



Nursing Student's Perception on Gender-Defined Roles in the Philippines: A Mixed Method Study

Lorena T. Averia^{1,1†}, Kaye Ann H. Casulla^{1,2†}, Karen, Kaye A. Dumalagan^{1,3†}, Zoilarose Marie P. Gabuelo^{1,4†}, Mae Maya Chona O. Lastimoso^{1,5†}, Erwin Martinez Faller^{2, 6*}

¹Iloilo Doctors' College, West Avenue, Molo, Iloilo City, Philippines

²Ilocos Training and Regional Medical Center, Brgy. Parian, San Fernando City, La Union, Philippines

³Maranding Community Hospital Inc., Purok Pomelo, Maranding, Lala, Lanao del Norte, Philippines

⁴Western Visayas Medical Center Cancer Center, Q. Abeto St. Mandurriao Iloilo City, Philippines

⁵Iloilo Doctors' College, West Avenue, Molo, Iloilo City

⁶Department of Pharmacy, Faculty of Pharmacy, San Pedro College, Davao City

zmgpama@gmail.com-zoila; kjcasulla@gmail.com-kaye; dockarekaye@gmail.com-karen; mmclastimoso@yahoo.com-maya

indaycakes@gmail.com-lorena

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ABSTRACT

Background: Traditional gender roles have shaped nursing for decades. They impact nursing students' choices, perceptions, and career paths. Global literature offers insights, but there's a gap in understanding nursing students' specific experiences in the Philippines.

Methods: A qualitative-quantitative convergent type of mixed method research was done to evaluate the nursing students' perception on gender-defined roles in the Philippines. All nursing students enrolled in the chosen institution in the Philippines were included in this study.

Results: The study found a strong connection between demographics and perception of gender roles in the Philippines. Respondents agreed that their perception of gender roles influences their future career in nursing.

Conclusions: The nursing students showed a positive agreement on gender-defined roles in the Philippines, with demographic profiles significantly affecting their perceptions. They recognized challenges related to these roles, which could impact their future nursing careers.

Keywords: Traditional gender-defined, nursing profession, gender perception

Background

Traditional gender-defined roles have deeply permeated the societal structures in the dynamic landscape of the Philippines. Nursing, a globally esteemed profession, has been stereotypically linked to femininity, nurturing, and caregiving. In contrast, male nurses often encounter societal bias despite progress towards global gender equality (1). These deeply ingrained perceptions affect nursing students' professional aspirations and experiences. This study aimed to unravel the factors shaping Filipino nursing students' views on gender-defined roles within their profession (2).

The Philippines, a nation steeped in cultural heritage, provides an ideal backdrop for this study. Filipino society, rooted in tradition and family values, imposes distinct gender expectations that influence students' career choices, particularly in professions such as nursing. Additionally, the country's diverse healthcare system underscores the pivotal role of nurses, making it essential to understand how gender-defined roles intersect with nursing education in this complex environment (3).

This study has immense significance for academia and the nursing profession in the Philippines. First, it addresses a crucial gap in the existing literature, enriching the body of knowledge by offering nuanced insights into the challenges faced in the Filipino cultural context. Second, the findings can inform future nursing education policies. Understanding the factors influencing gender perceptions among nursing students can lead to targeted interventions such as curriculum modifications and awareness programs, fostering a more inclusive learning environment. Moreover, healthcare institutions can utilize these outcomes to promote gender diversity within their workforce, creating a more equitable professional landscape.

While the existing literature on gender-defined roles in nursing predominantly focuses on Western contexts, this research delves into the perceptions of Filipino nursing students. By bridging this gap, this study sheds light on the unique challenges faced by Filipino nursing students, contributing to a holistic understanding of the gender dynamics within the nursing profession.

Hence, this study endeavors to unravel the complexities surrounding gender-defined roles in the Philippines, offering a comprehensive perspective that can inform policy making, academic initiatives, and societal attitudes. Through rigorous analysis and thoughtful interpretation, this study seeks to contribute significantly to the ongoing dialogue on gender equality within the nursing profession, fostering an environment in which all aspiring nurses can thrive, regardless of gender.

Methods

This study employed a convergent type of mixed method, involving the integration of qualitative and quantitative research methods to achieve convergence and complementarity in the findings. This approach entails the simultaneous collection and analysis of both qualitative and quantitative data, with the aim of merging the strengths of each method to provide a comprehensive understanding of the research topic.

The qualitative phase utilized semi-structured interviews and focus group discussions as primary tools, enabling a profound understanding of participants' experiences, perceptions, and emotions regarding gender-defined roles. Through open-ended inquiries, participants were encouraged to express their thoughts and challenges openly. Thematic analysis was employed to identify recurring themes and patterns within participants' narratives, promising rich, context-specific insights into gender perceptions within the nursing education context.

