

# Exploring the Entrepreneurial Mindset in Nursing: Unleashing Innovation and Leadership for Healthcare Transformation

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***Abstract—An entrepreneurial attitude allows people to spot possibilities, take them, overcome hurdles, learn from failure, and succeed in various circumstances. Entrepreneurial attitudes help create new businesses, impress employers, and boost academic performance (Entrepreneurial Mindset, 2021). Entrepreneurial attitude is not new, but adding spiritual awareness to creative entrepreneur behavior and a visioning map provides value and insight to organization performance. Entrepreneurial leadership and culture foster innovation (Gillin & Hazelton, 2020).***

## I. INTRODUCTION

An entrepreneurial attitude allows people to spot possibilities, take them, overcome hurdles, learn from failure, and succeed in various circumstances. Entrepreneurial attitudes help create new businesses, impress employers, and boost academic performance (Entrepreneurial Mindset, 2021). Entrepreneurial attitude is not new, but adding spiritual awareness to creative entrepreneur behavior and a visioning map provides value and insight to organization performance. Entrepreneurial leadership and culture foster innovation (Gillin & Hazelton, 2020).

Nurse entrepreneurs use their healthcare knowledge and business acumen to start successful businesses in health-related fields like information technology, patient data storage, healthcare services, and medical devices. Nurse entrepreneurs can change healthcare. Independent efforts, breakthrough technologies, and systematic changes can revolutionize medical delivery. These advances aim to increase patient care efficiency, improve treatment outcomes, and enable

individualized, proactive patient wellness regimens. Marville University, (2023). Moreover, according to Vannuci & Weinstein (2017), nursing business requires empowerment because it is dominated by women. Nurse entrepreneurs can also fill healthcare needs by improving public access. Also, Boyd (2023) stated that technology is revolutionizing nursing. EHRs, telemedicine, AI-powered diagnostics, and other innovations are changing how nurses treat patients. Nurses can improve patient outcomes, efficiency, and scope by adopting these technologies. Nurses must keep ahead of technology to provide compassionate, evidence-based care in the digital age.

In addition, nursing was limited to hospitals, clinics, and academics. With the changing healthcare landscape, rising nursing demands, advances in healthcare technology, and economic factors, nurses can now directly serve patients. Nursing entrepreneurship allows nurses to pursue their dreams and improve health outcomes through innovation. Nurse entrepreneurs are "proprietors of a business that offers nursing services of a direct care, educational, research, administrative, or consultative nature." Nursing entrepreneurship can give nurses self-employment opportunities and help improve health outcomes. This benefits nurses and improves healthcare generally. The extraordinary paradigm shift of this generation's young from employment to entrepreneurship should be exploited by the academic sector (Solidum et al., 2018).

As a key force in healthcare services, nurses must constantly innovate to keep pace with the health industry and improve the quality of care (Yan et al., 2020). This study determined the potential for

technological advancement and the search for innovations in medical care delivery methods. Additionally, it serves as an encouragement for change and works to improve the conditions for the treatment of people, families, and communities within the health systems. This study is aimed at finding to what level of entrepreneurial mindset among nursing students in the healthcare industry and also how does it influences their innovative practices. This study intends to collect feedback to help nursing students to improve their skills in the healthcare system with the use of innovation. It can also inspire nursing students to enhance their entrepreneurial mindset to become more productive and develop workable solutions and bring new innovations to the healthcare industry, rather than just focusing on usual nursing routines such as bedside care, nurse-patient interaction, vital signs taking, etc.

## II. THEORETICAL FRAMEWORK

### A. Mindset theory

Mindset theory is an achievement motivation paradigm that emphasizes ability malleability. According to mindset theory, students either have a growth mentality or a fixed attitude about their intelligence. Growth mindset students believe intelligence can be changed, whereas fixed mindset students feel intelligence is fixed. As many empirical and theoretical articles have shown, a student's mentality can affect psychological and behavioral characteristics like reaction to failure, persistence and effort, and expectations of success, which affect academic performance. Interventions to encourage a growth mindset have been created. A growth mindset encourages kids to see problems as opportunities for growth, enjoys learning, and boosts school motivation (Kapasi & Pei, 2021).

