

# ORIGINAL ARTICLE



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# Singapore nurses' perception of professional identity

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### Abstract

**Introduction:** Nurses' professional identity is important for their career orientation and clinical practice. This study explored Singaporean nurses' perceptions of professional identity. The results provide an understanding of how guided learning and reflection could help nurses in their professional identity formation and development.

**Methods:** Using an exploratory descriptive qualitative research study and purposive sampling by researchers teaching in the programme, 64 Registered Nurses with a diploma qualification pursuing a Bachelor of Science degree with Honours in Nursing programme in Singapore were invited to participate. They responded to open ended survey questions online, which were analysed using a thematic analysis. Ethical approval was obtained.

**Results:** All 64 first year students were invited to participate at the start of the module and upon the completion. The response rates were 94% and 81% respectively. Two overarching themes – "nurses as professionals with knowledge and moral character" and "the construction of professional identity" - emerged from the data.

Conclusion: The nurses perceived their professional nursing identity as a construct comprised of knowledge and moral characteristics, which is consistent with international literature. A professional nursing identity, relationships with other healthcare professionals, patients and confidence in practice were all interrelated. Guided reflection and discussion on clinical experiences and social interactions helped students become aware of their professional identity and responsibilities. Such purposive educational effort needs to be started early and supported through the students' educational journey into clinical practice.

**Keywords:** Professional Identity of Nursing, Singapore Nurses, Image of Nursing, Social Perception of Nursing in Singapore, Nurse Education

### **Practice Highlights**

- Professional nursing identity can be facilitated by guided reflection.
- Purposive educational effort needs to be started early and continued in clinical practice.
- Awareness of professional identity relates to practice, relationship and professional development.

### I. INTRODUCTION

# A. Background

Professional identity is 'one's professional self-concept based on attributes, beliefs, values, motives, and experiences' (Slay & Smith, 2011, p85). This study explored the perceived professional identity a group of Registered Nurses (RNs) pursuing a top-up bachelor's degree in nursing.

The development of professional identity is an ongoing narrative shaped by work, experience and nurses' sense of ownership (Mao et al., 2021). It is a construct comprised of personal values and beliefs fused with the expectations of society and the profession, which are in turn reflected in the values and ethics of professional practice (Crigger & Godfrey, 2014). It is a difficult concept to define and convey causing confusion for educators in how best to guide novice nurses (Fitzgerald & Clukey, 2022). As research evidence on how nurses

can elicit their professional identity through guided reflection is lacking, this study aims to offer educators an important teaching strategy in their toolkit.

Deppoliti (2008) found that nurses with a strong professional identity provided better patient care and developed higher competencies than those nurses who did not. Similarly, Clements et al. (2016) found that affirmation of professional identity facilitated a deeper sense of self-worth and belonging in nurses who were more committed to their careers as a result. Besides job commitment, a strong professional identity enhances job satisfaction and reduces burnout level (Sabanciogullari & Dogan, 2015). All are important in a climate of nursing shortage. In Singapore, the local nurse attrition rate was reported at 7.4% in 2021, the highest in five years due to workload and stress (Goh, 2022).

The transition of pre-registration nurse education to Higher Education Institutes in the 1990's, reduced opportunities for students to socialise with experienced staff, impacting the development of professional identity (Bartlett, 2015; Marique & Stinglhamber, 2011). In Singapore, other than the twelve-week consolidation Pre-Registration Clinical Practice and the Transition to Practice programme at the National University of Singapore, clinical placements are mostly focused on attaining nursing skills with two to three weeks duration being the norm. These touch and go kinds of clinical placements do not give students sufficient time to form significant relationships with the clinical nurses, thereby affecting their practice experience and perceived professional identity (Chen, 2020).

In recent years, Singaporean nurses have taken roles such as Advanced Practice Nurses (APN), which require more sophisticated knowledge, clinical experience and enhanced autonomy to practice (Ministry of Health, 2012). However, there is a lack of awareness of their training, abilities, and roles by the public and other healthcare professionals (Woo et al., 2020; Xu et al., 2022). Ten Hoeve et al. (2014) highlight that nurses are responsible to project their own public image. When there is a lack of communication from the professionals on their roles, the public is influenced by the media, which often focuses on practice failures (Girvin et al., 2016; Peate, 2016). Mistakes made by a minority of nurses tend to be perceived by the public as the 'typical nurse' and nursing practice in general without understanding the context (Hoyle et al., 2017).