Complementing the qualitative phase, structured surveys were administered to quantify specific attitudes, beliefs, and experiences related to gender-defined roles. These surveys were meticulously designed to gather quantitative data on societal expectations, educational experiences, career aspirations, and perceptions of professional identity among nursing students. Quantitative data analysis techniques, including descriptive statistics and inferential analysis, will be utilized to discern trends, correlations, and statistical significance. This quantitative phase aims to provide a broader overview, enabling generalizations and comparisons across different demographic variables.

The integration of qualitative and quantitative data followed a concurrent triangulation design, allowing for simultaneous comparison and validation of findings from both methods. Triangulation enhances the study's validity, enriching the overall understanding of gender-defined roles within nursing education. Qualitative insights, offering depth and context, were integrated with quantitative data, providing breadth and statistical rigor. By synthesizing these diverse datasets, the study aims to present a holistic and nuanced portrayal of gender perceptions among nursing students.

Ethical guidelines were rigorously adhered to, ensuring the protection and well-being of all participants. Informed consent was obtained, emphasizing the voluntary nature of participation. Anonymity and confidentiality were maintained to safeguard participants' identities and encourage candid responses. Ethical approval from relevant institutional review boards were secured, underscoring the study's commitment to ethical research practices.

Therefore, this meticulously planned qualitative-quantitative exploratory mixed method research design, integrating qualitative and quantitative approaches, stood as a robust framework for exploring gender-defined roles within nursing education in the Philippines.

Research Locale

This study was conducted within a carefully selected nursing school in the Philippines, a choice made to facilitate a comprehensive investigation into gender-defined roles within the country's nursing education system. The selection of this specific institution was deliberate, aimed at providing profound insights into the intricate dynamics of gender perceptions prevalent in Filipino nursing education.

The chosen nursing school meets stringent criteria vital for the research objectives. It represents a diverse student body, encompassing various backgrounds, socioeconomic statuses, and geographical origins. This diversity ensures a broad range of perspectives essential for a comprehensive analysis of gender perceptions. Additionally, the institution is recognized for its progressive educational approaches, making it an ideal environment to study initiatives promoting inclusivity and challenging traditional gender norms within the context of Filipino nursing education.

A collaborative relationship was established with the selected nursing school, emphasizing open communication channels with the institution's administration, faculty, and students. This collaboration will foster trust and mutual understanding, ensuring seamless access to participants, classrooms, and relevant educational materials. Open dialogue will be maintained to align the research activities with the school's educational objectives and ethical guidelines.

The research entailed thorough observation and analysis of classrooms, laboratories, mentorship programs, and extracurricular activities within the institution. In-depth interviews were conducted with students, faculty, and administrators, providing qualitative depth by uncovering personal experiences, institutional policies, and educational initiatives related to gender perceptions. Surveys administered within the school quantified attitudes and beliefs, offering a broader quantitative perspective.

By selecting a specific nursing school, the study ensures cultural sensitivity and contextual relevance. This approach allowed the research to immerse itself in the unique cultural and educational context of the institution, enabling insights that resonate with the broader Filipino society. Cultural nuances, traditions, and regional variations were considered, ensuring the findings are applicable to diverse cultural settings within the country.

Hence, the selected nursing school serves as a focal point for this study, enabling a profound and nuanced investigation into the intricate fabric of gender-defined roles within nursing education in the Philippines. Through this careful choice of research locale, the study aimed to provide a detailed, culturally sensitive, and contextually rich analysis, shedding light on the challenges, initiatives, and potential solutions related to gender perceptions among nursing students in the Philippines.

Participants

The participants in this study encompassed all nursing students enrolled in the chosen institution in the Philippines, adopting a total enumeration approach. Total enumeration implies that every eligible participant within these specified academic years at the institution will be included in the study. This method ensures a comprehensive representation of the target population, eliminating potential sampling biases and enhancing the study's internal validity.

All nursing students actively enrolled in the selected institution were automatically included as participants. This inclusive approach aims to capture a holistic view of gender-defined roles within the context of nursing education, encompassing a diverse range of perspectives from both male and female students.

Participants were provided with detailed information about the study objectives, procedures, and ethical guidelines. Informed consent was obtained from each participant, emphasizing their right to withdraw from the study at any stage without repercussions. Ethical standards and participants' confidentiality will be rigorously maintained throughout the research process, ensuring the protection of their rights and privacy.