This effect shows whether a student reacts consciously or unconsciously to hardships, effort, hurdles, and others' success. Low-confidence and entrenched attitudes lead to low-performance goals and issues that are typical of their actions, emotions, and mental processes, making them feel powerless when compared to others. However, those with a growth attitude believe that setting learning objectives can help them overcome barriers and achieve positive results. Mindset theory in nursing may explain student views, well-being, and effectiveness. A growth

mentality supports inventive behavior and can produce a leader who will raise their team's potential and foster an accountable culture that promotes corporate expansion and recognizes team possibilities even in difficult circumstances. In addition, entrepreneurial leadership, according to Subramaniam & Shankar (2020), has six essential traits: nourish an entrepreneurial capability, protect innovations threatening the current business model, make sense of opportunities, question the dominant logic, revisit the deceptively simple questions, and link entrepreneurship and strategic management. Thus, strategic entrepreneurship increasingly requires understanding entrepreneurial leaders. Idealized leadership inspires employees with confidence, adoration, respect, and trust. Nurse leaders must be role models that staff aspire to. When a leader models change, the team is less inclined to resist it. The service/unit's mission and philosophy reflect this idealized impact. Staff, families, and service users should help the leader create and implement these statements (Doody & Doody, 2012). Healthcare business requires finding new methods to help patients. Analyzing the situation, generating alternatives, and choosing new or better techniques might be beneficial. Nursing, nursing skills, technology, imaging, pharmacology, data gathering and analysis, and problem-solving create this type of professional medical practice.

## III. METHODOLOGY

### A. Research Design

The researchers used the quantitative research method and a descriptive survey with the use of the questionnaire as the main instrument in gathering the needed data for the study. Quantitative research design is aimed at discovering how many people think, act or feel in a specific way. Quantitative projects involve large sample sizes, concentrating on the quantity of responses, as opposed to gaining the more focused or emotional insight that is the aim of qualitative research. The standard format in quantitative research design is for each respondent to be asked the same questions, which ensures that the entire data sample can be analyzed fairly. The data is supplied in a numerical format and can be analyzed in a quantifiable way using statistical methods (Quantitative Research Design, 2023).

### B. Locale and Population

The study was conducted in the College of Nursing School of Baguio Central University located at Lower P. Burgos, Sto. Nino, Baguio City. The respondents are composed of 26 third year nursing students officially enrolled in the 2nd semester of the AY 2022-2023. The researchers used convenience sampling.

### C. Data Gathering Procedure

The researcher obtained an approval letter from the dean to administer the survey questionnaire. A letter of consent was given to the respondent for them to answer the questionnaires confidentially and voluntarily. The researchers float the questionnaire to all enrolled 3rd Year nursing students.

### D. Treatment of Data

The data gathered was treated using weighted mean.

The formula will be as follows:

Where:

WM - Weighted Mean

$\Sigma$  - Summation of Frequency N- total number of respondents

The weighted mean was used to indicate the level of response which will be treated using a 4-point scale and 3-point scale with their respective statistical limits and descriptive equivalent with four (4) and three (3) as the highest scale and one (1) as the lowest scale.

## IV. RESULTS & DISCUSSION

### Level of Entrepreneurial Mindset

Statements	SA (4)	A (3)	D (2)	SD (1)	WM	DE	RANK
1. I enjoy solving problems in innovative ways.	6	16	4	0	3.08	A	6
2. I am willing to take risks in order to achieve my goals.	20	6	0	0	3.77	SA	1
3. I constantly look for opportunities to improve my surroundings or situations.	18	8	0	0	3.69	SA	2
4. I am not afraid of failure and see it as an opportunity to learn.	15	11	0	0	3.58	SA	3
5. I am self-motivated and do not need external validation to drive my actions.	12	10	4	0	3.31	SA	5
6. I actively seek feedback from others to improve my ideas.	9	17	0	0	3.35	SA	4
TAWM=3.27						SA	

According to the table, nursing students are willing to take chances to attain their goals. Risk-taking is vital for attaining goals and innovating in the entrepreneurial nursing mindset. Nurses with this perspective realize that staying in their comfort zones can impede their advancement. Risk-taking opens them up to new ideas, innovative behaviors, and challenging norms. Nurses can think critically and creatively by taking measured risks. It lets them look beyond conventional nursing practice for solutions that could improve patient outcomes and healthcare delivery. Nurses with an entrepreneurial attitude also take initiative in professional growth, leadership, and organizational transformation. Thus, these risk-takers lead nursing's future.

