



# Understanding the Motivation behind Students' Pursuit of Nursing Education

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## **Authors' contributions**

*This work was carried out in collaboration between both authors. Both authors has read and approved the final manuscript.*

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## **ABSTRACT**

Nursing students' motivation before starting their education is very important. Motivation is essential because it affects students' interest and learning efforts during their education. This study aims to determine global and national phenomena regarding nursing students' motivation in developing their skills as professional nurses. The method used is a literature review of the Google Scholar, Garuda, PubMed, ScienceDirect database website and the official global and national health database. Journal searches using certain keywords that match the inclusion criteria. Two aspects of motivation were found, namely intrinsic motivation and extrinsic motivation, the dominance of intrinsic motivation creates nursing students with great interest and learning efforts. Extrinsic motivation can present students with achievements when accompanied by support and environmental influence. The quality of future nurses is influenced by nursing education, therefore it is necessary to renew the new student selection system by considering the motivation to choose

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nursing and the commitment to become a professional nurse. Support, a fun learning system, healthy communication with lecturers can change students' perspectives on initial motivation varices grades.

*Keywords: nursing students; motivation; quality of education; persuit nursing education.*

## 1. INTRODUCTION

Nursing is a professional service in a health setting that touches on aspects of bio, psycho, social and spiritual services. Professional services are based on nursing knowledge and tips for individuals, families and communities, both sick and healthy in a comprehensive manner. The role of nurses in services is to provide nursing care through hard skills and soft skills (Ariga, 2020). The presence of the nursing profession as an answer to the health needs of the community to improve optimal health (Ariga, 2020). Throughout the emergence of nurses in history, currently and in the future, nurses are at the forefront of health services. In the report (World Health Organization [WHO], 2020) regarding "WHO and partners call for urgent investment in nurses" describes that nurses are the backbone of health services. WHO together with the International Council of Nurses (ICN) and Nursing Now stated that there are currently 28 million nurses on a global scale. However, this number leaves a shortage of 5.9 million. The shortage of nursing staff is in countries in Africa, Southeast Asia and parts of Latin America (WHO, 2020). In addition to the number of nurses that is not optimal, the distribution of nurses globally is a problem in the global health system (Iddrisu, et al., 2025). In addition to the number of nurses that is not optimal, the distribution of nurses globally is a problem in the global health system. The uneven proportion of nursing staff and health workers is still a problem in improving the quality of health services (Purwaningsih, E, 2023)

Not free from these problems, Indonesia is one of the countries with less than optimal nursing needs. Currently, the number of nurses in hospitals is around 147,463 (45.65%) nurses or in a ratio of 87.65/100,000 population, while the standard target ratio for nurse needs for 2019-2025 is 180-200 nurses per 100,000 population (Ministry of Health of the Republic of Indonesia [KEMENKES RI], 2021). In Indonesia, not only is the number of nurses not optimal, but the distribution of nurses is also a problem in the health system. This is related to the geographical conditions of the country. Indonesia is typical of

areas that are difficult to reach, many health workers, including nurses, consider economic opportunities in working. This condition causes health workers to only be concentrated in a few areas (Purwaningsih, E, 2023). Indonesian nursing currently still needs to improve itself in order to answer the challenges of today's era. In answering the health problems above, nursing colleges are needed as a long-term solution. Currently, there are many nursing colleges spread throughout Indonesia, however, it is necessary to update the registration system, learning and motivation of graduates. In addition, the determination of nurse qualifications is in accordance with the motivation for skill development. Doubts about the quality of nursing education can be seen in the student admission selection system (Rafii, et al., 2019). So far, selection has focused on cognitive tests such as written tests, structured interviews and health tests. Psychological tests as psychological tests are often missed and ignored during the selection stage, while psychological tests are useful for observing the self-motivation of new students in lectures, developing abilities and career paths (Komariah, A., Fiana, M., & Ningsih, R, 2024).

