for nurses' entrepreneurial abilities to decide which of these qualities will motivate nurses. The goal of this research was to identify the various competencies required as a nurse entrepreneur, identify methods to develop these nursing entrepreneurial competencies, determine how to incorporate these competencies in the curriculum, identify other preparations needed to venture in entrepreneurship while working as a nurse, and a framework that will be used to address these skills in professional practice. This embedded mixed method study acquired the perspective of twenty-five active nurse entrepreneurs to determine their skills and business methods while maintaining their professional nursing practice. The interview guide questions were answered by a total of nine people. A qualitative analysis provided a better explanation of nurses’ entrepreneurial competencies The researchers used snowball sampling in this study due to the small number of individuals who were both professionally practicing nurses and operating their own businesses. Motivation and perseverance, goal oriented, visionary, ability to learn, and need for entrepreneurship knowledge are the most vital competencies to enhance the entrepreneurial qualities of nurses. The findings of this study can serve as the foundation of a framework to delineate the entrepreneurial competencies of nurses. These findings are also useful in establishing a start-up curriculum in nursing schools to help aspiring nurse entrepreneurs. Lastly, a Professionally Practicing Nurse Entrepreneurial Competencies Framework was developed.

Keywords: entrepreneurship competencies framework, nurse entrepreneurs, professionally practicing nurse entrepreneurs

I. INTRODUCTION
Nursing entrepreneurship nowadays is becoming more popular than in the last fifty years. Before, nurses would only attend bedside care but in the past few years, the situation is becoming more different due to innovation in nursing and emerging needs of patients. Nurse entrepreneurs are in the best position...
to offer healthcare services and products as they are the ones knowledgeable with what clients need and
and the arts and science on how to deliver it.

Nursing entrepreneurship is crucial for elevating the profession's profile as a science, technology,
to the arts and science on how to deliver it. innovation-driven field [1]. By showcasing its social goals and health benefits, society can appreciate
nursing’s achievements [2]. This approach promotes nursing’s visibility and fosters professional growth
for nurses.

Moreover, nursing entrepreneurship fills gaps in the healthcare system through specialized goods,
that they are the ones knowledgeable with what clients need and enhanced technology, and safety procedures [3]. Nurse entrepreneurs play a vital role not only in healthcare but also in the global economy, contributing to various health-related businesses and services.

During the fourteenth century, the term "entrepreneurship" originated from the French word entrepreneur, signifying organizing, supervising, and risk-taking in a business or industry [4]. Entrepreneurship has been present in nursing since Florence Nightingale's revolutionary work in providing care for troops during the Crimean War and the foundation of the School of Nursing at Saint Thomas Hospital, which established the scientific underpinnings of the profession. Clara Barton is considered the first nurse entrepreneur for founding the American Red Cross in 1881, leaving a lasting impact on the world. Other nurses have followed in her entrepreneurial footsteps, making their own distinctive contributions.

In the Philippines, Dr. Carl E. Balita, a registered nurse who is also the president and owner of the Carl Balita Review Center (CBRC) helped a lot of Filipinos not only to become registered nurses but as well as help the Philippine economy to further improve by creating jobs and opportunities for Filipinos. Economics benefits greatly from entrepreneurship in terms of development and income [5]. However, according to Jakobsen et.al [6], it has been found that approximately 0.5–1% of all currently employed nurses worldwide are regarded as entrepreneurial nurses.

Despite the above premises, nurses are only developed to be nurses. They lack proper training and education when it comes to entrepreneurship. In the Philippines, most nurse entrepreneurs become successful after learning from a painful experience in the field of entrepreneurship. Insufficient business knowledge and skills, concerns about legal issues, a lack of the mindset required to launch a business, and the misconception that "nursing is about care, whereas business is about making money" are just a few of the obstacles mentioned in previous reports on the difficulties faced by nurses starting healthcare-related ventures [7].

Given the above premise, this research aimed to determine the Competencies for Nurse Entrepreneurial from those experts who themselves are nurses working at the hospitals and at the same time, entrepreneurs.

This study is deemed beneficial so that the unique competencies needed for nurse entrepreneurs will be identified. With the identified competencies, a framework can be proposed. Lastly, this study can also serve as a basis for curriculum review.

**Objectives of the Study**

The purpose of this research was to discover the Entrepreneurial Competencies of Professionally Practicing Nurses as a Basis for a Framework. Specifically, this aimed to identify the different competencies needed as a nurse entrepreneur; determine ways to acquire and cultivate these nursing entrepreneurial competencies, determine how to incorporate these competencies in the curriculum, and
identify other preparations needed to venture into entrepreneurship at the same time as a nurse and develop a framework.

**Literature Review**

**Entrepreneurship**

Neegard's research [8] emphasizes entrepreneurship as the process of recognizing opportunities and taking action to provide value, whether monetary, social, or cultural. It is defined as the organized acceptance of risk to attain profit [9]. This critical economic feature contributes to global growth in both developed and developing nations [10]. An entrepreneur is inspired to establish a business through entrepreneurship training and its components, including role models, feedback, business planning, and entrepreneurial networks [11].

Sharp and Monsivais [12] highlight the necessity for financial support and education in various aspects such as law, regulations, strategic planning, leadership, and nursing center management based on a study involving 24 nurse practitioners in the United States. The importance of entrepreneurship education is widely recognized, as relying solely on willpower to start a firm is risky.

Extensive research supports that entrepreneurial education positively impacts entrepreneurial intentions and actions. Identifying essential information, skills, and abilities for undergraduate entrepreneurship students is crucial for studying entrepreneurial competences and guiding future educational efforts.

The significance of entrepreneurship in socioeconomic development, especially under neoliberal monetarist policies, has made it a relevant topic of academic study since the 1980s. Entrepreneurs’ capacity to create jobs, stimulate local and national economies, and contribute to global economic development is a critical component of the modern economy. Additionally, entrepreneurship not only promotes social and economic progress but also fosters personal fulfillment, as individuals identify market gaps and transform ideas into products that address those needs [13].

**Nursing entrepreneurship**

Nursing entrepreneurship is the process of developing new ideas in nursing driven by professionalism, altruism, social satisfaction, business savvy, and economic transformation to maximize beneficial influence and enhance client outcomes [14].

A person who "creates new riches and new opportunities via the acquisition and innovative use of existing resources" is referred to be an entrepreneur as a result of this process. As a result, it can be concluded that a nurse entrepreneur is a licensed nurse who pursues an entrepreneurial opportunity with the goal of creating new value and money. Nonetheless, the phrase "nurse entrepreneur" has long been associated with a negative connotation, and nurse entrepreneurs have challenges in gaining acknowledgment for their work. This pertains to the general public's and nurses' perceptions of nursing and entrepreneurship [8].

Nurse entrepreneurs encounter a tension between professional principles and a conventional view of "genuine" nursing because they are trapped between traditional and modern interpretations of nursing identity, norms, values, and duties. Entrepreneurship empowers nurses to expand their view on health and question nursing's culture and role. Despite constraints like professional standards and biases, nurse entrepreneurs hold enormous potential for nursing function and identity growth, benefiting both patients and medical personnel [6].
Nurse entrepreneurs are company owners offering direct care, education, research, administration, or advisory nursing services. Beyond patient care, they teach, upskill the community, and provide healthcare advisory services. As nurses explore careers beyond bedside care, understanding best practices, transferable skills, and the importance of self-care is vital. Despite challenges, nurse entrepreneurs find promising business opportunities [15].

As a result, promoting nursing's societal visibility and helping nurses attain new levels of professional growth and development are guided by the concept of entrepreneurship [16].