In addition, risk-taking nurses bravely challenge the established quo and address ineffective or unethical procedures, according to Seifert (2020). They're moral and always looking for better ways to succeed. Risk-taking nurses ask questions, gather data, and seek other views to find issues and solutions. They learn from their mistakes and teach others. Florence Nightingale and Harriet Tubman are nursing risk-takers. They inspired future risk-takers. In 1954, the Association of Operating Room Nurses (AORN) was founded, demonstrating nursing risk-taking. These brave nurses risked everything to form a professional organization. Furthermore, in more recent times, the AORN Global Surgical Conference & Expo 2020 featured a program that delved into the risks undertaken by nurses in their professional careers. One such pioneer is Billie, who spearheaded the implementation of self-managed teams and a core curriculum for perioperative nursing at a hospital in Boston, Massachusetts. Additionally, Billie played a pivotal role in introducing the position of clinical nurse specialist. She attributes her accomplishments to the unwavering support of her manager and colleagues. Overall, risk-taking in nursing is a vital characteristic that propels the profession forward. It requires courage, innovation, and a commitment to continuous improvement. By embracing risks, nurses can drive positive change and enhance the quality of care provided to patients.

*Influence of Entrepreneurial Mindset in the Innovative Practices in the Healthcare Setting*

Statements	SA (4)	A (3)	D (2)	SD (1)	WM	DE	RANK
1. I believe my innovative ideas could improve healthcare outcomes.	6	20	0	0	3.23	A	4
2. I feel encouraged to innovate in my clinical practice.	12	13	1	0	3.42	SA	2
3. I have contributed an innovative idea or practice during my clinical experience.	7	16	2	1	3.12	A	5
4. I think healthcare settings should encourage more innovation	18	8	0	0	3.69	SA	1
5. I feel confident in implementing innovative practices in a healthcare setting	9	16	1	0	3.31	SA	3
TAWM=3.35					SA		

The table shows that the healthcare setting should encourage more innovation with a weighted mean of 3.69 based on the nursing student's perception. Healthcare settings encourage more innovation because it promotes critical thinking, a sense of adventure, and an openness to adapt that will serve our nursing students in the healthcare setting. Students think healthcare settings should encourage more innovation in their clinical practice and feel confident in implementing innovative practice in a healthcare setting. Also, students believe that innovative ideas could improve healthcare outcomes and contributed an innovative idea or practice during my clinical experience. The total average weighted mean of 3.35 and its descriptive equivalent is strongly agreed.

Furthermore, according to Fleba and Huebner (2021) shared that in the health care sector, innovations are the source of any improvement in the quality of service, quality of life but also a steady challenge to existing health care providers and systems. Progress in medicine requires new technologies like drugs, implants and devices, procedures like new surgical techniques or forms of organization like palliative medicine as an innovative form of care. The tremendous increase of the quality of life and the length of life over the last 100 years can be attributed to innovations in health care or related fields, such as hygiene and nutrition. Innovation is constantly improving prevention. In addition, innovations

revolutionize curative care. For example, stem cell transplants allow us to cure previously fatal cancers. In health care in particular, innovations enable us to treat previously incurable diseases or to make better use of scarce resources. To improve more the innovation of student nurses in the healthcare setting is that overall innovation helps to improve the quality of service and life to existing health care providers and systems and innovation in nursing ranges from impromptu solutions for immediate problems to long-term studies and sophisticated technology designed to improve healthcare delivery and patient outcomes. Also, innovation for student nurses requires creativity and a certain agility to innovate and provide high-quality, patient-centric care. Even Though healthcare technologies are obsolete, forcing specialists to learn completely new methods and requiring high investments, there is much more benefit because it will be easy for them to work with technology.