Nursing student motivation will be one of the determining factors in achieving targets, self-development and abilities in the nursing profession. Motivation will help students achieve success and complete optimal education (Lemiecha & Leńczuk-Gruba, 2020). The drive to achieve achievement, the desire to develop oneself, move oneself for change, behavioral direction and behavioral intensity are the essential basics of motivation (Lestari, et al., 2020). The choice of vocation in college as a career determinant is influenced by various factors such as views on nurses themselves (Komariah, A., Fiana, M., & Ningsih, R, 2024). Today, nursing students do not have motivation during college or even to pursue a career. Motivation in students mostly appears extrinsically with little intrinsic motivation possessed by students. Extrinsic motivation such as encouragement from those closest to them, the wishes of family/parents, environmental coercion or even the existence of a profession in

the area of residence. For example, parents who want their children to become nurses because nursing is seen as a high-caste job and the existence of nurses in eastern Indonesia creates a necessity for society to choose this profession. This is one of the reasons for the lack of motivation for self-development and abilities in students in the nursing profession (Messineo et al., 2019).

Students who enter nursing education are no longer motivated or called to become nurses. Not a few students have intrinsic motivation to become nurses, however, over time, students' idealism is eroded when they see the reality of nurses' wages in Indonesia. Students become lazy and do not focus on their initial motivation to become nurses. Not infrequently, students take or choose to become nurses because they are considered easy to get a job. Generally, students with high motivation will be seen in their achievements during their education, their desire to develop their abilities, their willingness to explore their profession, their dreams of career paths and their passions become influences in their profession. Motivation is a major influence in determining the success of a professional nursing career, however, motivation is influenced by various perspectives of each individual. The success of the implementation of nursing care is supported by efforts to improve the professionalism of nurses. The achievement of career care, potential and professional performance are influenced by motivation during their education.

## **2. METHODS**

The literature review design was applied in this study using a systematic approach to analyze the results of various studies. The journal findings were re-elected to match the criteria. The search results obtained 5 journals. The journals were filtered with the following criteria: publications in the last 5 years 2019-2024 by discussing the phenomenon of student motivation during education or just entering education in choosing a nursing career.

## **3. RESULTS AND DISCUSSION**

In the analysis, the author found that motivation has a positive effect on the seriousness and achievement of learning, the development of professional skills and expertise and the ambition to become a professional nurse. Uniquely, in the study, extrinsic motivation is very prominent and

always superior to intrinsic motivation. This indicates that many students do not have seriousness during their education, students only carry out external demands. However, over time, extrinsic motivation often changes into intrinsic motivation. Students begin to feel passion in their profession, feel comfortable with learning and enjoy their practice period. The opposite is also found, intrinsic motivation can be eroded and lost because of difficult learning, not in accordance with initial expectations and economic factors.

### **3.1 Intrinsic Motivation**

Nursing students describe that nurses are required to have high quality in the world of work or education. Nurses are described as individuals with compassion, generosity, endurance, politeness, wisdom and expertise and competence in clinical practice. Nurses are likened to someone who gives 'their heart voluntarily' meaning that nurses really work using their hearts but still maintain professional ethics. These things are described as the intrinsic motivation of nursing students (Seran, Bria, & Meo, 2019). The emergence of intrinsic motivation in these students is based on the perspective of nurses themselves. In the study of Omari, et al. 2023 students wanted to become nurses because they were considered 'life savers', they considered nurses to be volunteers in health services to save someone's life. Based on this perspective, he was motivated to become a nurse starting by undergoing nursing education with focus and well and would certainly lead him to a key player in health services. This is in line with the study of Carillo, Massimino, and Santella in 2022 that social values, altruism and the desire to help others were the first motivations for students to become nurses. Working by providing services that are beneficial to others is the goal in pursuing a nursing career.

The intrinsic motivation of each student can be seen from their behavior during learning. Students who decide to take nursing in self-determination are characterized by enjoying learning in lectures. They look happy and joyful, effective in learning, involvement in learning, efforts to achieve expertise and optimal health during lectures (Ryan & Deci dalam Torbergsen, Utvaer, and Haugan 2023). Motivation from within can arise because of role models during growth and development. Students are ambitious to become nurses who help many people sincerely. This ambition results in students' learning efforts in lectures. Often motivation is

associated with student achievement during lectures, however, research by Torbergson, et al. in 2023 showed that motivation actually does not affect student learning achievement but affects learning efforts. Maximum learning efforts provide output of achievement in learning. Student learning efforts are generated by motivation, learning efforts have a positive impact on student performance and learning outcomes. For nursing students with intrinsic motivation, pleasure and enjoyment in lectures are not important values. These students think more about their benefits and functions as nurses. They wonder more about whether after graduating they can struggle in a career, they will consider the benefits of helping and caring for others in need. Students like those above are less concerned about the steep educational process they have to go through, however, improving their abilities, skills, career prospects, benefits and self-function are more important than other aspects (Torbergson, et al., 2023).