Investing in entrepreneurship capitalizes on current trends and creates opportunities for social, political, and economic change. It also supports skills enhancement for young people transitioning from school to the workforce. In Brazil, ongoing developments like the intense commercialization of the health system and the shift of public funding to the private sector require consideration by future professionals [17]. Despite its global significance, there is relatively limited literature on nursing entrepreneurship [18], indicating a need for improved discussions and exploration of the diverse specialized areas nurses can be involved in.

Nursing's growing role in entrepreneurship fosters innovation and scientific advancements while empowering nurses to take charge of population health management. Their unique position allows them to create new companies, adopt technological initiatives, and improve the healthcare system, ensuring equitable access to services. Nurse entrepreneurs can leverage their skills and expertise to launch healthcare-related enterprises, but further research and nursing curricular content are needed to enhance this important area of nursing practice and science [19].

Nursing competencies

The category of nursing competency includes the core competencies required to fulfill one's obligations as a nurse. As a result, to offer the framework for nursing education courses, it is essential to clearly define nursing competency. Although nurse competency theories are crucial for raising the standard of nursing care, they have not yet realized their full potential. As a result, there are still challenges in defining nursing competency definitions and frameworks, competency standards for nursing practitioners, training methodologies, and other concerns [3].

Entrepreneurship involves seizing opportunities and creating innovative solutions that positively impact the community, whether through a business, project, or movement. It is characterized by actions and attitudes, not inherent traits, making it challenging to predict who may have an entrepreneurial profile. Education and real-world experience can help individuals develop entrepreneurial skills. Higher education institutions are increasingly interested in teaching entrepreneurship [20].

Nursing competency, according to Nakayama [21], can be thought of as a consolidated performance that reflects the professional nurse's feelings and judgment. They also interpret nursing competency as "the ability to take action by combining knowledge, skills, values, beliefs, and experience acquired as a nurse". Nursing competency was interpreted by Takase and Teraoka [22] as the ability of a nurse to successfully demonstrate a variety of traits, including personal qualities, a professional attitude, values, knowledge, and skills, as well as the capacity to carry out his or her professional responsibilities through practice. These qualities must be possessed, utilized with effectiveness, and motivated by a competent person to ensure that the patient receives safe, competent, and professional nursing care.
Strong self-esteem, inventiveness, the desire to take risks and be independent, marketing expertise, and the capacity for wise decision-making, priorities planning, and budgeting are listed by Herron [23] as essential qualities for nurse entrepreneurs.

In a study conducted by Nurluöz and Esmaeilzadeh [24], self-confidence, change, need to accomplish, locus of control, risk-taking, and tolerance toward uncertainty were selected as the entrepreneurial characteristics.

According to Jahani [25], nurses who are entrepreneurs should be creative thinkers who are driven to modernize health systems and demonstrate leadership. They are innovative in coming up with fresh ideas, as well as in enhancing current products and service delivery systems. These concepts, techniques, or goods might be exported to other countries. Three themes emerged as ideas, as well as in enhancing current products and service delivery systems. These concepts, techniques, and the capacity for wise decision making, locus of control, risk-taking, and tolerance toward uncertainty were selected as the entrepreneurial characteristics.

Three steps are opportunity identification, opportunity appraisal, and opportunity selection. This leads to noticeable outcomes including competitive advantage, increased earnings, future-focused opportunity analysis, and reflection on how appealing the company is to entrepreneurs.

Ubochi et.al [14] figured out that the drive process model of entrepreneurship with 20 purposively selected participants have shown how personal attributes motivate nurses for entrepreneurship. This process improved the social, professional, and economic status of these nurse entrepreneurs.

Social entrepreneurs require resources to increase their social effect, according to Drencheva et.al [26]. These entrepreneurs indeed use a great resource when deciding who to approach and why getting feedback is difficult. Thirty-six (36) social entrepreneurs shared their perspectives on this subject. As stated by Vijeta et.al [27], the importance of social entrepreneurs brings positive social change by giving solutions to identified social problems, in this case, the social dilemma of nurses between being a medical professional and as an entrepreneur.

According to a study by Dion et.al. [28], nurses must be prepared in terms of their knowledge and abilities of debt, investments, and budgeting as nursing employment expands. It was discovered that nurses try to further their education, get employment, and eliminate inequity while simultaneously promoting health care.

Vannucci and Weinstein’s [15] research describes the “critical motivators” of participants in pursuing entrepreneurship. These include personal meaning, ability to make own decisions, need for growth, having an impact, great idea for a product or service, flexibility, control over time, better work/life balance, lack of advancement, being the boss, choice of coworkers, and financial gain. These motivators are referred to as “push” or “necessity” motivators and “pull” or “opportunity” motivators. This is evident in achieving one’s work and life in a balanced lifestyle.

Qualter [29] found that three factors support the importance of helping students to work effectively. First is that research on millennial students has been clearly documented in terms of working valuably and is increasingly used in collaboration and learning. The second is on having a more global environment that is based on settings. Third is interdisciplinary knowledge which became more prevalent in learning skills to work and communicate with partners who are in the workplace.

Neergard [8] analyzed empirical descriptions of entrepreneurial employment status, contexts, knowledge, activities, barriers, and motivations. Thirty-seven [37] experienced nurses have relevant education and experience in both business and nursing before starting their own companies. This agrees with having self-confident and managerial skills with risk-taking motivation even without ambition.
According to Middleton [30], while knowledge may be acquired through reading and hearing, experience can only be acquired through doing, conversing, and making sense of things, in other words, actions. According to researchers, learning entrepreneurial competences requires students to participate in entrepreneurial activities. It is significant to note that learning from experience requires "learning from doing" rather than just "learning by doing".

Vision is described by Catana [31] as a clear, cogent assertion of what the company should aim to become that directs an organization by tying it to a sense of meaning and purpose. Vision also serves as motivation during times of upheaval and transition. According to the definition of entrepreneurial vision, entrepreneurs "visualize their venture strategically as an extension of themselves and their needs."

In 2020, Hagg-Martinell [32] examined research on nursing students' perceptions of a sustainable career as nurses. The findings highlight three themes: possessing a moral foundation that guides each nurse in safeguarding and advancing patient care; working in a setting that encourages professional development and learning while listening, reflecting, and supporting; and being a proud professional nurse with integrity who does not jeopardize their own health or professional development.

Self-efficacy is also an important nursing competency for entrepreneurs since it relates to one's confidence in one's capacity to engage in the behaviors necessary to launch and manage a successful business. Nurse entrepreneurs are expanding their influence in healthcare systems around the world by addressing people's healthcare needs through nursing-related healthcare firms [19].

The entrepreneurial experts

Based on Martinez [33], experts are "those with broad knowledge and expertise in the field, whose predictions may be generally true." They must be picked based on their relationship to the issue, professional experience, research involvement capacity, and subject-matter expertise [34]. Regarding the appropriate number of experts, different proposals can be found. Landeta [35] emphasizes that there should be between seven and thirty. On the other hand, García and Fernández [34] firmly supports the idea that the number should be in the fifteen to twenty-five range. Now, the various arguments prompted us to create a team of twenty-three experts, fifteen men and eight women. All of these professionals had substantial responsibilities for encouraging nursing entrepreneurs in both public and private organizations. They were also researchers and consultants with high social status who founded and served as directors of for-profit businesses.

According to Mitchell et al. [36], experts are defined as individuals who possess knowledge structures about a particular domain that allow them to significantly outperform and process information more accurately. Entrepreneurial experts are individuals who have started at least one business and have succeeded in doing so and have experience and education/training [37].