*Barriers and facilitators for nursing students in developing and applying entrepreneurial skills within the healthcare organization.*

Statements	ED (3)	D (2)	ND (1)	WM	DE	RANK
1. Lack of relevant coursework or training	8	18	0	2.31	D	2
2. Lack of mentorship or guidance	10	16	0	2.38	ED	1
3. Limited resources or funding for entrepreneurial initiatives	14	11	1	2.5	D	3
4. Time constraints due to academic workload	14	11	1	2.5	D	4
TAWM=2.42					ED	

The table shows that the lack of mentorship or guidance is extremely difficult with 2.38 weighted mean based on the nursing student's perception. Students have difficulties by the following statements such as lack of relevant coursework or training; Limited resources or funding for entrepreneurial initiatives; Time constraints due to academic workload. The total average weighted mean is 2.42, the mean values obtained indicate that the nursing students consider that this theme is extremely difficult for the profession and training of nurses. However, the view prevails that it is rarely addressed in undergraduate Nursing, especially among 3rd year students. This outcome adds up by the absence of formal training on business all through the nursing

college class, to foster explicit abilities and capabilities for an enterprising profile. In addition, nursing student's knowledge of the subject in its infancy because it is considered a minor subject, making it difficult to spread the entrepreneurial culture within the College of Nursing setting.

According to Trotte et al. (2021) stated that in the United States, most undergraduate Nursing courses do not teach concepts of innovative behavior and entrepreneurship, despite the recommendations of multidisciplinary and Nursing organizations that support the need for nurses to act as innovative agents and promoters of change. Furthermore, the training institutions need to incorporate the perspective that entrepreneurship in Nursing enables different perspectives of performance, which differs from the traditional work patterns, providing opportunities for individual and economic development through the creation of new ways of acting in the labor market. Along the same lines of thought, an Australian study also highlights the importance of supporting class bodies in defining specific policies for the development of entrepreneurship in the Nursing practice.

In this sense, in order to meet the needs of society and health care as well as search for innovations and technologies with a view to future labor market changes, it is worth noting that nurses need to be encouraged to invest in entrepreneurship training, thus encouraging discussion about curricular changes and strategies for developing entrepreneurship skills in nursing.

## V. CONCLUSION & RECOMMENDATIONS

### A. Conclusion

1. The level of entrepreneurial mindset among nursing students is commendably high. They exhibit a positive outlook and a strong willingness to take risks in pursuit of their goals, which is a crucial aspect required for fostering an entrepreneurial mindset, particularly within the healthcare industry.
2. Nursing students not only display a willingness to adopt innovative practices themselves, but they also hold the expectation that their future

workplaces will actively support and encourage such initiatives.

3. There is a pressing need for enhanced mentorship and guidance in the field of nursing education and professional development.

### B. Recommendations

1. Individual attitudes towards risk-taking can vary, influenced by personal factors, cultural backgrounds, and other contextual elements. Therefore, it is imperative to conduct further research and exploration to validate and generalize this conclusion to a larger population of nursing students. Additionally, it is worth noting that the sampling technique employed in this study was convenience sampling, which may necessitate caution in drawing broad conclusions.
2. Establish forums or platforms to evaluate and implement innovative ideas proposed by nursing students. Provide constructive feedback to ensure that these ideas are duly considered, reviewed, and implemented if they demonstrate potential to enhance patient care. This initiative aims to foster an environment that encourages nursing students to actively contribute their unique ideas and perspectives.
3. Nursing students ought to be provided with the essential support to effectively navigate their careers and cultivate the requisite skills for entrepreneurship within the healthcare profession. This can be achieved by engaging professionals from diverse sectors of the healthcare industry to serve as mentors, guest lecturers, or providers. Such collaboration offers students invaluable exposure to real-world scenarios, expands their professional network, and augments their career development.