Such inertia creates a cyclical situation whereby nurses draw their professional identity from their public image and when portrayed negatively, are less likely to communicate their professionalism in return. As professional identity is such a complicated construct, students need guided reflection on their professional experiences, to develop professional values and affirm their professional identity. Such awareness is necessary to facilitate public dialogue and deliberation and portray professional image in a more positive and accurate manner.

Nurse education, being the catalysing process of converting a layperson into an individual whose values and beliefs are consistent with those of the professionalisation, should take action (Benner et al., 2009; Clouder, 2003; Johnson et al., 2012). Black (2014, p118) discussing the goal of nursing education argued:

"Nursing education is not simply teaching you the tasks of nursing...the overriding goal of your education is to teach you to think like a nurse, to see the world of healthcare through the lens of nursing..."

Fostering a positive professional identity is an imperative within nursing education (Clements et al., 2016). This research offers a strategy to realise such an aim.

### B. Study Context

Nursing schools in Singapore follow Singapore Nursing Board's (SNB) guideline regarding the development of students' reflective thinking skills and professional identity (Singapore Nursing Board, 2011). However, the character and psychological aspects of nursing professional identity, such as integrity, compassion and courage, are often learnt through the hidden curriculum in practice as opposed to explicit guided reflection in classrooms. Students need guidance to reflect on their clinical practice and social encounters, and hence commit to the process of reflection as an integral feature of professional life (Fitzgerald & Clukey, 2022).

Realising such an educational priority, a module was designed to facilitate students' professional identity development in a Bachelor of Science degree with Honours in Nursing programme in one of the higher education institutes in Singapore. This post-registration degree programme is offered jointly by a Singapore university and an overseas university, admitting students who have completed their Diploma in Nursing and are registered with the SNB.

To support the students in developing their concepts of nursing professionalism and practice, they were guided in gaining a critical understanding of nursing knowledge, reflective models, and methods. Table 1 shows the teaching and learning activities. Forming small groups, students set ground rules of respect and confidentiality at the initial meeting. Facilitators started by sharing and reflecting on their own critical clinical experiences, including mistakes made and what they learnt from them, to help build trust and make students feel safe to share their stories.

Lecture/seminar	Guided Small Group Discussion
Nursing knowledge, professional development	Discusses nursing knowledge and theories, professionalisation, history of nursing and Singapore nursing
Skills and attributes in reflective thinking; Reflective models	Self-awareness: Johari's window, clarify values, life map Reflection in clinical teaching and learning
Reflection, thinking and knowing	My critical moment: attention to details, emotion and feelings, analysis of the situation, learning points, plan for future
Purpose, value, reason and ethical issues in practice	Reflective case-study: description, critical analysis, recognise value and ethical conflicts
Me, other healthcare professionals, society and self-growth	Reflect on quality care, patient safety, my role and multidisciplinary team; SNB guidelines and standards, Singapore Medical Council guidelines and Allied Health Professions Council Act
Professional power and position	Being a reflective practitioner and collaborate with others

Table 1. Teaching and learning activities

Lectures and seminars covered important concepts to prepare the students for group discussions. The group facilitators guided students to first describe their experiences clearly, and then explore and acknowledge their emotions and feelings. Negative emotions such as shame, hurt, resentment and regret were acknowledged and considered integral to the spectrum of human emotions. From there, students were guided to explore the cause of their emotions. Once highlighted, an indepth literature review was undertaken to help students make decisions on personal and professional learning strategies.

An understanding of self and professional identity can help students affirm their professional role and career commitment (Sather, 2020). These guided reflective thinking activities enabled students to reach a new and deeper understanding of their beliefs and values, as well as the socio-cultural, professional, and personal background underpinning them.

Having created a student-centred module based on their learning experiences, this study was initiated to understand their perceived professional identity and the impact on practice. The research questions were:

- (1) What are Singapore Nurses' perceptions of Professional Identity?
- (2) What is the impact of their perceived professional identity on practice?