Expert entrepreneurs as stated by Sarasvathy [38] are those with sustained performance over long periods of time. They start by introducing themselves, what they know, and who they know before taking action and interacting with others. Instead of worrying much about what they should do, they concentrate on what they can do and do it.

There is a bright potential for entrepreneurship in the profession of nursing because of the public's need for healthcare services and nurses' ability to meet this need, even if the percentage of entrepreneurial specialists among all working nurses worldwide is barely 0.5% to 1%. Additionally, nurses are dealing with national and international changes in the healthcare sector, the nursing profession, and new chances
for innovation. These options help nurses advance personally and professionally and may include starting their own businesses or creating new patient-care technology [19].

**Theoretical framework**

This research utilized the EntreComp framework of entrepreneurial competencies to determine the aspects that affect an entrepreneur's performance and to evaluate the development of their entrepreneurial abilities.

After analyzing the entrepreneurial competencies frameworks that have been developed and described in the scientific literature Educating the next Wave of Entrepreneurs, (2009), and taking into account the objective circumstances of modern education requirements, the authors have developed an entrepreneurial competences framework in which are included all the elements of entrepreneurial competence and their interactions (Figure 1). Thus, the conclusion can be made that nowadays all entrepreneurs must have well-developed entrepreneurial competence. This framework is the closest to the framework of entrepreneurial competences suggested by the authors.

The EntreComp framework is divided into three competency areas: "Ideas and Opportunities," "Resources," and "Into Action." Each domain has five skills that, when combined, form the foundation of entrepreneurship as a skill. The framework builds the 15 competences in an 8-level progression paradigm.

![EntreComp framework of entrepreneurial competences](image)

**Figure 1** – EntreComp framework of entrepreneurial competences

**II. METHODS**

**Research Design**

A mixed technique was employed to study the deciding elements in measuring the core competences of chosen nurse entrepreneurs in CALABARZON. The definition of embedded mixed method designs according to Creswell and Clark [39] as follows: "... the researchers combined the collection and analysis of a standard quantitative research approach or qualitative study that includes both quantitative and qualitative data design. The gathering and evaluation of the secondary data set could take
place before, during, or after implementing the data collection and analysis methods often connected with a larger design.

The researchers acquired and analyzed both quantitative and qualitative information to assess a scenario in a case study using embedded mixed techniques [40].

Furthermore, mixed method research allows for generalizable observations, which are typically obtained through quantitative approaches, to be combined with rich and "thick" descriptions, which are typically obtained through qualitative techniques. This combination can aid in the discovery of previously unknown links and the generation of intriguing new ideas to promote theory development [41].

A quantitative research design used a survey questionnaire to identify practices of nurse entrepreneurs in their line of business while working professionally as nurses. The survey reflected changes experienced by nurse entrepreneurs, how they coped with the changes, encountered challenges, and their recommendations for improvement.

To capture in-depth experiences and perspectives of nurse entrepreneurs, a qualitative approach was also chosen. In-depth interviews provided ample data, offering new insights for nurse entrepreneurs to enhance their services. The face-to-face interaction facilitated a better understanding of the issues and experiences of the nurse entrepreneurs [42].

Participants

Quantitative Respondents

Twenty-five (25) professionally practicing nurse entrepreneurs participated in the study in selected places in Calabarzon. In terms of age, most of the participants are between 31-40 years old. In terms of educational attainment, most of them only graduated with a Bachelor of Science in Nursing without a Master or Doctorate Degree. In addition, most of the respondents' businesses are health or medical-related.

In terms of business ownership, the majority of the respondents are in the form of a corporation. Lastly, most of the respondents' length of business is ten years and above, and most are situated in urban places.

The study was conducted in different places in CALABARZON where businesses of professionally practicing nurses are located. Snowball sampling was utilized by the researchers in this study due to a low number of participants that were professionally practicing nurses and at the same time running their own businesses.

Qualitative Participants

Nine (9) nurse entrepreneurs were chosen from the initial respondents. In qualitative analysis, the researchers randomly picked 25 respondents from selected areas of Region IV-A CALABARZON.

Instruments

The researchers used a self-made questionnaire comprised of 43 questions that determine the core competencies of professionally practicing nurse entrepreneurs in different areas of CALABARZON. These questionnaires have undergone validation and reliability testing by professionals. Reliability results showed that the Cronbach’s alpha for idea and opportunities is 0.907, resource is 0.918, and into action is 0.951 suggesting that the items have an excellent internal consistency. Five-word scales were used which are extremely important, very important, moderately important, slightly important, and not at all important.
Interview-guide was used in the qualitative analysis which comprises of six questions. An interview guide question is a type of question that is carefully designed to gather specific information from a participant during an interview. These questions are commonly used to guide the conversation and ensure that all important topics are covered. It is crafted to explore a variety of different topics, such as personal experiences, opinions, attitudes, knowledge, behavior, or perceptions. The questions are based on the researchers' objectives, which explore the relevant experiences of nurse entrepreneurs who are professionally working nurse at the same time as entrepreneur.

Data Gathering Procedure

Due to the varied and complex work schedules of respondents, the researchers utilized an online-based survey, Google Forms, to collect necessary data. The survey link was distributed via email and social media, allowing participants two weeks to respond. The researchers addressed respondents' concerns using the same platform. Following the survey period, online and in-person interviews were conducted using Zoom, focusing on exploring participants' experiences and perspectives. With participants' consent, the interviews were recorded and transcribed for analysis.

A letter of approval was presented to the respondents, providing information on the research title, objectives, sample questionnaire, and interview questions. Participants were informed of the study's purpose and their data privacy, and they signed the consent before taking the survey.

The survey link was distributed in February 2023, with responses collected until the second week of the same month. Data collection was influenced by various factors, including shifting duties, workforce implementation, leaves, and unexpected circumstances. Twenty-five respondents participated in the survey, yielding a retrieval rate of 96%.

To strengthen the quantitative data, the researchers conducted one-on-one interviews with participants based on their availability, utilizing six interview guide questions.

Validation of Research Instrument

The researchers developed a self-made questionnaire to gather data from participants in the study. They consulted subject experts and other professionals to ensure its validity, incorporating comments and suggestions. The reliability of the paper was also determined after revision. Additionally, proposed interview-guide questions were used to further strengthen the data collected from participants, following the same process of consultation and revision. The target participants were then interviewed in person and virtually to complete the data collection process.

Data Analysis

Quantitative Data Analysis

Statistical tools used in the analysis of gathered data included Frequency Distribution, which tallied participants' responses to specific questionnaire items, aiding in determining the mean of each item. Weighted Mean calculated the average value of respondents' answers, considering the weight of each response, providing numerical significance to each item. Ranking helped identify the lowest, highest, and middle items on the table, facilitating researchers and readers in determining the most important aspects. Mean was utilized to determine the value of questions based on the number of respondents within the presented parameters.
Qualitative Data Analysis

The researchers used narrative analysis to interpret the respondents' answer to each interview question. The narrative analysis provided the researchers valuable insights of the complexity of each respondent life, feelings, and behaviours that affect their competencies as nurse entrepreneur. This is where the reviews and explorations of the nine (9) randomly selected respondents’ interviews took place to develop a picture of the participants’ opinions, views, feelings and comments about nurse entrepreneurial competencies. Additionally, transcripts of recorded interviews were created to completely arrange the information from each conversation. To correlate the data gathered from nurse entrepreneurs, categories were constructed based on frequently occurring statements.

Finally, themes were purposefully generated using narrative analysis to corroborate the quantitative data gathered and convey a deeper understanding of the entrepreneurial competencies of professionally practicing nurses.