## REFERENCES

- [1] Boyd, A.M. (2023). Unleashing the Digital Nurse: Exploring the Intersection of Nursing and Technology. Retrieved July 5, 2023 from <https://medium.com/@amandamboyn/unleashing-the-digital-nurse-exploring-the-intersection-of-nursing-and-technology-34877d39ae10>
- [2] Doody, O., & Doody, C.M. (2012). Transformational leadership in nursing practice.

- British Journal of Nursing, 21(20):1212-4, 1217-8. doi: 10.12968/bjon.2012.21.20.1212.
- [3] Entrepreneurial Mindset.(2021). Retrieved July 5, 2023 from <https://www.nfte.com/entrepreneurial-mindset/>
- [4] Flessa, S., & Huebner, C. (2021). Innovations in Health Care-A Conceptual Framework. International Journal of Environmental Research and Public Health, 18(19):10026. doi:10.3390/ijerph1819 10026. Retrieved July 10, 2023 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8508443>
- [5] Flessa, S., & Huebner, C. (2021). Innovations in Health Care-A Conceptual Framework. International Journal of Environmental Research and Public Health, 18(19):10026. doi:10.3390/ijerph1819 10026. Retrieved July 10, 2023 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8508443>
- [6] Gillin, L.M., & Hazelton, L.M. (2020). Bringing an entrepreneurial mindset to health-care: a new tool for better outcomes. Journal of Business Strategy. DOI:10.1108/JBS-03-2020-0049.
- [7] Kapasi, A., & Pei, J. (2022). Mindset Theory and School Psychology. Canadian Journal of School Psychology, 37(1), 57-74. <https://doi.org/10.1177/08295735211053961>.
- [8] Marville University (2023). What is a nurse entrepreneur, and how do You become one?. Retrieved July 11, 2023 from <https://online.maryville.edu>
- [9] Quantitative Research Design, 2023. Retrieved July 08, 2023, from <https://www.djsresearch.co.uk>
- [10] Seifert, P.C. (2021). The Power of Risk-Taking: Shaping Excellent Nursing Practice AORN J., 113: 5-7. <https://doi.org/10.1002/aorn.13292>
- [11] Solidum, J.N., Solidum, G.G., & Villa, E.G. (2020). Entrepreneurship Aptitude of Graduating Students of a City Run College of Nursing in Manila, Philippines. Ascendens Asia Journal of Multidisciplinary Research Conference Proceedings, Vol. 2 No. 2 (2018). Retrieved July 11, 2023 from <https://ojs.aare-searchindex.com>
- [12] Subramaniam, R., & Shankar, R. K. (2020). Three Mindsets of Entrepreneurial Leaders. The Journal of Entrepreneurship, 29(1), 7-37. <https://doi.org/10.1177/0971355719893498>. Retrieved July 9,2023 from <https://journals.sagepub.com/doi/10.1177/>
- [13] Tan, T.A., Yap, E., & Vicente, A. (2021). Entrepreneurship from an Emerging Nation: A Case Study from Cebu, Philippines. Philippine Management Review, 28, 1-24. Retrieved July 9, 2023 from <https://pmr.upd.edu.ph/index.php/pmr/article/view/354>
- [14] Trotte, L.A.C., Santos, J.L.G.D., Sarat, C.F.N., Mesquita M.G.D.R., Stipp, M.A.C., Souza P., Duarte, Q.G.M., Gobato, B.C., & Lima, C.F.D.M. V (2021). Entrepreneurial tendency of Nursing students: a comparison between graduating beginners and undergraduate students. Revista Latino-Americana De Enfermagem, 2021;29: E3402. doi: 10.1590/1518-8345.4397.3402
- [15] Vannuci, M.J., & Weinstein, S.M. (2017). The nurse entrepreneur: empowerment needs, challenges, and self-care practices. Nursing: Research and Reviews, 2017;7:57-66. <https://doi.org/10.21147/NRR.S98407>.
- [16] Yan, D., Wen, F., Li, X., & Zhang, Y. (2020). The relationship between psychological capital and innovation behavior in Chinese nurses. Journal of nursing management, 28(3), 471-479. <https://doi.org/10.1111/jonm.12926>