### I. METHODS

### A. Methodology

Adopting the exploratory descriptive qualitative approach to explore under researched topics detailed by Hunter et al. (2019), this study explores Singapore nurses' professional identity, to offer an initial understanding of this concept.

# B. Study Sample

A purposive sample of all first-year students in 2018 was invited to participate. Eligibility criteria included: age above 21 years old, having a pre-registration Diploma in Singapore, RN registered with the SNB and enrolled in the module. All 64 students met these criteria. Most students were in their early twenties from Chinese, Malay, Indian and other ethnic groups. Gender split was 73% females to 27% males, while 45% had above six months of clinical experience. Their particulars are shown in Table 2.

Gender	Male	16
	Female	48
Age	21 – 25	42
(Years)	26 - 30	19
	> 30	3
Ethnic	Chinese	37
	Malay	18
	Indian	7
	Others	2
In	Fresh graduates	35
practice	Less than 1 year	10
as RN	1-3 years	12
	>3 years	7

Table 2. Participant particulars

### C. Ethical Consideration

The study was approved by the University's Ethics Committee. Students were informed of the study and given the opportunity to ask questions. They were assured that their decision to participate was entirely voluntary and not linked to their academic performance in any way. The students were provided with a research information sheet clearly describing the purpose of the study and their involvement along with the consent form. They were given time to consider their decision. Each student was assigned a code which was kept separately from the data in a locked drawer. Any information that could lead to a student's identification was rephrased or removed.

# D. Data Collection

The complexity of the concept of professional identity meant it would have been confusing to ask the students the research question verbatim. Consequently, the questions were phrased in a way that was more intuitive for students to understand. They were:

- When you think of professionalism, what image or word comes into your mind?
- What is the effect of professional identity on your practice?

Those who agreed to participate were sent the online survey questions. This approach was adopted as the students were still new to the programme and likely to feel overwhelmed and less inclined to be authentic if interviewed. The online survey was carried out at the start and the end of the module. The purpose of the two-point data collection was to consider the students' learning and ongoing reflection and to provide them with the opportunity to answer the questions comprehensively. A quiet classroom in school was

offered to those wishing to avail themselves of it at each data collection point.

### E. Data Analysis

All submitted responses were included for analysis using the thematic analysis approach described by Braun and Clarke (2012). The first author (MC) familiarised herself with the data by reading the narratives and coded the entire data set. Codes were applied to sections with similar meanings, which were then categorised, clustered and organised into themes. The indexed data were linked to the actual transcripts to demonstrate a clear audit trail (Braun & Clarke, 2006).

A second round of data analysis was carried out by the same author four weeks later to allow a more in-depth analysis, identification of consistencies and clarification of any discrepancies. According to Miles et al. (2019), a time lapse between the two analyses allows the researcher to look at the data afresh and minimise the potential for bias and assumptions. In so doing, it enhances the rigour of the analysis and the credibility of the findings.

The second author triangulated the data analysis by synthesising codes into themes and linking them to the original data to contextualise their meaning. The two authors then met to reach a consensus on the themes. The refining process of Theme One is shown in Tables 3 and 4. Table 3 shows the initial thematic analysis, while Table 4 illustrates the finalised themes.

Theme	Subtheme	Codes
Theme 1: Professional Characteristics	Knowledgeable and good attributes	expert knowledge
		science and the arts
		communication
		able to teach
		intelligent
		patient
		understanding
		caring
		control emotion
		non-judgmental
		sacrifice
		gratefulness
		positive,
		trustworthy

Table 3. Initial theme one with subthemes and codes

Themes	Subthemes	Codes
Theme 1: Professionals with	Knowledgeable	expert knowledge
knowledge and moral character		communication
		intelligent
	Moral character	understanding
		caring
		control emotion
		sacrifice
		positive
		trustworthy
Theme 2: The construction of	A social perception	as a ruler
professional identity		traditional image
		the classes of professional
		being respected (negotiated)
		vibes of being superior
	Identity challenges	being watched and monitored
	, 8	power position
		source of negativity
		boundary and roles
	Realising their role in the construction of	advocate self
	professional identity	long journey learning to be one
		hard work in making one
		not to lose faith

Table 4. Finalised themes, subthemes and codes

### III. RESULTS

All 64 students agreed to participate and signed the consent form. The response rate at each collection point was 94% and 81% respectively. While the reason for the drop is not clear, it is possible that the demands from competing modules at the time of the second survey were influential.