Ethical Consideration

Nurses in the study were given a clear explanation of the research purpose and the option to withdraw at any time. Confidentiality was upheld, and no identifying information was collected to ensure privacy. Data integrity and accuracy were maintained throughout the process, and the results were reported without manipulation or alteration.

IV. RESULTS AND DISCUSSION

<table>
<thead>
<tr>
<th>Nurse Entrepreneurial Competencies in terms of Spotting Opportunities</th>
<th>WM</th>
<th>VI</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Seizing opportunities to create value by exploring the social, cultural and economic landscape</td>
<td>4.64</td>
<td>Extremely Important</td>
<td>2.5</td>
</tr>
<tr>
<td>2. Identify needs that need to be met</td>
<td>4.84</td>
<td>Extremely Important</td>
<td>1</td>
</tr>
<tr>
<td>3. Re-establish relationships to generate opportunity to add value</td>
<td>4.64</td>
<td>Extremely Important</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Composite Mean</strong></td>
<td><strong>4.71</strong></td>
<td><strong>Extremely Important</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Nurse Entrepreneurial Competencies in terms of Creativity</th>
<th>WM</th>
<th>VI</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop several ideas to create value, including better solutions to existing and new challenges</td>
<td>4.76</td>
<td>Extremely Important</td>
<td>2.5</td>
</tr>
<tr>
<td>2. Explore with innovative approaches</td>
<td>4.76</td>
<td>Extremely Important</td>
<td>2.5</td>
</tr>
<tr>
<td>3. Combine knowledge and resources to achieve valuable effects</td>
<td>4.88</td>
<td>Extremely Important</td>
<td>1</td>
</tr>
<tr>
<td><strong>Composite Mean</strong></td>
<td><strong>4.80</strong></td>
<td><strong>Extremely Important</strong></td>
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<tr>
<td>Indicators</td>
<td>Score</td>
<td>Importance</td>
<td>Weight</td>
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<td>---------------------------------------------------------------------------</td>
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<tr>
<td>Imagine the future</td>
<td>4.88</td>
<td>Extremely Important</td>
<td>2.5</td>
</tr>
<tr>
<td>Develop a vision to turn ideas into action</td>
<td>4.96</td>
<td>Extremely Important</td>
<td>1</td>
</tr>
<tr>
<td>Visualize future scenarios to help and guide efforts and actions</td>
<td>4.88</td>
<td>Extremely Important</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Composite Mean</strong></td>
<td><strong>4.90</strong></td>
<td>Extremely Important</td>
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</table>

**Nurse Entrepreneurial Competencies in terms of Valuing Ideas**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Score</th>
<th>Importance</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judge what value is in social, cultural and economic terms</td>
<td>4.68</td>
<td>Extremely Important</td>
<td>1.5</td>
</tr>
<tr>
<td>Recognize the potential an idea has for creating value and identify suitable ways of making the most out of it</td>
<td>4.68</td>
<td>Extremely Important</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Composite Mean</strong></td>
<td><strong>4.68</strong></td>
<td>Extremely Important</td>
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**Nurse Entrepreneurial Competencies in terms of Ethical and Sustainable thinking**

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<tr>
<th>Indicators</th>
<th>Score</th>
<th>Importance</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Assess the entrepreneurial action on the target community</td>
<td>4.68</td>
<td>Extremely Important</td>
<td>2</td>
</tr>
<tr>
<td>Reflect on how sustainable long-term social, cultural and economic goals are</td>
<td>4.60</td>
<td>Extremely Important</td>
<td>3</td>
</tr>
<tr>
<td>Act responsibly</td>
<td>4.92</td>
<td>Extremely Important</td>
<td>1</td>
</tr>
<tr>
<td><strong>Composite Mean</strong></td>
<td><strong>4.73</strong></td>
<td>Extremely Important</td>
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**Nurse Entrepreneurial Competencies in terms of Self Awareness and Efficacy**

<table>
<thead>
<tr>
<th>Indicators</th>
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<th>Importance</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Reflect on your needs, aspirations and wants in the short, medium and long term</td>
<td>4.76</td>
<td>Extremely Important</td>
<td>3</td>
</tr>
<tr>
<td>Assess your individual strengths and weaknesses</td>
<td>4.88</td>
<td>Extremely Important</td>
<td>2</td>
</tr>
<tr>
<td>Believe in your ability</td>
<td>4.92</td>
<td>Extremely Important</td>
<td>1</td>
</tr>
<tr>
<td><strong>Composite Mean</strong></td>
<td><strong>4.85</strong></td>
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**Nurse Entrepreneurial Competencies in terms of Motivation & Perseverance**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Score</th>
<th>Importance</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Be determined to turn ideas into action</td>
<td>4.84</td>
<td>Extremely Important</td>
<td>2</td>
</tr>
<tr>
<td>Be prepared to be patient</td>
<td>4.96</td>
<td>Extremely Important</td>
<td>1</td>
</tr>
<tr>
<td>Be resilient under pressure, adversity, and temporary failure.</td>
<td>4.80</td>
<td>Extremely Important</td>
<td>3</td>
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<tr>
<td>Composite Mean</td>
<td>4.87</td>
<td>Extremely Important</td>
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<tr>
<td>Nurse Entrepreneurial Competencies in terms of Mobilizing Resources</td>
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<tr>
<td>Indicators</td>
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<tr>
<td>1. Manage the material, non-material and digital resources needed to turn ideas into action</td>
<td>4.72</td>
<td>Extremely Important</td>
<td></td>
</tr>
<tr>
<td>2. Make the most of limited resources</td>
<td>4.80</td>
<td>Extremely Important</td>
<td></td>
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<tr>
<td>3. Manage the competences needed at any stage, including technical, legal, tax and digital competences</td>
<td>4.68</td>
<td>Extremely Important</td>
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<tr>
<td>Composite Mean</td>
<td>4.73</td>
<td>Extremely Important</td>
<td></td>
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<tr>
<td>Nurse Entrepreneurial Competencies in terms of Financial and Economic Literacy</td>
<td></td>
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<tr>
<td>Indicators</td>
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<tr>
<td>1. Estimate the cost of turning an idea into a value creating activity</td>
<td>4.72</td>
<td>Extremely Important</td>
<td></td>
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<tr>
<td>2. Plan, put in place and evaluate financial decisions over time</td>
<td>6.68</td>
<td>Extremely Important</td>
<td></td>
</tr>
<tr>
<td>3. Manage financing to make sure my value-creating activity can last over the long term</td>
<td>4.68</td>
<td>Extremely Important</td>
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<tr>
<td>Composite Mean</td>
<td>4.69</td>
<td>Extremely Important</td>
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<tr>
<td>Nurse Entrepreneurial Competencies in terms of Mobilizing Others</td>
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<tr>
<td>Indicators</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1. Inspire relevant stakeholders</td>
<td>4.64</td>
<td>Extremely Important</td>
<td></td>
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<tr>
<td>2. Get the support needed to achieve valuable outcomes</td>
<td>4.76</td>
<td>Extremely Important</td>
<td></td>
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<tr>
<td>Composite Mean</td>
<td>4.70</td>
<td>Extremely Important</td>
<td></td>
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<tr>
<td>Nurse Entrepreneurial Competencies in terms of Taking the Initiatives</td>
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<tr>
<td>Indicators</td>
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<td></td>
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<tr>
<td>1. Initiate processes that create value</td>
<td>4.64</td>
<td>Extremely Important</td>
<td></td>
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<tr>
<td>2. Take up challenges</td>
<td>4.72</td>
<td>Extremely Important</td>
<td></td>
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<tr>
<td>Composite Mean</td>
<td>4.68</td>
<td>Extremely Important</td>
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<tr>
<td>Nurse Entrepreneurial Competencies in terms of Planning &amp; Management</td>
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<tr>
<td>Indicators</td>
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<td></td>
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<tr>
<td>1. Set long-,medium- and short-term goals</td>
<td>4.80</td>
<td>Extremely Important</td>
<td></td>
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<tr>
<td>2. Define priorities and action plans</td>
<td>4.84</td>
<td>Extremely Important</td>
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<tr>
<td>Competency</td>
<td>Mean</td>
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<td>----------------------------------------------------------------------------</td>
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<tr>
<td>Adapt to unforeseen changes</td>
<td>4.84</td>
<td>Extremely Important</td>
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<tr>
<td>Nurse Entrepreneurial Competencies in terms of Coping with Uncertainty,</td>
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<tr>
<td>Ambiguity and Risk</td>
<td></td>
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<tr>
<td>1. Make decisions when the result of that decision is uncertain</td>
<td>4.60</td>
<td>Extremely Important</td>
<td></td>
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<tr>
<td>2. Within the value-creating process, include structured ways of testing</td>
<td>4.64</td>
<td>Extremely Important</td>
<td></td>
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<tr>
<td>ideas to reduce risks of failing</td>
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<tr>
<td>3. Handle fast-moving situations promptly</td>
<td>4.72</td>
<td>Extremely Important</td>
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<tr>
<td><strong>Composite Mean</strong></td>
<td>4.83</td>
<td>Extremely Important</td>
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<tr>
<td>Nurse Entrepreneurial Competencies in terms of Working with Others</td>
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<tr>
<td>1. Cooperate with other to develop ideas and turn them into action</td>
<td>4.80</td>
<td>Extremely Important</td>
<td></td>
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<tr>
<td>2. Building network</td>
<td>4.84</td>
<td>Extremely Important</td>
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<tr>
<td>3. Solve conflicts with others</td>
<td>4.72</td>
<td>Extremely Important</td>
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<tr>
<td><strong>Composite Mean</strong></td>
<td>4.65</td>
<td>Extremely Important</td>
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<tr>
<td>Nurse Entrepreneurial Competencies in terms of Learning Through Experience</td>
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<tr>
<td><strong>Indicators</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Use any initiative for value creation as a learning opportunity</td>
<td>4.80</td>
<td>Extremely Important</td>
<td></td>
</tr>
<tr>
<td>2. Learn with others, including peers and mentors</td>
<td>4.76</td>
<td>Extremely Important</td>
<td></td>
</tr>
<tr>
<td>3. Learn from both success and failure (your own and other people's)</td>
<td>4.92</td>
<td>Extremely Important</td>
<td></td>
</tr>
<tr>
<td><strong>Composite Mean</strong></td>
<td>4.83</td>
<td>Extremely Important</td>
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**Legend:** 4.50-5.00=Extremely Important; 3.50-4.49=Very Important; 2.50-3.49=Moderately Important; 1.50-2.49=Slightly Important; 1.00-1.49=Not at all Important