Amir's 2019 study stated that there is a relationship between nursing students with intrinsic motivation having maximum learning outcomes or achieving more than students with other motivations. This means that the initial motivation to enter the world of nursing determines students during their education and even their future careers. Most nursing students with satisfactory GPAs come from students with their own motivation or desire to enter the world of nursing. This condition is because students have great enthusiasm compared to others. On average, students with intrinsic motivation do not think about facilities and infrastructure on campus or other things that do not affect their academic achievement. These students focus on knowledge and the development of abilities and skills during lectures so that they can be used in developing a nursing career.

Nursing students certainly have unique motivations, whether high motivation or lack of motivation of course, the nature of the motivation is also unique, some are active in studying because of knowledge, on the other hand, they are active in studying for the interests of qualified work (Rafii, et al., 2019). Intrinsic motivation is related to the interests, values, beliefs and characteristics of each student. Nursing students with intrinsic motivation are very ambitious with information, knowledge, caring for patients, altruistic attitudes, the desire to help patients and interest in the nursing profession. One of the nursing students in the 2019 Rafii, Saeedi, and

Parvizy study stated that he was ambitious with all the knowledge during his education, aspiring to have broad knowledge and not only limited to physical skills. According to him, internal strength as a motivation to learn during lectures with maximum learning outcomes.

In addition to the relationship between intrinsic motivation and nursing students' learning efforts or achievements, there is also a relationship between intrinsic motivation and nursing students' empathy. As we know, nurses are identical to empathy in service marked by non-verbal messages, speech intonation, expressions and gestures (Fadillah, et al., 2021). Nursing students with intrinsic motivation have a better level of empathy than others. Motivation affects student behavior during lectures including clinical practice. Students with intrinsic motivation have been equipped with qualified knowledge so that in clinical practice they are more confident and enjoy and can implement academic knowledge. Students will show empathy because it is a guide to achieve what is aspired to. Intrinsic motivation will bring nursing students to the basics of the nursing world that is being run, of course it will increase empathy in service (Fadillah, et al., 2021).

Research by Seran, Bria, and Meo in 2019 showed that there was no relationship between intrinsic motivation and nursing student achievement. Learning achievement is not simply the result of students' initial motivation to enter or choose nursing, there is a role for other factors. In addition to motivation being used as a serious reason for studying, there are intelligence, emotional, spiritual, creativity, level of difficulty, physical health, interests, talents, motives, economy, family, environment and other instruments. It was found that nursing students with low intrinsic motivation still had achievements during their studies. This condition is due to the commitment and ambition of students towards values, not towards the ideals of professional nurses (Seran, et al., 2019).

The desire of students to enter the world of nursing and hope for future career development is indeed influenced by the determination or selection of vocations when entering the world of college. Intrinsic motivation makes nursing students enjoy the college process more. In addition to motivation from within oneself, of course the environment also determines the seriousness of learning. Support from parents and friends is needed, the influence of economic

level and difficulty of adaptation during college. Often students who enter the world of nursing because of their own desires appear unenthusiastic during college because there is no support from their parents. Parents who do not like their future career, families are not supportive of their children's choices, economic problems in the family, adaptation of the college learning system and friends during education. These factors can break the initial motivation of nursing students so that they appear reluctant to go to college, have no interest in learning and career development.