Two overarching themes emerged (Table 4). The first, "Nursing profession is perceived as a profession with knowledge and moral character" stood out clearly from the responses given. It encompassed the subthemes of knowledge and moral character. The second theme – "The construction of professional identity" - elicited codes that made up the subthemes of social factors, identity challenges and nurses' role in the construction of their professional identity.

Theme 1. Professionals with Knowledge and Moral Character

Students perceived a professional nurse as someone with a "good character, and capable of knowing" and "doing what was needed with self-control and discipline". The theme was supported with two subthemes – 'knowledge' and 'moral character'.

1) Knowledge: The students believed a professional nurse needed to engage in learning throughout their professional lifetime. A knowledgeable nurse was described as "knowing the job well" and "having special knowledge and being able to perform well". The knowledgeable nurse could create new knowledge through study as exemplified in the quote below.

"...Professionalism is the outcome of a work that can have both the elements of arts and science .... been thoroughly sorted out to create knowledge that could be of relevance to the present study or development for future studies."

(S37)

2) Moral character: The moral character of a professional nurse encompasses the moral agency demonstrated in his/her daily practice. A nurse needed to be "someone with good virtues and moral values" and uphold "ethical conduct and practice contentiously beyond any selfish thoughts". The quotes below indicate some of these moral characteristics:

"Nursing is a job that is not meant for anyone, it takes dedication, strength and passion to be one."

(S44)

"Because we work together as a team, it is important to trust each other based on the individual training that we had gone through and are able to carry out our duties well. It also serves as a form of accountability to people in our team and people receiving care from us"

(S08)

Students were clearly aware of the ethical code expected of them, which was reassuring in terms of the preregistration education received.

# Theme 2. The Construction of Professional Identity

This theme illuminated how the students viewed the construction of their professional identity. Three subthemes including 'a social perception', 'identity challenges' and 'realising their role in the construction of professional identity' were elicited.

1) A social perception: The students' perception of their professional identity was influenced by the images and values directed towards nursing by society in comparison to other professions. The students perceived doctors, lawyers, and teachers as well-respected professionals. Doctors were "in a white coat with a stethoscope around their neck with confidence" while lawyers and teachers had "nice and neat suits" and were deemed to be "a sage or Master Yoda", or "a confident global speaker", "the force is within them", or "have an aura of superiority, authority and power". In contrast, the students viewed themselves as engaging in a "low skill/dirty job and of lower social status" due to the nature of the essential care they delivered daily. Such socially perceived images of being a professional were internalised resulting in the projection of a poor perception of their care work and image, as indicated here.

"When the word professionalism...the image of a doctor comes to my mind...portrayed as a superior figure as compared to a nurse... they (patients) will usually turn for help from [the] doctors as they perceive that doctor[s] have all the information and knowledge...parents also encourage or advise their children to become doctors...

(S17)

2) Identity challenges: Closely linked to social perception, the students encountered identity challenges from their interactions with people around them. They noted the development of special relationships with patients while remaining deferential to doctors. Some students also felt the process of professionalisation was akin to a sorting method, which differentiated professionals into higher or lower social status. Such relationships caused confusion and challenged their professional identity as the following quotations exemplify.

"I think that by having professional identity...only favours the doctors... Even if nurses make the right decision and doctors are wrong in the case, patients will still think that doctors are always right."

(S17)

"The effect of professional identity in our practice is that the people around us may or may not get [us] respected. For example, in front of the doctors, we would portray like a maid who just do as what they say. However, in front of patients, we are their healthcare advocates which they listened to. Thus, it is a mixture of set of identity..."

(S28)

3) Realising their role in the construction of professional identity: The guided reflection created a safe space and provided methods for students to learn from their own and others' experiences. As the module progressed, students came to realise their roles and their relationship with other professionals, as well as their responsibility in constructing their professional identity and how this identity was then portrayed to others. The quotes below offer some examples:

"The effects of the professional identity are how you portray the occupation to the world. People tend to judge the occupation by the way we portray ourselves."