Table 1 describes the different assessment of competencies of a nurse entrepreneur according to the following competencies:

Relative to ideas and opportunities in terms of spotting opportunities with a composite mean of 4.71 with a verbal interpretation of extremely important was obtained. Identifying needs that must be met received the highest weighted mean of 4.84, indicating its utmost importance. Seizing opportunities to add value through exploring social, cultural, and economic landscapes, as well as re-establishing relationships, tied for 2.5th rank with a weighted mean of 4.64.
Vannucci and Weinstein [15] highlighted that nurses transitioning from employment to entrepreneurship are motivated by factors such as psychological empowerment, impact, growth, and decision-making. These factors play a significant role in their decision to start a business.

According to ideas and opportunities in terms of creativity with a composite mean of 4.80 and verbally interpreted as extremely important. Among the cited indicators, combine knowledge and resources to achieve valuable effect ranked first and got the highest weighted mean of 4.88

Develop several ideas to create value, including better solutions to existing and new challenges, and explore with innovative approaches both obtained the weighted mean of 4.76 and tied in the 2.5th rank.

Jahani et.al. [25] described that nurses who are entrepreneurs should be innovators who are motivated for change, modernizing health systems, and display leadership. They are creative in developing new idea/s and improving service delivery methods and existing products. These ideas, methods, or products could be sold to foreign lands. In the study of 13 participants, 37 years old as the youngest while 50 years old is the oldest, three themes emerged as source to meet the description mentioned above. These are identification of opportunities, evaluation of opportunities, and identifying proper opportunities.

Further, ideas and opportunities in terms of vision got a composite mean of 4.90 and verbally interpreted as extremely important. Among the cited indicators, develop a vision to turn ideas into action ranked first and got the highest weighted mean of 4.96.

Imagine the future and visualize future scenarios to help and guide efforts and actions both obtained the weighted mean of 4.88 and tied in 2.5th rank.

The study of Jahani et.al. [25] on Iranian entrepreneurial nurses have resulted to reviewing the potential efficiency of opportunities, market position, legal issues, and position of customers. These results are notable in having a competitive edge and more profits, future-oriented opportunity evaluation, and reflecting on the attractiveness of the business to the entrepreneur.

According to P4, vision is the most important competency that he considered.

With the following declaration, Participant 4 (P4) signified these:

"The most significant characteristic or competency a nurse entrepreneur must have is vision. It is very important to have a good vision because it helps me to plan, strategize and management my business ahead of time."

"Motivation and perseverance as well as vision for me are almost equally important. They should go hand in hand together. Motivation helps me to have a goal or vision for my business and perseverance is what pushes me to accomplish my goals."

Catana [31] defines vision as a coherent and strong declaration of what the firm should seek to become, that guides an organization by connecting it to a sense of meaning and purpose. In times of turmoil and change, vision also provides inspiration. Entrepreneurs visualize their venture strategically as an extension of themselves and their needs," according to the definition of entrepreneurial vision.

According to ideas and opportunities in terms of valuing ideas with a composite mean of 4.68 and verbally interpreted as extremely important. Among the cited indicators, assessing value in social, cultural, and economic aspects as well as recognizing the potential that an idea must add value and choosing the best strategies for doing so tied for first place with a ranking of 1.5.

In his article, Neergard [8] stated that nurses are business owners in rural and/or urban areas while providing primary care, secondary care, and private practice services. He found out, after going through the literature review of nurses entrepreneurs, knowledge and lack of literature review is prevalent in this
field. Still, however, nursing skills are prevalent. The value on clinical nursing / consultancy is the activity in which nurses have aligned themselves to be business owners.

According to ideas and opportunities in terms of ethical and sustainable thinking with a composite mean of 4.73 and verbally interpreted as extremely important. Among the cited indicators, act responsibly ranked first and got the highest weighted mean of 4.92.

Meanwhile, assess the entrepreneurial action on the target community obtained a weighted mean of 4.68 or second in rank, while reflect on how enduring long-term social, cultural, and economic objectives got a weighted mean of 4.60 or third in rank.

Hagg-Martinell et.al [32] studied nursing students' perspectives on a sustainable professional life as nurses. The findings revealed three themes: a moral foundation guiding nursing care for patients and protection of nursing care; a supportive and reflective learning environment; and a sense of pride as ethical professional nurses prioritizing health and career advancement.