### **3.2 Extrinsic Motivation**

The choice of nursing by students is seen based on the great job opportunities. Nursing students see great job opportunities and can be included in any part of the health sector. Nursing students in Tanzania stated that choosing nursing as a future career was because the salary offered in that country was quite large. Nursing students considered that working as nurses would guarantee their future financial life (Omari, et al., 2023). This kind of motivation can be said to be intrinsic motivation, however, it is influenced by external factors. The students clearly chose nursing because of their own desires but were influenced by financial security and future job opportunities. Nursing students with this type of motivation make them less ambitious during their studies. These students are more relaxed, not bothered by learning, not thinking about developing knowledge and careers. They only follow how the education process takes place in the hope of graduating.

In other states, nursing students said that salary was one of the things that reduced motivation during their studies. This is because in some countries, nurses' salaries do not match the price of education that has been spent. Nursing students with intrinsic motivation can decrease their motivation due to inappropriate salaries. These nursing students consider that the nursing profession requires extensive training, great responsibility, a difficult and challenging work environment, therefore, appropriate incentives are also needed. Other motivations are influenced by the media they see. The image of the nursing profession in the media or society influences students' desire to pursue the nursing profession. One nursing student

said that they were interested in becoming a nurse because they saw a drama or film related to the health sector (Omari, et al., 2023). Nursing students with extrinsic motivation as above are easily shaken during nursing studies. They easily experience decreased motivation because they choose nursing because of the influence of external instruments. If there is a change in the instrument that motivates them, they will experience decreased motivation.

Another extrinsic motivation is the desire or coercion of the family, especially parents, there are several nursing students who are in this profession because of coercion from their parents. Parents' assessment of a nursing career is the reason they want their children to enter the world of nursing. Parents consider nurses to have long-term career promotion and to be a guarantee for their children in the future (Santos, 2020). Nurses are considered to have a higher social status than other professions so that when their children become nurses it will affect the family's social status. Nursing students who are forced to choose this profession find it more difficult to follow the learning during lectures. Often nursing students who are forced to enter the world of nursing do not have specific achievements, average grades tend to be low, slow development of abilities and no passion during lectures (Santos, 2020).

In addition to intrinsic and extrinsic motivation, the development of nursing students' skills is also influenced by the role of educators during lectures. New nursing students with intrinsic or extrinsic motivation still need help from lecturers during learning. Early semester nursing students are beginners in developing clinical skills. Often a complex learning system makes it difficult for students to adapt and becomes a trigger for stress. In this case, a lecturer is needed as a clear and competent leader, the lecturer will help students develop more competencies than just gaining clinical knowledge. Lecturers can influence the motivation of nursing students through the learning approach carried out in class. Students who were initially not interested and forced to enter the world of nursing will change to interest and enthusiasm when in a fun class. Communication between lecturers and students will change students' perspectives on the difficulty of learning nursing (Torbergson, et al., 2023).

**Table. 1. Reviewed articles and key findings**

Author	Year	Title	Method	Results
<ul style="list-style-type: none"> <li>• Rehema Bakari Omari</li> <li>• Pendo Paschal Masanja</li> <li>• Golden Mwakibo Masika</li> </ul>	2023	<i>Secondary school Student's perspectives about nursing career and their motivations to become future in nurses in Singida municipal</i>	Qualitative descriptive	Extrinsic and intrinsic factors regarding nursing emerge such as perspectives on nursing and the nursing profession, the role and quality of nurses, workplace, nature of work, position while working and career levels of this profession. Intrinsic factors are found such as generosity, compassion, endurance, politeness, wisdom and practical skills. From this intrinsic motivation, nursing is said to be a calling profession that requires motivation and intention from within. Extrinsic factors such as public figures as role models as motivators in career selection.
<ul style="list-style-type: none"> <li>• Illeana M. Carillo</li> <li>• Phoebe M. Massiminino</li> <li>• Anthony J. Santela</li> </ul>	2022	<i>Exploring the motivations of nursing students in New York State</i>	Conceptual framework	An exploratory cross-sectional online survey was conducted with a convenience sample of 158 students in nursing education programs leading to a Bachelor's degree in New York State. The researcher focused on identifying motivations for pursuing a career in nursing, including a career as a Registered Nurse (RN). Personal motivators (primarily the desire to help others) were the primary reason for choosing the profession (60.1%). Occupational motivators (including job, benefits, and financial reasons) ranked second (26.8%), and Lifestyle motivators (including work hours and schedule) ranked third (13.1%). Statistical analysis revealed consistent prioritization of primary motivators across subgroups of nursing students. Understanding student motivations in nursing programs can inform academics and employers in recruiting and retaining future nursing professionals.
Luis Miguel Dos Santos	2020	<i>I want to becoe a Registered Nurses as a non-traditional, returning, evening, and adult student in community college: A study of Career-Changing nursing</i>	Qualitative descriptive	This study produced two major themes or motivational reasons for choosing a career as a nurse, the first being family considerations. This extrinsic motivation produced several sub-themes, namely optimal financial resources, better work management, and a good image of nurses for family members. The second motivational theme was guaranteed social status for the future with the sub-theme of the nurse's position having a clear future career path. Uniquely, both are extrinsic motivations, no reasons were found from within themselves regarding choosing a nursing career.