The study utilized a combination of qualitative and quantitative methods, including in-depth interviews, focus group discussions, and structured surveys. Qualitative methods enabled a deep exploration of participants' experiences and perceptions, while quantitative data provided numerical insights into specific attitudes and beliefs. The integration of these methods offered a comprehensive understanding of gender-defined roles within nursing education among 3rd and 4th year students in the selected institution.

Instruments

In this study, two meticulously designed instruments, a survey and an interview guide, were employed to gather comprehensive data from the participants, ensuring a nuanced exploration of gender-defined roles within nursing education in the chosen institution in the Philippines.

Survey Instrument

The survey instrument was thoughtfully crafted to capture quantitative data related to gender perceptions among nursing students. This structured questionnaire included a series of closed-ended questions, allowing participants to express their attitudes, beliefs, and experiences in a standardized format. The survey covers diverse aspects such as societal expectations, educational experiences, career aspirations, and perceptions of professional identity. Carefully constructed Likert-scale questions facilitate the quantification of responses, enabling the identification of patterns and statistical analysis. The survey instrument ensures systematic data collection, facilitating comparisons and generalizations within the study population.

The survey instrument employed a five-point Likert scale, a widely used measurement tool that allowed participants to express their agreement or disagreement with specific statements. The scale ranges from "Strongly Disagree" (coded as 1) to "Disagree" (2), "Neutral" (3), "Agree" (4), and finally, "Strongly Agree" (5). This scale offers participants a clear and structured way to indicate their responses, allowing for quantification of attitudes, beliefs, and perceptions related to gender-defined roles within nursing education.

The instrument consists of two distinct sections, carefully tailored to comprehensively explore gender-defined roles within nursing education:

In the Demographic Information section, participants provided essential background details such as age, gender, socioeconomic background, and geographic origin. This section ensured a holistic understanding of the participants' profiles, providing context for their responses.

The first section employs a five-point Likert scale, ranging from "Strongly Disagree" to "Strongly Agree." Participants expressed their agreement levels regarding statements related to Level of Perception of Nursing Students on Gender-Defined Roles. This structured approach quantifies participants' perceptions, enabling statistical analysis.

The second section contains the different Challenges or Barriers Related to Gender-Defined Roles. Participants use the Likert scale to indicate their agreement on the different challenges and barriers provided.

Interview Guide

The interview guide, a qualitative instrument, is designed to facilitate in-depth discussions with participants. Five Open-ended questions were structured to encourage detailed responses, allowing participants to express their thoughts, emotions, and experiences related to gender-defined roles within nursing education. The guide covered a broad array of topics, such as personal narratives, challenges faced, and perceptions of societal expectations and institutional support. By employing probing questions, the interview guide enabled the exploration of underlying motivations and beliefs, uncovering rich qualitative insights. The guide was flexibly applied, allowing for participant-driven discussions and the exploration of emergent themes.

Data Collection

In this study, the researcher directly conducted both the surveys and interviews, ensuring a consistent and thorough approach to gathering information from the participants. The following detailed procedure outlines the systematic approach to data collection.

Before initiating data collection, the researcher obtained ethical approval from the relevant institutional review board. Informed consent forms, detailing the purpose, procedures, and participant rights, will be developed and distributed by the researcher. Participants will be fully informed about the study, emphasizing the voluntary nature of their participation and the confidentiality of their responses.

The researcher actively administered the structured surveys to the participants within the chosen institution. Clear and concise instructions will be provided, emphasizing the importance of honest and thoughtful responses. Participants used the five-point Likert scale to indicate their agreement or disagreement with the survey statements. The researcher supervised the survey administration process to maintain consistency and quality.

In-depth interviews were personally conducted by the researcher with selected participants, following the semi-structured interview guide. The researcher facilitated the interviews, encouraging participants to share their personal narratives, challenges, coping mechanisms, perceptions of institutional support, aspirations, and empowerment within the nursing profession. The researcher handled the audio-recording (with participants' consent) and transcription of the interviews, ensuring accuracy and completeness.

Throughout the data collection process, the researcher validated responses for consistency and accuracy. Regular meetings were conducted by the researcher to address any challenges encountered during data collection, ensuring a uniform approach and adherence to the research protocol. The researcher actively monitored the data collection to maintain high-quality standards.

The researcher strictly adhered to ethical guidelines, including participant confidentiality and anonymity. Personally ensuring participants' identities are protected, the researcher handled the removal of any identifiable information from transcripts and survey data during analysis, upholding the ethical standards of participant confidentiality.

Both quantitative data from surveys and qualitative data from interviews were directly analyzed by the researcher. Statistical methods, including descriptive statistics and inferential analysis, were applied to survey data. Thematic analysis was conducted on interview transcripts, personally carried out by the researcher to identify patterns and themes within participants' narratives. The integration of these findings was personally overseen by the researcher, providing a comprehensive understanding of gender-defined roles within nursing education.