(S63)

"I value my role as a nurse as I feel that nurses can play a lot of roles...versatile, as nurses have greater knowledge than patients think. Also, nurses have judgment and good assessment skills so that we can identify what is not right with patients right away."

(S17)

At a wider level, the students portrayed an optimistic outlook on their professional status with reference to the approved prescription rights to APNs in Singapore (Liew, 2018). The students felt their devotion towards patients led to them gaining wider trust and respect, as shown here:

"I valued the fact that my role gave me a sense of responsibility to advocate to the best of my patient's interest. And the fact that more people are approaching nurses for advice makes me feel that we have slowly gained public trust on nurses."

(S64)

The students believed that mutual respect was essential for quality patient care, positive relationships, and the affirmation of their professional identity. Student S54 provided an example.

"As a nurse, I feel that mutual respect is vital for nursing. As the nurse respects the patient as an individual to provide the best quality care, the value for respect towards nurses should also be established as professionals."

(S54)

# IV. DISCUSSION

The study demonstrated that students perceived nursing as a professional with knowledge and moral character, which is consistent with the professional requirement by the SNB (2011). However, students perceived a lack of awareness of nurses' roles and some confusion about nursing identity by the public and other healthcare professionals, which does not reflect the intended development of nursing practice.

The repeated comments of nurses being perceived as inferior to doctors by the public indicated that to them, nursing is still viewed negatively and of lower social status in Singapore, similar to the study done by Tay et al. (2012) ten years ago where nurses felt devalued and disrespected. Internationally, a division in the treatment towards doctors and nurses persists, as people tend to give doctors credit and recognition and view nurses as having a complementary role (de Araujo Sartorio & Pavone Zoboli, 2010; de Meis et al., 2007; Johnson, 2018; Kemmer & Paes da Silva, 2007). The biased perception and treatment contribute to the devaluation of nursing, resulting in a focus solely on nursing functions

and categories, rather than profiling nursing's professional identity.

Despite more nurses pursuing higher education and leading comprehensive patient care roles such as APNs in Singapore, patients still have a poor perception of their roles and lack awareness of the preparation needed (Woo et al., 2020). A study set in a primary care setting found that doctors viewed APNs as competent clinical partners, but their roles were not well understood (Soh et al., 2021). This role confusion is possibly due to the breadth of nurses' roles and a failure to communicate their professional roles effectively to the public. Pimenta and Souza (2017) reviewed 55 newspapers concerning the professional identity of nursing from 1983 to 2012 and found that nursing was treated as a unified entity. There was no differentiation between "nursing practiced by nurses" from the "nursing practiced by the other workers making up the team" (Pimenta & Souza, 2017, p4) indicating there is still much work to be done to make the roles of nurses more comprehendible and visible.

This study showed how intentional education can help nurses to reflect on their clinical experiences and form a positive professional identity. The finding is consistent with that of a recent study by Fitzgerald and Clukey (2022, p1349) who found that reflection helped students to "think about thinking", connecting the dots together to know what nursing really is and internalise their professional identity. The educational effort highlighted in both studies can be extended to interprofessional education, to create opportunities for different professional groups to learn together and understand one another's abilities and roles better. In Singapore, studies on interprofessional learning revealed improved communication, mutual respect, trust and changing the stereotypes and attitudes towards the nurse-physician relationship (Liaw et al., 2014; Liaw et al., 2023). Another study demonstrated how interprofessional virtual rounds helped students from six healthcare courses, including nursing, to gain insights into one another's professional role and build mutual trust (Liaw et al., 2020). However, these studies were all based in schools with a short duration of learning. Intentional education and long-term studies on professional identity and interprofessional relationships should be continued in clinical settings.

A Singaporean ethnographic study by Chen et al. (2021) exposed the complexity of nurses' daily work and how nurses navigated their participation and relationships with other healthcare workers. The deliberation of nurses' professional identity is not a single professional affair, but that of all healthcare professionals. Nevertheless, more action is needed from nurses, nurse

educators, and nursing leaders to define, develop, and portray their professional identity. Ben Natan and Becker (2010) urged nurses to let the public know what their work entailed by giving speeches and presenting their work through social media. With the Healthier SG movement (MOH, 2023), it is foreseeable that nurses will play more important roles in preventive and community health. Nurses should seek opportunities to communicate their roles and articulate their abilities to the public.