Moreover, resources in terms of self-awareness and efficacy got a composite mean of 4.85 and verbally interpreted as extremely important. Among the cited indicators,” believe in your ability” ranked first and got the highest weighted mean of 4.92.

Further, “assess your individual strengths and weaknesses” obtained a weighted mean of 4.88 or second in rank, while “reflect on your immediate, medium-term, and long-term demands and desires” got a weighted me of 4.76 or third in rank.

Having 76 nurse respondents from Jahani et.al [46] have found out that there was a significant different in the uncontrolled group in terms of self- efficacy and entrepreneurial intention. The data were collected using quasi-experimental study. It seems that nurses’ entrepreneurship is promoted in the entrepreneurship culture.

One out of nine participants stated that self-awareness and self-efficacy are the most significant entrepreneurial competencies.

P2 supported these entrepreneurial competencies by saying:

“In my experience, the most important characteristic or competence a nurse entrepreneur must have is to have self-confidence and to believe in yourself, to believe in your own ability that you can succeed even if it is difficult. If a person doubts himself, his own ability then, there is no way he would be a successful entrepreneur.”

Self-efficacy is crucial for entrepreneurs since it pertains to one's belief in one's ability to carry out the behaviors required to start and run a successful firm. By supporting people's healthcare needs through nursing-related healthcare enterprises, nurse entrepreneurs are specifically increasing their influence in healthcare systems around the world [19].

Resources in terms of motivation and perseverance got a composite mean of 4.87 and verbally interpreted as extremely important. Among the cited indicators, be prepared to be patient, ranked first and got the highest weighted mean of 4.96.

On the other hand, be determined to turn ideas into action obtained a weighted mean of 4.84 or second in rank while be resilient under pressure, adversity, and temporary failure got a weighted me of 4.80 or third in rank.

Ubochi et al. [14] figured out that the drive process model of entrepreneurship with 20 purposively selected participants have shown how personal attributes motivate nurses for entrepreneurship. This process improved the social, professional, and the economic status of these nurse entrepreneurs.
Most of the participants mentioned that motivation and perseverance are the most important competencies among nurse entrepreneurs.

P2, P6, P7, and P8 have supported these competencies to be the most relevant among other entrepreneurial competencies. P2 indicated these with the following statement:

“For me the most important nurse entrepreneurial skill is being driven and motivated. If I lose my motivation in my business then before long, I would surely have to close my business.”

In addition, P6 also emphasized these statements:

“One of the most important virtues in life is patience, and I suppose this is as well the most important characteristic or competency a person must have. Not everything goes well immediately, and it is perfectly true when it comes to business. My business didn’t prosper over night, but it develops and grows in the process of time. It is not easy to be patient especially when things are getting more difficult in business, and one experiences more losses than gain due to unexpected turn of events. But being patient as well as motivated puts me to where I am right now.”

In this case, the abovementioned responses are congruent to the study conducted by Nikitina et.al [47] about “Competencies for Strengthening Entrepreneurial Capabilities in Europe.” The key research findings revealed that entrepreneurs in all of the nations surveyed consistently rated motivation and tenacity as extremely crucial.

In addition, P7 and P8 also both agreed on the result of these study that motivation and perseverance were the most relevant entrepreneurial competencies among nurse entrepreneurs. These are reflected with the following responses:

“All competencies mentioned in the survey questionnaires are all extremely important. However, based on the result of the questionnaire, motivation, and perseverance top other entrepreneurial competencies. I think it is because, motivation is what fuels our perseverance and we are willing to do anything as long as we have enough motivation to accomplish something. These competencies are practical enough so they can all be applicable in real life scenarios.”

“Based on the result of the study, motivation and perseverance got the highest weighted mean, and I would definitely agree with it. Being patient is a must to be successful. We can’t accomplish anything right off the bat. So, it takes time and effort to be able to succeed in business and in our other goals in life.”

For P2 and P6, motivation and perseverance can be acquired and cultivated through experiences. The following responses illustrate this:

In my opinion, I think the best way to acquire and cultivate motivation and perseverance is when we go through experiences. An old saying says, experiences are the best teachers in life.

I believe people learn to be patient and motivated from as long as we were born in this world. It is a continuous learning process. It is something that we didn’t learn from school. But we learn through life experiences.

Most of the respondents concurred that proper education training and seminar are all needed to prepare a nurse in venturing the world of entrepreneurship at the same time as a nurse. P6 said the following to denote these:

Having the right knowledge, training and seminars will surely help nurse entrepreneurs to avoid financial losses in business. Without the right knowledge and skills, venturing into entrepreneurship would be like going to a war without guns and bullets.
More so, resources in terms of mobilizing resources obtained a composite mean of 4.73 and verbally interpreted as extremely important. Among the cited indicators, make the most of limited resources ranked first and got the highest weighted mean of 4.80.

Manage the physical, intangible, and digital resources required to put ideas into practice got a weighted mean of 4.72 or second in rank while manage the technical, legal, fiscal, and digital competencies required at any step got a weighted me of 4.68 or third in rank.

Drencheva et.al. [26] agreed that social entrepreneurs need resources to further their social impact. It is a fact of valuable resource that approaches these entrepreneurs in selecting who to approach and why there is struggle on feedback. There were 36 social entrepreneurs who gave their insight on this topic.

Meanwhile, resources in terms of financial and economic literacy got a composite mean of 4.69 and verbally interpreted as extremely important. Among the cited indicators, make the most of limited resources ranked first and with the highest weighted mean of 4.72.

The item, “to ensure that my value-creating activity can persist over time, plan, implement, and analyze financial decisions, as well as manage finance” both obtained the weighted mean of 4.68 and tied in 2.5th rank.

With the increase of nurses’ workforce, it is important that they should be prepared, too, in their knowledge and skills of debt, investments, and budgeting as researched by Dion et.al [28]. It was found out that nurses work also to be educated and to be employed with a sense health care, alleviation of poverty, and elimination inequality.

Consequently, action in terms of mobilizing others had a composite mean of 4.70 and verbally interpreted as extremely important. Among the cited indicators, Get the assistance required to produce worthwhile results ranked first and got the highest weighted mean of 4.72 while inspire relevant stakeholders got the second rank or weighted mean of 4.64.

Drencheva et.al [26] researched on nurses’ entrepreneurial mobilization which is outside of their networks. It happens that they reduce uncertainty, improve the offering and personal capacity, and benefit-based primary appraisal which are experienced, expert, encouraging, challenging, and powerful. It is also cost-based primary appraisal, which is accessible, engaging, and trustworthy. Though it is not always successful in accessing the desired resource, it includes multiple cycles inside and outside of one’s social network that influences how later stages fail on the resources they needed.

Also, action in terms of taking the initiative induced a composite mean of 4.68 and verbally interpreted as extremely important. Among the cited indicators, take up challenges ranked first and got the highest weighted mean of 4.72 while on the other hand inspire relevant stakeholders got the second rank or weighted mean of 4.64.

The research by Vannucci and Weinstein [15] discusses the "critical motivators" of participants in pursuing entrepreneurship. Personal significance, the capacity to make own judgments, the desire for progress, having an influence, a fantastic concept for a product or service, flexibility, control over time, a better work/life balance, a lack of advancement, being the boss, the ability to pick teammates, and financial gain are examples of these. There are two types of motivators: "push" or "necessity" motivators and "pull" or "opportunity" motivators. This is seen in the achievement of a work-life balance lifestyle.