Author	Year	Title	Method	Results
		<i>students</i>		
<ul style="list-style-type: none"> <li>• Vera Feronica</li> <li>• Muhammad Syafrizal</li> <li>• Suryadi Imran</li> </ul>	2020	The relationship between interest and motivation to become a nurse and learning achievement in nursing students	<i>Ex post facto</i>	The results of the study showed a positive and significant relationship between motivation to become a nurse and nursing achievement in nursing students. There is a close and quite strong relationship between the two variables. Great motivation affects learning achievement, however, it was found that if the learning that is learned is not in accordance with the initial motivation and interest, students will not learn as well as possible. Students who have high motivation to become nurses will be motivated to learn so that they will get good learning outcomes or learning achievements and vice versa.
<ul style="list-style-type: none"> <li>• Antonius Edi Dasi Seran</li> <li>• Gaudentiana Un Bria</li> <li>• Christina Marina Meo</li> </ul>	2019	The relationship between motivation to become a professional nurse and learning outcomes of fifth semester students, level III, Belu Regency Government Nursing Academy, 2014/2015 academic year	<i>Cross-sectional quantitative</i>	57.9% of students have low intrinsic motivation, 52.9% of students have high extrinsic motivation to become nurses, 52.1% of students have low motivation, 47.9% of students have high motivation, 96.7% of students have a GPA range with a very satisfactory category. The results of the analysis did not find any relationship between intrinsic, extrinsic, and motivation to become professional nurses with learning outcomes.

## 4. CONCLUSION

Nurses are a fundamental profession in health services. Nurses play a full role in the health of the wider community. The nursing profession contributes significantly to health services with a focus on health problems, social care, counseling and education. Over time, regeneration of old nurses into young nurses is needed. The process of nurse regeneration is certainly through higher nursing education. Currently, the global or national is still experiencing a shortage of nursing staff. The presence of nursing colleges is a long-term solution to bring in new nurses. The quality of future nurses is determined by nursing students who are in academic or professional nursing education. The development of nursing students' skills and abilities is influenced by the process they go through during their education and other instruments. One of them is the motivation of nursing students to become nurses. What they want, how their interests and support are from their families and their environment. Nursing students, both intrinsically and extrinsically motivated, have the same motivation towards developing professional nursing skills. This motivation can be used as a first step in pioneering a nursing career even by coercion. Motivation accompanied by the support of family and the environment will create interest and enthusiasm in each student. Efforts and learning achievements will emerge by themselves according to the motivation of new nursing students.

Nursing colleges need to change their student admission system. So far, nursing student admission has only focused on academic selection and cognitive tests such as written tests and interviews. Psychological tests are often ignored and considered not to affect the quality of students during lectures. Colleges need to know the motivations of students in choosing a vocation and future career as a nurse in order to improve the quality of future nurses. The selection stage needs to be added regarding the commitment of nursing students during education to always focus on learning, developing knowledge and skills

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Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