By emphasizing the singular involvement of the researcher in every step of the data collection process, this study ensured a hands-on and meticulous approach, enhancing the reliability and validity of the research findings.

Data Analysis

In this mixed-method study, a rigorous and multifaceted approach was employed for data analysis, encompassing both quantitative and qualitative methods to provide a comprehensive understanding of the research questions. The integration of these methods enriched the study's findings and offered a nuanced exploration of gender-defined roles within nursing education.

For the quantitative component, descriptive statistics was applied to analyze the survey responses. Frequency distributions and percentages were computed to summarize participants' demographic characteristics, attitudes, and perceptions related to gender-defined roles. The five-point Likert scale responses were averaged to identify central tendencies and measure the participants' overall agreement or disagreement with specific statements.

In addressing specific research problems, appropriate statistical treatment such as correlation analysis, or chi-square tests were employed. These statistical methods will facilitate the identification of significant patterns and relationships within the quantitative data, providing valuable insights into the perceptions of nursing students regarding gender-defined roles.

For the qualitative component, a two-tiered approach comprising content analysis and thematization will be utilized. Firstly, content analysis was applied to systematically categorize and interpret textual data from the open-ended survey responses. This method allowed for the identification of recurring themes, enabling a deeper understanding of participants' qualitative responses regarding gender perceptions in nursing education.

Secondly, thematic analysis was conducted on the transcribed interviews. This in-depth qualitative analysis method involves identifying, analyzing, and reporting patterns (themes) within the data. Through an iterative process of coding and theme development, the researchers uncovered underlying themes in participants' narratives, providing rich qualitative insights into their experiences and perspectives related to gender-defined roles.

The integration of quantitative and qualitative findings was carried out during the interpretation phase. Triangulation, a methodological approach to validate research findings by cross-verifying results from different methods, was employed. By comparing and contrasting quantitative and qualitative outcomes, a comprehensive and nuanced understanding of gender-defined roles within nursing education emerged.

By adhering to this methodological framework, the data analysis process yielded robust, contextually rich findings, allowing for a profound exploration of the research questions. The combination of quantitative statistical treatments, content analysis, and thematization ensured a holistic approach, enhancing the depth and breadth of insights derived from this mixed-method study.

Ethical Consideration

Ethical considerations played a pivotal role in ensuring the integrity and credibility of this forthcoming research study. These considerations were of utmost importance in safeguarding the rights, dignity, and confidentiality of the participants throughout the entire research process.

Informed consent was a cornerstone of this ethical approach. Participants were provided with detailed and comprehensive information about the study, including its purpose, procedures, potential risks, and benefits. Informed consent forms were distributed, emphasizing the voluntary nature of participation and the freedom to withdraw from the study at any point without facing any consequences. Participants had the opportunity to ask questions and fully comprehend the research before providing their consent.

Confidentiality was rigorously maintained to protect participants' identities and responses. All data collected, encompassing survey responses and interview transcripts, were anonymized and stored securely. Individual identities were coded, ensuring that responses were not traced back to specific individuals. Access to confidential information was restricted to the researchers involved in the study, upholding participants' privacy rights. Respect for participants' autonomy was a guiding principle. Participants were encouraged to express their opinions openly and honestly. The researchers created a supportive and non-coercive environment during interviews and surveys, fostering an atmosphere where participants feel safe to share their perspectives without fear of judgment or reprisal. The participants' voices were respected and valued throughout the study.

Efforts were made to minimize potential harm or discomfort to the participants. Survey questions and interview prompts were carefully crafted to be sensitive to cultural norms and individual differences. Participants were required to disclose personal information that could cause distress, and any potentially triggering topics were approached with utmost care and sensitivity. Transparency and honesty were maintained in all interactions with participants. The researchers provided accurate information about the study's purpose, funding sources, and affiliations. Any conflicts of interest were openly disclosed, ensuring the research's credibility and trustworthiness.

Additionally, this study adhered to the ethical guidelines and regulations set forth by the institutional review board (IRB) and other relevant governing bodies. Ethical approval was obtained before the research commences, and any modifications to the study protocol was promptly submitted for approval, demonstrating a commitment to ethical conduct and compliance with established standards. By upholding these ethical considerations in a continuous and unwavering manner, this research will ensure the protection of participants' rights and well-being. These ethical principles underscored the study's commitment to conducting rigorous and morally responsible research, contributing meaningfully to the understanding of gender-defined roles within nursing education while respecting the autonomy and dignity of all those involved.

Results and discussion

All data are based from the answer of the respondents in the questionnaire that the researchers had provided and from the respondent's assessment on the nursing student's perception on Gender-Defined Roles in the Philippines.