Action in terms of planning and management obtained a composite mean of 4.83 and verbally interpreted as extremely important. Among the cited indicators, set goals, make preparations, and be flexible to unforeseen developments both tied in ranked 1.5 and got the highest weighted mean of 4.84.
On the other hand, set long, medium and short-term goals obtained the weighted mean of 4.80 and got the third rank. Ubochi et.al [14] researched theme which showed leadership as part of planning. It shows that people have characteristics that took people over and their peers irrespective of one’s background or one’s high aptitude. It would have been possible that the participants have expressed traditional practice and career ladder in institutionalized nursing to venture into entrepreneurship that shows leadership positions. In addition, there is risk management pertaining to an essential attribute to business management in terms of entrepreneurship. There are losses in businesses of other disciplines that include health emergencies, referral, disability and death, and other consequences of businesses.

According to into action in terms of coping with uncertainty, ambiguity and risk with a composite mean of 4.65 and verbally interpreted as extremely important. Among the cited indicators, handle fast-moving situations promptly ranked first and got the highest weighted mean of 4.72.

On the other hand, additional formal methods of testing concepts to the value-creation process to lower failure chances obtained the weighted mean of 4.64 and ranked the second and make judgments even when the outcome is unknown got the third rank and weighted mean of 4.60.

The research by Hagg-Martinell et.al [32] emphasizes the significance of achieving a balance between their patients and their own health when taking care of oneself. The participants want respect in terms of being crucial in setting limitations that do not take over during their break time. It is critical for kids to be honest, to listen to their bodies, and to make health-promoting decisions regarding their own health and fitness. There is interest and bravery to continue developing and learning new things and new ideas to continue educating themselves in attending specialty nursing education.

Moreover, action in terms of working with others had a composite mean of 4.79 and verbally interpreted as extremely important. Among the cited indicators, building network ranked first and got the highest weighted mean of 4.84.

On the other hand, collaborating with others to create and implement ideas obtained the weighted mean of 4.80 and ranked the second and while solve conflict with others got the third rank and weighted mean of 4.79.

According to Qualter, [29] there are three aspects that support the necessity of assisting students in working successfully. The first is that research on millennial students has been well established in terms of valuable work that is increasingly being used in cooperation and learning. Second is on having more global environment that is based on settings, while third is on interdisciplinary knowledge and became more prevalent in learning skills to work and communication with partners who are in the workplace.

On the other hand, action in terms of learning through experience got a composite mean of 4.83 and verbally interpreted as extremely important. Among the cited indicators, Take lessons from both successes and failures (your own and other people's) ranked first and got the highest weighted mean of 4.92.

Further, any value-creation endeavor should be viewed as a learning opportunity obtained the weighted mean of 4.80 and ranked the second while learn with others, including peers and mentors got the third rank and weighted mean of 4.76.

Neergard [8] examined empirical accounts of entrepreneurial job status, circumstances, knowledge, actions, challenges, and incentives. Before launching their own businesses, 37 accomplished nurses have necessary education and experience in both business and nursing. This corresponds with having self-assurance and managerial skills with risk-taking drive even if there is no goal.
Two out of nine respondents mentioned the importance of learning through experience as another very important nurse entrepreneurial competency. P9 signified these statements:

“Aside from having motivation and vision in business, the ability to learn from past mistakes or failures are both very important competencies a nurse entrepreneur should have. It helps me not to repeat the same mistake over again. And because of that I am able to develop and grow my business”.

P1 also echoed the importance of learning through experience with the following statements:

“In my perspective, one of the competencies that a nurse entrepreneur should have is the ability to learn from mistakes and from other nurse entrepreneurs. As a nurse entrepreneur, I didn’t learn any of these competencies back in university days because it is not a part of the curriculum, however, I learned lessons from other people who are successful entrepreneurial experts. I tried to imitate their ways to have the right mindset in business as well as their strategies in managing their wealth and business.”

With regards to the above statements, Middleton et.al [30] asserts that while information may be learned through reading and hearing, experience can only be learned through doing, conversing, and making sense of things—in other words, actions. According to researchers, in order for students to gain entrepreneurial abilities, they must participate in entrepreneurial activity. It is crucial to note that learning from experience requires “learning from doing,” not just a "learning by doing" approach.

Emerging Themes
This section discusses the emergent themes drawn from the Interview.

1. Different ways to acquire and cultivate nursing entrepreneurial competencies

1.1 Experiential Learning

Most of the informants answered that hands on experiences had the most impact on acquiring and cultivating nursing entrepreneurial skills. According to the participants that the researchers interviewed, they verbalized:

P2 stated, “In my opinion, I think the best way to acquire and cultivate these competencies is when we go through experiences. An old saying says experiences are the best teachers in life”

P4 emphasized that “Nurses can acquire and cultivate these competencies by going through actual life experiences”

P5 also stated, “For me, the only way to acquire and cultivate the competencies needed as a nurse entrepreneur is by learning them through experience of others and our own experience. I don’t know any other way to learn them but only through experiences”

P6 said, “I believe people learn to be patient and motivated from as long as we were born in this world. It is a continuous learning process. It is something that we don’t learn from school but through life experiences.”

P9 also verbalized, “In my opinion, entrepreneurial competencies can be cultivated while learning through experience”

Based on the informants’ responses, the majority of them agree that learning from experience made a huge impact on acquiring and cultivating nurse entrepreneurial competencies. Nurse entrepreneurial competency is something that they did not learn from school but rather from the school of life. The informants' responses are in line with Middleton et.al [30] which contends that while knowledge may be acquired through reading, listening, and speaking, the experience can only be acquired through doing, talking, and making sense of things—in other words, through actions. Researchers assert that involvement
in entrepreneurial activities is necessary for students to develop entrepreneurial skills. It is important to understand that learning from experience necessitates "learning from doing" rather than just "learning by doing."

1.2 Educational Preparedness

Moreover, during the interview, minority of the informants also verbalized the need for educational preparedness to acquire and cultivate nurse entrepreneurial competencies by verbalizing these statements:

P3 said, “Nurse entrepreneurial competencies can be acquired through continuous education and learning.”

P7 also reiterated “We can acquire and cultivate these competencies through proper education, training, and seminars.”

The minority of the informants agreed that educational preparedness is also important to acquire and cultivating nurse entrepreneurial competencies. Having enough knowledge and skill through training and seminars would equipment nurse entrepreneurial newbies to somehow improve their performance in running a business.

Sharp and Monsivais [12] found that nurse entrepreneurs experience problems linked to a range of business practices, business skills, and role conflicts in their qualitative research of 24 nurse practitioners in the United States. The study highlights the need for financial assistance and training in various business practices, legal concepts, strategic planning, leadership, and nursing facility administration. Entrepreneurship education is emphasized as a crucial factor for successful entrepreneurial action and intention. This research serves as a foundational step in developing evidence-based knowledge to guide entrepreneurial education in the future. Therefore, educational preparedness is vital in acquiring and cultivating nurse entrepreneurial competencies.

1.3 Self Discipline

On the other hand, another way to acquire and cultivate nurse entrepreneurial competency is self-discipline.

P1 stated, “Only one way to acquire and cultivate these competencies, it is through self-discipline”. P8 also emphasized, “Self-discipline is very important to have to acquire and cultivate these competencies”

Based on the informants’ responses, two out of nine of them viewed the importance of self-discipline in acquiring and cultivating nurse entrepreneurial competencies. Self-discipline is the only way to acquire and cultivate nurse entrepreneurial competencies. Concerning these statements, according to Livingstone, [48] the likelihood that someone will achieve increases with their level of self-discipline. Self-discipline is essential for entrepreneurs, as it not only enhances performance but also helps in building and maintaining positive relationships. It enables entrepreneurs to be strong, captivating, and inspirational, fostering a proactive rather than defensive approach.