This study collected data from only one group of nurses undergoing a top-up degree study. Many nurses did not explain their ideas in detail. Future studies can consider using interviews and focus group discussions to explore these ideas in further depth. Nurses from various nursing schools and clinical settings could also be included and views from the public and other healthcare professionals would be welcomed.

### V. CONCLUSION

Nursing identity is influenced by multiple factors, which can cause role confusion. The educational effort is vital to nurture nurses' abilities to reflect, deliberate and communicate their professional identity. Nursing schools in Singapore and further afield need to include such intentional reflective approaches to help nursing students deliberate their professional identity and to nurture their ability to do so throughout their professional careers. Nurses and nursing leaders need to be more proactive in communicating their professional values and roles. More longer-term research is needed in both education and clinical practice settings to understand the sustained effect of education on nurses' ongoing negotiation of their professional identity.

# Notes on Contributors

Dr Mary XiaoRong Chen reviewed the literature, designed the study, conducted the data collection, data analysis and wrote the transcript.

Dr Dora Howes reviewed the data analysis, contributed to the manuscript and gave critical feedback on the final version.

Both authors read and approved the final manuscript.

# Ethical Approval

The study was approved by the Singapore Institute of Technology Ethics Committee (Project 2018007).

# Data Availability

The data that support the findings of this study are available in the repository at:

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### Declaration of Interest

The authors do not have any conflicts of interest. Participation in the research was voluntary and anonymous. Student nurses were assured that their participation or nonparticipation would not affect their learning or academic standing.

### References

Bartlett, J. (2015). *The profession of nursing*. Jones & Bartlett Learning. Retrieved 14 November from <a href="http://samples.jbpub.com/9781449649029/46066">http://samples.jbpub.com/9781449649029/46066</a> CH01 6031.pdf

Ben Natan, M., & Becker, F. (2010). Israelis' perceived motivation for choosing a nursing career. *Nurse Education Today*, 30(4), 308-313. https://doi.org/10.1016/j.nedt.2009.08.006

Benner, P., Sutphen, M., Leonard, V., & Day, L. (2009). *Educating nurses: A call for radical transformation* (Vol. 15). John Wiley & Sons.

Black, B. P. (2014). *Professional nursing concepts & challenges* (7th ed.). Elsevier.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper (Ed.), *APA handbook of research methods in psychology* (Vol. 2, pp. 57-71). American Psychological Association.

Chen, M. X. (2020). The evolving identity and competence of new nursing graduates in practice: A community of practice perspective [EdD Thesis, UCL (University College London)]. <a href="https://discovery.ucl.ac.uk/id/eprint/10115351/">https://discovery.ucl.ac.uk/id/eprint/10115351/</a>

Chen, M. X., Newman, M., & Park, S. (2021). Becoming a member of a nursing community of practice: Negotiating performance competence and identity. *Journal of Vocational Education & Training*, 1-15. https://doi.org/10.1080/13636820.2021.2015715

Clements, A. J., Kinman, G., Leggetter, S., Teoh, K., & Guppy, A. (2016). Exploring commitment, professional identity, and support for student nurses. *Nurse Education in Practice*, *16*(1), 20-26. <a href="https://doi.org/10.1016/j.nepr.2015.06.001">https://doi.org/10.1016/j.nepr.2015.06.001</a>