As shown in the table above, distribution of respondents' demographic profile of nursing students in terms of gender, out of 414 respondents, the majority of respondents were Female having the highest frequency of 329 or 79.47% followed by Male having a frequency of 56 or 13.53%. The least frequency of 1 or 0.24% fell under Asexual, Lesbian and Transgender. This implies that the majority of respondents were Female.

As shown in the table above, distribution of respondents' demographic profile of nursing students in terms of age, out of 414 respondents, majority of respondents were 18 – 20 years old having the highest frequency of 204 or 49.28% followed by 21 – 23 years old having a frequency of 192 or 46.38%. The least frequency of 18 or 4.35% fell under 24 – 26 years old. This implies that the majority of respondents were 18 – 20 years old.

As shown in the table above, distribution of respondents' demographic profile of nursing students in terms of type of school, out of 414 respondents, majority of respondents were from Private School having the highest frequency of 404 or 97.58% while the least frequency of 10 or 2.42% fell under Public School. This implies that the majority of respondents were from a Private type of school.

As shown in the table above, distribution of respondents' demographic profile of nursing students in terms of year level, out of 414 respondents, majority of respondents were Junior students having the highest frequency of 206 or 49.76% followed by Sophomore students having a frequency of 139 or 33.57%. The least frequency of 26 or 6.28% fell under Freshman students. This implies that the majority of respondents were Junior students.

As shown in the table above, the level of perception of nursing students on gender-defined roles in the Philippines resulted in a composite mean of 3.83 suggesting an agreed response. The highlighted highest mean of 4.39, interpreted as a strongly agreed response, was statement number 1 "Nursing students' abilities should not be judged based on their gender" followed by statement number 7 "Nursing students should actively promote gender equality in healthcare" having a mean of 4.37, also interpreted as a strongly agree response.

The least mean of 3.42, interpreted as an agreed response, fell under statement number 5 "Nursing students should be educated about breaking gender stereotypes in healthcare". Overall results suggest that the respondents have a positive agreement level of perception of nursing students on gender-defined roles in the Philippines.

As shown in the table above, significant relationship between demographic profile and level of perception on gender-defined roles in the Philippines using Chi square for independence test resulted in a Chi value of 71.692 - 237.484 with a significant p value of 0.000 less than 0.05 level of significance.

Since p values are less than 0.05 level of significance, therefore reject null and accept alternative hypotheses. Overall results implies that there is a significant relationship between demographic profile and level of perception on gender-defined roles in the Philippines.

The relationship between demographic profiles and the level of perception on gender-defined roles has been a subject of interest in various fields of research. Several studies have explored the influence of demographic factors on individuals' perceptions, shedding light on the complex interplay between personal characteristics and attitudes towards gender-defined roles.

For instance, Almeida-García et al (2016) found a significant effect of socio-demographic variables on the perception of tourism impact, indicating that demographic profiles can shape individuals' perceptions of specific phenomena. Similarly, Papastathopoulos et al. (2019) examined how demographic profiles moderated the relationship between residents' perceptions of tourism impact and their support for tourism development, highlighting the influence of gender, level of education, nationality, length of residency, and age on perceptions. These findings underscore the importance of considering demographic factors when studying perceptions in specific contexts.

In the realm of finance and investment, Bashir et al. (2014) and Saivasan & Lokhande (2022) delved into the influence of demographic characteristics, such as age, education, income, and gender, on risk perception and investment decisions, revealing both positive and negative relationships between certain demographic factors and risk perception. This suggests that demographic profiles can play a pivotal role in shaping individuals' attitudes towards financial risk and decision-making.

Moreover, studies in organizational settings have explored the impact of demographic characteristics on various aspects of workplace dynamics. Bellou (2010) investigated the influence of gender and age on the relationship between organizational culture and job satisfaction, highlighting the relevance of demographic factors in shaping individuals' experiences within organizations. Similarly, Makwana et al. (2017) examined the motivated cognitive basis of transphobia, revealing the intricate relationships between right-wing ideologies, gender role beliefs, and transphobia, emphasizing the role of gender-related perceptions in social attitudes.

Furthermore, the influence of demographic characteristics on risk perception and decision-making has been a subject of interest in various domains. Rahman (2012) explored the mediating role of demographic characteristics, such as age, gender, and income, in consumers' behavior and perceptions in the context of restaurant selection, highlighting the multifaceted nature of demographic influences on consumer behavior. Additionally, Alharthey & Colleges (2019) investigated the impact of demographic characteristics, including age and gender, on the relationship between green marketing practices and consumer purchase intention, emphasizing the moderating role of demographic factors in shaping perceptions.