Self-discipline, one of the highest competencies identified in this study, is closely linked to acting responsibly. It plays a crucial role in managing oneself effectively when making important business decisions and preparations. Moreover, self-discipline is essential for balancing the demands of working as a nurse and managing a business simultaneously.
2. Incorporating Entrepreneurship in Nursing Curriculum

2.1 Proposing Nurse Entrepreneurial Subject in College

All participants have suggested including nurse entrepreneurial subject in college, as signified by these statements:

P1 said, “It is important to have entrepreneurship subject in the College of Nursing”

P2 claimed, “Teach nursing students the basics of entrepreneurship”

P3 answered, “It would really be nice if nursing entrepreneurship would be a part of a subject or curriculum because of lack of training and knowledge a lot of nurse entrepreneur has to rely on their experiences to be able to learn what is important in entrepreneurship.”

P4 claimed, “There should be a nursing entrepreneurship subject in class”

P5 said, “The board of nursing and the department of education should consider having nurse entrepreneurial subject in the curriculum”

P6 verbalized, “It would be nice if someone would propose having a subject of nurse entrepreneurship in college”

P7 also emphasized, “Nurse entrepreneurial expert should teach entrepreneurship in college”

P8 also mentioned, “It has to be proposed in higher education to add nurse entrepreneurship as a subject”

P9 said, “It would be great if nursing entrepreneurship could be incorporated as a nursing subject at school.”

According to the Canadian Association of School of Nursing’s (CASN) National Education Framework (2015), nursing school could include self-employed nursing practice as a form of innovative and viable community-based nursing practice within the baccalaureate nursing curricula [43].

Recognizing the significance of nurse entrepreneurship, countries like Canada have incorporated it into their curriculum. Including nurse entrepreneurship in the curriculum would equip Filipino nurses to not only work as traditional nurses but also manage their own businesses. This would create opportunities for nurses to stay and work in the country instead of seeking opportunities abroad. Thus, integrating nurse entrepreneurship subjects into the nursing curriculum in the Philippines is highly beneficial for both nurses and the country.

A successful nursing educational system is essential for preparing nursing students and licensed nurses for entrepreneurship. This can be achieved by incorporating entrepreneurship coursework into core programs to enhance students' awareness of possibilities and implications. Additionally, offering undergraduate and graduate level electives and specialized curricula can better equip them for real-world business ventures. To bridge the gap in nursing education regarding entrepreneurship, subjects like business administration, healthcare administration, financial management, marketing, and business planning should be included in the curriculum, enabling entrepreneurs to thrive in their ventures [44].

3. Preparation to Venture in Entrepreneurship at the same time as a Nurse

3.1 Having the Right Mindset and Attitude about Entrepreneurship

Most of the respondents have all agreed that having the right mindset and attitude about entrepreneurship is a vital component before venturing in entrepreneurship at the same time as a nurse. These statements signified these:

P1 claimed, “It is very important to have the right mindset about entrepreneurship before venturing into it because of its huge difference in the concept of traditional nursing”
P2 also said, “It is important to have the right attitude towards business”

P3 also emphasized, “It is really important to have a proper mindset before engaging in entrepreneurship. Putting up a business comes with a great risk and the market keeps changing over time.”

P5 stated, “I suggest to prepare our mindset because entrepreneurship is different from nursing employment”

P8 said, “We have to prepare our heart and mind before going into entrepreneurship because without it we wont have motivation to continue”

With the above statements from the informants, having the right mindset and attitude in entrepreneurship is a significant factor to have before venturing into entrepreneurship. Traditional nursing which is hospital-based or bedside care is a far cry from entrepreneurship.

Previous studies on the challenges faced by nurses starting healthcare-related businesses have mentioned a number of barriers, including a lack of business knowledge and skills, concerns about legal issues, a lack of the mindset required to launch a business, and the misconception that "nursing is about care, whereas business is about making money" [7].

Therefore, having the right mindset and attitude in business is extremely important to aspiring nurse entrepreneurs before venturing into entrepreneurship because working at the bedside care is a totally different world than managing a business.

3.2 Investing in Knowledge and Skills

On the other hand, four out of nine respondents deemed it necessary to invest in knowledge and skills by verbalizing these statements:

P4 said, “Consultation with entrepreneurial experts is very important to gain knowledge and expertise”

P6 stated, “Having the right knowledge, training and seminar will surely help nurse entrepreneurs to avoid financial losses in business.”

P7 claimed, “Proper training and education is a must have first before venturing into entrepreneurship”

P9 also stated, “We need to invest in knowledge and skills before starting a business or entering into entrepreneurship”.

In line with the above statement, entrepreneurship, according to Jena, [45] entails more than merely starting a firm. The essential requirement is to instill in children an entrepreneurial attitude through excellent entrepreneur education. Entrepreneurship education has been identified as one of the critical aspects that may influence students' employment choices in the twenty-first century.

Indeed, education is vital for preparing nurses for entrepreneurship. Seeking guidance from nurse entrepreneurial experts can lead aspiring nurse entrepreneurs to success by avoiding financial losses due to business inexperience. While nurses are trained to care for patients, they often lack the knowledge and skills to manage a business effectively. Like working in a hospital, proper knowledge and skills are essential for ensuring patient health and safety.
PROFESSIONALLY PRACTICING NURSE ENTREPRENEUR FRAMEWORK

![Diagram of the Professionally Practicing Nurse Entrepreneurial Competencies Framework]

The Professionally Practicing Nurse Entrepreneurial Competencies Framework is made up of four major competence areas: ‘Knowledge, Skill, Attitude and Attributes’. Each area includes three competencies, which, together, are the building blocks of professionally practicing nurse entrepreneurship as a competence.

CONCLUSION
Based on the findings presented, the following conclusions were drawn:
1. Majority of the respondents are professionally practicing nurses and entrepreneurs at the same time, 31-40 years old, a graduate of BSN, with doctorate degree, with health/medical related types of business and owned as a corporation, and with 10 years and above in business which is located in Urban area.
2. Most of the respondents have considered motivation and perseverance as well as a vision to be the most important entrepreneurial competencies.
3. All qualitative participants agreed that nurse entrepreneurial competencies based on the questionnaire such as spotting opportunities, creativity, vision, valuing ideas, ethical and sustainable thinking, self-awareness and self-efficacy, motivation and perseverance, mobilizing resources, financial and economic literacy, mobilizing others, taking the initiatives, planning and management, coping with uncertainty and ambiguity, working with others and learning through experience are almost equally important.
4. Nurse entrepreneurial competencies can be acquired and cultivated through experience, education, training, and seminars.
5. The majority of the participants also proposed to add nurse entrepreneurship subject in the curriculum to prepare future nurses who are professionals working in the hospital to be entrepreneurs at the same time.
6. Preparations are important before venturing into entrepreneurship while working as a nurse in the hospital which include having the right mindset and attitude about entrepreneurship and having proper education and training.
RECOMMENDATION

With the drawn findings and conclusions, the following recommendations are put forth:

1. Prepare aspiring nurse entrepreneurs by including nurse entrepreneurial subjects in the nursing curriculum to equip them with the right mindset, knowledge, skills, and competencies through training and education.

2. Provide opportunities for practice and application of nurse entrepreneurial competencies by going through on-the-job training in different companies to develop their competencies as entrepreneurs and gain experiential learning.

3. Create an organization that will help nurse entrepreneurs identify needs of the health and hospital industry that can be a business start-up and update their knowledge and skills as entrepreneurs.

4. Recognize the contributions of nurse entrepreneurs to the economy by giving them incentives.

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