- Clouder, L. (2003). Becoming professional: Exploring the complexities of professional socialisation in health and social care. *Learning in Health and Social Care*, *2*(4), 213-222. https://doi.org/10.1046/j.1473-6861.2003.00052.x
- Crigger, N., & Godfrey, N. (2014). From the inside out: A new approach to teaching professional identity formation and professional ethics. *Journal of Professional Nursing*, 30(5), 376-382. https://doi.org/10.1016/j.profnurs.2014.03.004
- de Araujo Sartorio, N., & Pavone Zoboli, E. L. C. (2010). Images of a 'good nurse' presented by teaching staff. *Nursing Ethics*, 17(6), 687-694. https://doi.org/10.1177/0969733010378930
- de Meis, C., de Almeida Souza, C., & da Silva Filho, J. F. (2007). House and street: Narratives of professional identity among nurses. *Journal of Professional Nursing*, *23*(6), 325-328. https://doi.org/10.1016/j.profnurs.2007.06.004
- Deppoliti, D. (2008). Exploring how new registered nurses construct professional identity in hospital settings. *The Journal of Continuing Education in Nursing*, 39(6), 255-262. https://doi.org/10.3928/00220124-20080601-03
- Fitzgerald, A., & Clukey, L. (2022). Factors influencing nursing professional identity development: A qualitative study. *Nursing Forum*, 57(6), 1346-1353. https://doi.org/10.1111/nuf.12816
- Girvin, J., Jackson, D., & Hutchinson, M. (2016). Contemporary public perceptions of nursing: A systematic review and narrative synthesis of the international research evidence. *Journal of Nursing Management*, 24(8), 994-1006. <a href="https://doi.org/10.1111/jonm.1241">https://doi.org/10.1111/jonm.1241</a>
- Goh, T. (2022, August 3). Resignation rates of nurses in public hospitals at a five-year high in 2021. *The Straits Times*. https://www.straitstimes.com/singapore/politics/resignation-rates-of-nurses-in-public-hospitals-at-a-five-year-high-in-2021-says-rahayu-mahzam
- Hoyle, L. P., Kyle, R. G., & Mahoney, C. (2017). Nurses' views on the impact of mass media on the public perception of nursing and nurse–service user interactions. *Journal of Research in Nursing*, 22(8), 586-596. <a href="https://doi.org/10.1177/1744987117736">https://doi.org/10.1177/1744987117736</a>
- Hunter, D., McCallum, J., & Howes, D. (2019). Defining exploratory-descriptive qualitative (EDQ) research and considering its application to healthcare. *Journal of Nursing and Health Care*, 4(1). https://eprints.gla.ac.uk/180272/
- Johnson, M., Cowin, L. S., Wilson, I., & Young, H. (2012). Professional identity and nursing: Contemporary theoretical developments and future research challenges: Nurses, careers and professional identity. *International Nursing Review*, *59*(4), 562-569. https://doi.org/10.1111/j.1466-7657.2012.01013.x
- Johnson, S. E. (2018). "Convince your patients and you will convince society": Career decisions and professional identity among nurses in India. *SAGE Open*, 8(1). https://doi.org/10.1177/2158244018763014
- Kemmer, L. F., & Paes da Silva, M. J. (2007). Nurses' visibility according to the perceptions of the communication professionals. *Revista Latino-Americana de Enfermagem*, *15*(2), 191-198. https://doi.org/10.1590/S0104-11692007000200002
- Liaw, S. Y., Siau, C., Zhou, W. T., & Lau, T. C. (2014). Interprofessional simulation-based education program: A promising approach for changing stereotypes and improving attitudes toward nurse–physician collaboration. *Applied Nursing Research*, 27(4), 258-260. <a href="https://doi.org/10.1016/j.apnr.2014.03.005">https://doi.org/10.1016/j.apnr.2014.03.005</a>