In summary, the relationship between demographic profiles and the level of perception on gender-defined roles is multifaceted and extends across diverse fields of research. These studies collectively underscore the significance of demographic characteristics in shaping individuals' perceptions, attitudes, and behaviors, providing valuable insights into the complex interrelationships between demographic profiles and perceptions of gender-defined roles.

As shown in the table above, the challenges or barriers on their perceived gender-defined roles in the Philippines resulted in a composite mean of 3.56 suggesting an agreed response.

The highlighted highest mean of 4.09, interpreted as agree response, was statement number 7 "Gender discrimination affects the mental health of nursing students" followed by statement number 17 "Limited family support affects nursing students' ability to challenge traditional gender roles" having a mean of 3.86, also interpreted as agree response.

The least mean of 2.93, interpreted as neutral response, fell under statement number 3 "Gender biases affect nursing students' access to scholarships and educational opportunities". Overall results suggest that the respondents have a positive agreement on the challenges or barriers on their perceived gender-defined roles in the Philippines.

The result indicating a positive agreement on the challenges or barriers related to perceived gender-defined roles in the Philippines aligns with existing research that underscores the influence of demographic factors on individuals' perceptions and attitudes. For instance, Almeida-García et al. (2016) found that residents with less than five years of residence exhibited more positive attitudes towards the impact of tourism, highlighting the role of demographic characteristics in shaping perceptions. Similarly, Papastathopoulos et al. (2019) demonstrated that residents' perceptions significantly influence their support for tourism development, emphasizing the interplay between perceptions and demographic profiles. These findings suggest that demographic factors can play a crucial role in shaping individuals' attitudes and perceptions in various contexts.

Moreover, the influence of demographic characteristics on risk perception and decision-making has been a subject of interest in diverse domains. Saivasan & Lokhande (2022) revealed a relationship between risk perception and investment decisions, with psychological or emotional factors, including risk perception, impacting investment decisions. Additionally, Alise & Teddlie (2010) highlighted significant differences in the methods employed across disciplines, indicating the relevance of demographic factors in methodological choices. These studies collectively underscore the intricate relationship between demographic profiles and perceptions, emphasizing the need to consider demographic characteristics when examining individuals' attitudes and behaviors.

Furthermore, the integration of qualitative and quantitative research methods has been shown to provide a comprehensive understanding of complex phenomena. Östlund et al. (2011) emphasized that combining qualitative and quantitative findings can lead to an overall or negotiated account of the research outcomes, highlighting the value of mixed methods approaches in capturing diverse perspectives. This underscores the importance of employing methodological approaches that account for the multifaceted nature of perceptions and attitudes, particularly in the context of gender-defined roles.

In summary, the positive agreement on challenges or barriers related to perceived gender-defined roles in the Philippines aligns with existing research that emphasizes the influence of demographic factors on perceptions and attitudes. By considering demographic characteristics and employing mixed methods approaches, researchers can gain a more comprehensive understanding of individuals' perceptions of gender-defined roles, thereby contributing to a nuanced and contextually grounded analysis.

Presentation of Qualitative Data

1. The perceived influence of traditional gender roles within the context of your nursing education

The participants answered question number 1: How do you perceive the influence of traditional gender roles within the context of your nursing education?

Majority of the participants highlighted that the female is more fit and capable in the field of nursing course/profession. It is explained by "Nursing at the beginning is all for girls, because girls are more caring than boys."(SN-13); That nursing course/profession is more suitable for women because women possess the attitude and ability to take good care of others." (SN-12); "Female Nursing students are more capable of caring for patients, that's why more females are applying for nursing courses." (SN-11)

Additionally, male participants suffer judgement, criticism, stereotyping roles, generating diversity and unequal opportunities. It is supported by "Nursing is for women and that men are judged for taking a course for women." (SN-1), "It has an impact on the male nursing students because when it comes to caring, it is the forte of women and men usually excels on technical aspect in nursing". (SN-2)

2. Male and female nursing students treated differently if at all, in terms of expectations and opportunities within your academic program

The participants answered question number 2: In your opinion, how are male and female nursing students treated differently if at all, in terms of expectations and opportunities within your academic program?

Majority of the participants highlighted that the male and female nursing students are treated differently in their workplace. Additionally, female participants experience high expectations and are given more opportunities in the field of nursing course/profession. It is confirmed by "Female nurses are expected to excel more than male nurses. Male nurses perform well on the technical side. Opportunities are more given to female nurses." (SN-12), "This days, treatment of a male and female nursing students is not that different, although female nurses tend to perform well on their academics."(SN-13), "Male and Female nursing students treated differently in terms of academics and on hand practical's, wherein female nurses are given more opportunities."