## REFERENCES

- Amir, S. (2019). The influence of learning motivation on the academic achievement of Diploma 3 nursing students at Kaltara Nursing Academy Tarakan, Semester V, Year 2018. *Scientific Health Journal "Pencerah"*, 08(2), 81–86. <https://doi.org/10.34050/elsjsh.v4i3.15003>
- Ariga, R. A. (2020). Nursing profession. In S. Z. Nasution, R. Amelia, F. A. Ariga, & S. Ariga (Eds.), *Textbook: Basic concepts of nursing* (1st ed., p. 8). Deepublish.
- Carillo, I. M., Massimino, P. M., & Santella, A. J. (2022). Exploring the motivation of nursing students in New York State. *American Journal of Health Studies*, 37(1), 7–18. <https://urn.fi/URN:NBN:fi:amk-202404106176>
- Fadillah, R. H., Sumarni, T., & Adriani, P. (2021). The relationship between self-motivation and empathy ability of nursing students at Universitas Harapan Bangsa. In *National Seminar on Research and Community Service (SNPPKM)* (pp. 1289–1297).
- Iddrisu, M., Poku, C. A., Pwavra, J. B., Yawson, A. O., Mensah, E., Oppong, S. S., ... & Aziato, L. (2025). From aspiration to achievements: Exploring the motivational drives behind female graduate nursing students' pursuit of higher education in Ghana. *Nurse Education Today*, 106580.
- Komariah, A., Fiana, M., & Ningsih, R. (2024). Motivation and independence in learning in nursing new students. *Java Nursing Journal*, 2(1), 65–70. <https://doi.org/10.61716/jnj.v2i1.35>
- Lemiecha, A., & Leńczuk-Gruba, A. (2020). Nursing—why? Students' motives for choosing nursing as a field of education. *Nursing in the 21st Century*, 19(1 (70)), 22–28.
- Lestari, T., Issroviatiningrum, R., Abdurrouf, M., & Sari, D. W. P. (2020). The relationship between interest and motivation of nursing students in continuing the nursing profession at Unissula Semarang. *Proceedings of Unissula Scientific Student Conference (KIMU)*, 3, 66–75. <http://jurnal.unissula.ac.id/index.php/kimukes/article/view/10221/4589>



- Messineo, L., Allegra, M., & Seta, L. (2019). Self-reported motivation for choosing nursing studies: A self-determination theory perspective. *BMC Medical Education*, 19, 1–14.
- Ministry of Health, Republic of Indonesia. (2021). *Report on the need for medical personnel in Indonesia*.
- Omari, R. B., Masanja, P. P., Masika, G. M., & Hussein, M. R. (2023). Secondary school students' perspectives about nursing career and their motivations to become future nurses in Singida Municipal: A qualitative study. *Nursing Open*, 10(10), 7014–7024. <https://doi.org/10.1002/nop2.1957>
- Rafii, F., Saeedi, M., & Parvizi, S. (2019). Academic motivation in nursing students: A hybrid concept analysis. *Iranian Journal of Nursing and Midwifery Research*, 24, 315–322. <https://doi.org/10.4103/ijnmr.IJNMR>
- Rafii, F., Saeedi, M., & Parvizi, S. (2019). Academic motivation in nursing students: A hybrid concept analysis. *Iranian Journal of Nursing and Midwifery Research*, 24(5), 315–322.
- Santos, L. M. Dos. (2020). I want to become a registered nurse as a non-traditional, returning, evening, and adult student in a community college: A study of career-changing nursing students. *International Journal of Environmental Research and Public Health*, 5(8), 1–20. <https://doi.org/10.3390/ijerph17165652>
- Seran, A. E. D., Bria, G. U., & Meo, C. M. (2019). The relationship between motivation to become a professional nurse and academic achievement in 5th semester, 3rd level students of the Nursing Academy of Belu District Government. *Journal of Nursing Friends*, 1(02), 70–79. <https://doi.org/10.32938/jsk.v1i02.254>
- Torbergson, H., Utvaer, B. K., & Haugan, G. (2023). Nursing students' perceived autonomy-support by teachers affects their intrinsic motivation, study effort, and perceived learning outcomes. *Journal of Learning and Motivation*, 81. <https://doi.org/10.1016/j.lmot.2022.101856>
- World Health Organization. (2020, April 7). WHO and partners call for urgent investment in nurses. World Health Organization. <https://www.who.int/news/item/07-04-2020-who-and-partners-call-for-urgent-investment-in-nurses>

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