- Liaw, S. Y., Tan, J. Z., Lim, S., Zhou, W., Yap, J., Ratan, R., Ooi, S. L., Wong, S. J., Seah, B., & Chua, W. L. (2023). Artificial intelligence in virtual reality simulation for interprofessional communication training: Mixed method study. *Nurse Education Today*, 122, Article 105718. <a href="https://doi.org/10.1016/j.nedt.2023.105718">https://doi.org/10.1016/j.nedt.2023.105718</a>
- Liaw, S. Y., Wu, L. T., Soh, S. L. H., Ringsted, C., Lau, T. C., & Lim, W. S. (2020). Virtual reality simulation in interprofessional round training for health care students: A qualitative evaluation study. *Clinical Simulation in Nursing*, 45, 42-46. <a href="https://doi.org/10.1016/j.ecns.2020.03.013">https://doi.org/10.1016/j.ecns.2020.03.013</a>
- Liew, I. (2018, July 2). First pharmacists, advanced practice nurses certified to prescribe medicines. *The Straits Times*. https://www.straitstimes.com/singapore/first-pharmacists-advanced-practice-nurses-now-certified-to-prescribe-medicines
- Mao, A., Lu, S.-e., Lin, Y., & He, M. (2021). A scoping review on the influencing factors and development process of professional identity among nursing students and nurses. *Journal of Professional Nursing*, 37(2), 391-398. <a href="https://doi.org/10.1016/j.profnurs.2020.04.018">https://doi.org/10.1016/j.profnurs.2020.04.018</a>
- Marique, G., & Stinglhamber, F. (2011). Identification to proximal targets and affective organizational commitment: The mediating role of organizational identification. *Journal of Personnel Psychology*, 10(3), 107-117. <a href="https://doi.org/10.1027/1866-5888/a000040">https://doi.org/10.1027/1866-5888/a000040</a>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2019). *Qualitative data analysis: A methods sourcebook* (4<sup>th</sup> ed.). SAGE.
- Ministry of Health. (2012). *Nursing Careers*. https://www.moh.gov.sg/hpp/nurses/career-practices/CareerNPracticesDetails/nursing-careers
- Peate, I. (2016). Nursing against the odds. *British Journal of Nursing*, 25(7), 357-357. https://doi.org/10.12968/bjon.2016.25.7.357
- Pimenta, A. d. L., & Souza, M. d. L. d. (2017). The professional identity of nursing in the papers published by Reben. *Texto & Contexto Enfermagem*, 26(01), e4370015. https://doi.org/10.1590/0104-07072016004370015
- Sabanciogullari, S., & Dogan, S. (2015). Relationship between job satisfaction, professional identity and intention to leave the profession among nurses in Turkey. *Journal of Nursing Management*, 23(8), 1076-1085. https://doi.org/10.1111/jonm.12256
- Sather, D. L. (2020). Who Am 1? A Case Study of Professional Identity Development in Undergraduates [PhD Thesis, Northcentral University]. ProQuest Dissertations Publishing. <a href="https://www.proquest.com/openview/236d1081c0cef0fafcb075a2c36dd183/1?pq-origsite=gscholar&cbl=18750&diss=y">https://www.proquest.com/openview/236d1081c0cef0fafcb075a2c36dd183/1?pq-origsite=gscholar&cbl=18750&diss=y</a>
- Singapore Nursing Board. (2011). Standard of practice for nurses and midwives. https://www.healthprofessionals.gov.sg/docs/librariesprovider4/publications/snb\_standards\_of\_practices.pdf
- Slay, H. S., & Smith, D. A. (2011). Professional identity construction: Using narrative to understand the negotiation of professional and stigmatized cultural identities. *Human Relations*, 64(1), 85-107. https://doi.org/10.1177/0018726710384290
- Soh, B. F. J. R., Ang, W. H. D., De Roza, J. G., Quek, I. P., Lim, P. S., & Lau, Y. (2021). They are partners in care: A qualitative exploration of physicians' perceptions of primary care Advanced Practice Nurses. *Journal of Nursing Scholarship*, 53(5), 542-551. https://doi.org/10.1111/jnu.12665

Tay, L. H., Ang, E., & Hegney, D. (2012). Nurses' perceptions of the barriers in effective communication with inpatient cancer adults in Singapore. *Journal of Clinical Nursing*, 21(17-18), 2647-2658. https://doi.org/10.1111/j.1365-2702.2011.03977.x

Ten Hoeve, Y., Jansen, G., & Roodbol, P. (2014). The nursing profession: Public image, self-concept and professional identity. A discussion paper. *Journal of Advanced Nursing*, 70(2), 295-309. https://doi.org/10.1111/jan.12177

Woo, B., Koh, K., Zhou, W., Wei Lim, T., Lopez, V., & Tam, W. (2020). Understanding the role of an advanced practice nurse through the perspectives of patients with cardiovascular disease: A

qualitative study. *Journal of Clinical Nursing*, 29(9-10), 1623-1634. https://doi.org/10.1111/jocn.15224

Xu, C., Koh, K. W. L., & Zhou, W. (2022). The development of advanced practice nurses in Singapore. *International Nursing Review*. <a href="https://doi.org/10.1111/inr.12810">https://doi.org/10.1111/inr.12810</a>

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