However, some participants state that they think that in this current era both male and female nursing students were treated equally. It is supported by "They are treated the same despite different gender roles when it comes to expectations and opportunities within our academic program." (SN-2), "No bias, treats equally." (SN-3), "They are both treated equally."(SN-4), "Today, I think both male and female nursing students were treated equally". (SN-6)

3. Gender-defined roles affect the way nursing students are prepared for the future careers

The participants answered question number 3: Do you believe that gender-defined roles affect the way nursing students are prepared for their future careers? If so, how?

Majority of the participants highlighted an approval and agreement to the gender-defined roles that will affect the way nursing students are prepared for their future careers in the field of nursing course/profession. It is approved by "Yes. Because patients prioritize the women over men when it comes to caring for them." (SN-1), "Yes, it gives a negative impact and lessens self-confidence." (SN-3), "Yes, by the way students are guided in their studies, clinical experience and career expectations."(SN-4), "Yes, by preparing them that sometimes leads to being biased by the professor in terms of skills emphasis and development." (SN-5), "Yes, because nowadays companies/ hospitals hire new nurses depending on their gender."(SN-13), "Yes, maybe in caring for their patients, using uniforms and the way they interact with others." (SN-15)

4. The perception of gender defined roles influence on future career in nursing

The participants answered question number 4: How do you think the perception of gender defined roles might influence your future career in nursing?

Majority of the participants highlighted an approval and agreement to the gender-defined roles that will influence your future career in the field of nursing course/profession. Additionally, it would be a great help and benefit on both the future patient and the future nurses in the nursing profession. It is confirmed by "It might have an impact on my future career because I will be discriminated again because I am male." (SN-1), "For me, I guess there will be no effect in my future career in nursing someday despite of my gender, because the school where I am studying now upholds gender equality."(SN-2), "In my own personal perspective, breaking the stereotypes of allows people to perform their skills on duty, benefiting both the patient and the nursing profession."(SN-3), "It influences by making me see over the differences that it challenges me to do well and prepare for the future." (SN- 4), "The challenge is on how the patient or other people see my ability as a nurse in the future."(SN-5), "They might think that because I am Lesbian I could not perform my duties well." (SN-7), "Gender defined roles might influence my future career in nursing because of the stigma that female nurses are more needed than male nurses." (SN-8), This might affect the way of caring for their future patients."(SN-9) , "Maybe on applying for job it may affect."(SN-10)

5. The steps can nursing institutions take to promote gender equality and challenge traditional gender norms within nursing education

The participants answered question number 5: In your opinion, what steps can nursing institutions take to promote gender equality and challenge traditional gender norms within nursing education?

Majority of the participants suggested to create an institutional program promoting gender equality to remove gender biases, stereotypes, discrimination and unequal expectations and opportunities in the field of nursing course/profession. It is suggested by "They can implement symposiums with topics that deals with Gender Sensitivity."(SN-1), "They need to create programs that will foster awareness about gender defined roles and break the stereotype of Nursing is a course for women." (SN-2), "Provide training in faculty and staffing recognizing and addressing unconscious biases."(SN-3), "Institutions should address biases." (SN-4), "They should have programs to promote gender equality. They should treat their students equally in terms of practical and academics."(SN-7), "In my opinion nursing administrators / institutions must be transparent and must treat their students fairly without discrimination."(SN-8), "Health Education for nursing students regarding gender equality must be given importance."(SN-9), "Dissemination of information regarding gender equality might help students."(SN-10), "They should have programs to promote gender equality. They should treat their students equally in terms of practical's and academics."(SN-12), "Health Education for nursing students regarding gender equality must be given importance."(SN-14)

6.The challenges and barriers did you face based on your perceived gender role

The participants answered question number 6: What challenges and barriers did you face based on your perceived gender role?

Majority of the participants did not encounter or experience challenges and barriers you face based on your perceived gender role. It is stated by "For now, I haven't experienced any challenges or barriers in my nursing study."(SN-1), "None."(SN-6), "None so far." (SN-9), "None."(SN-10), "None."(SN-11), "None so far."(SN-12), "None."(SN-14), "None."(SN-15)

However, some participants experience gender biases, stereotypes, discrimination and unequal expectations and opportunities in the field of nursing course/profession. It is confirmed by "Some of the challenges would be the societal expectations, that I need to act according to my gender."(SN-2), "Personally, I have faced challenges related to expectations about my communication style of leadership approach based on gender related issues. Overcoming these barrier is vital for showcasing the diverse skills within the nursing profession."(SN-4), "Stereotyped caregiving profession. Faculty may unknowingly hold biases due to gender roles."(SN-5), "Sometimes some of my patients, don't believe in my skills and knowledge."(SN-6)

Conclusions

The study revealed a dominant demographic among participants: primarily young women aged 18-20, who were junior-level students enrolled in private schools. It was observed that these nursing students held positive views regarding gender-defined roles in the Philippines, and their demographic profiles showed a significant relationship with their perceptions of these roles. The research also uncovered a shared recognition of obstacles and barriers related to gender-defined roles, which could potentially affect future career choices in the nursing field. In light of these findings, recommendations were made for institutional programs that promote gender equality, eliminate biases, stereotypes, and discrimination, and create equitable expectations within the nursing profession. Interestingly, a majority of participants did not report encountering challenges or barriers resulting from their perceived gender roles.

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Availability of data and materials

The data relating to this manuscript are available upon request.

Abbreviation

SN: Student Nurse

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Authors' Contributions

All of the researchers conceived and designed the study. ZMG, KAC and LA initiated validation of the questionnaire. KKD ran the reliability test of the questionnaire and checked for plagiarism test of the research. MMC collected the data. KKD and a certified statistician conducted the statistical analysis and interpretation of the findings. All of the researchers wrote the initial draft, critically reviewed and finalized the manuscript. All authors read and approved the final version of this manuscript.

Ethics declaration

The research was conducted in accordance with the ethical guidelines to safeguard the rights and confidentiality of participants. Prior to the study, all participants were given full information about the research and their consent was obtained. The collected data were secured and anonymized to protect the privacy of the participants. Approval was sought from the relevant ethical committees and authorities prior to the data collection process.

Conflict of Interest declaration

The authors declare that they have NO affiliations with or involvement in any organization or entity with any financial interest in the subject matter or materials discussed in this manuscript.

Tables

Table 1.1 Distribution of Respondents' Demographic Profile of Nursing Students in terms of Gender

Gender	Frequency	Percentage	Rank
Asexual	1	0.24	7
Bisexual	29	7.00	3
Female	329	79.47	1
Gay	9	2.17	4
Lesbian	1	0.24	7
Male	56	13.53	2
Queer	3	0.72	5
Transgender	1	0.24	7
Total	414	100.00	

Table 1.2 Distribution of Respondents' Demographic Profile of Nursing Students in terms of Age

Age	Frequency	Percentage	Rank
18 – 20 years old	204	49.28	1
21 – 23 years old	192	46.38	2
24 – 26 years old	18	4.35	3

Total	414	100.00	
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Table 1.3 Distribution of Respondents' Demographic Profile of Nursing Students in terms of Type of School

Type of School	Frequency	Percentage	Rank
Private	404	97.58	1
Public	10	2.42	2
Total	414	100.00	

Table 1.4 Distribution of Respondents' Demographic Profile of Nursing Students in terms of Year Level

Year Level	Frequency	Percentage	Rank
Freshman	26	6.28	4
Junior	206	49.76	1
Senior	43	10.39	3
Sophomore	139	33.57	2
Total	414	100.00	

Table 2. The Level of Perception of Nursing Students on Gender-Defined Roles in the Philippines

Gender-Defined Roles	Mean	SD	Interpretation
1. Nursing students' abilities should not be judged based on their gender.	4.39	1.17	Strongly Agree
2. Society's expectations of gender roles affect how nursing students are perceived in their profession.	3.69	1.16	Agree
3. Nursing students should challenge traditional gender norms in their interactions with patients.	3.61	1.11	Agree
4. Gender-defined roles impact how nursing students are assigned responsibilities in clinical settings.	3.42	1.24	Agree
5. Nursing students should be educated about breaking gender stereotypes in healthcare.	4.17	1.09	Agree
6. Traditional gender roles restrict the career growth of nursing students.	3.42	1.23	Agree
7. Nursing students should actively promote gender equality in healthcare.	4.37	1.03	Strongly Agree
8. Gender biases influence the way nursing students are mentored and guided in their studies.	3.61	1.17	Agree
9. Nursing students should actively engage in discussions about gender equality within their academic institutions.	4.16	1.04	Agree
10. Gender-defined expectations affect nursing students' confidence in their abilities.	3.84	1.11	Agree
11. Male nursing students face unique challenges in a predominantly female-dominated profession.	3.43	1.12	Agree
12. Female nursing students face societal pressure to balance career and family life.	3.81	1.13	Agree
13. Nursing students should be encouraged to challenge gender biases in healthcare policies.	3.80	1.11	Agree
14. Gender norms affect the leadership opportunities available to nursing students.	3.60	1.24	Agree
15. Nursing students should receive training on handling gender-related issues in the workplace.	4.02	1.02	Agree
16. Nursing students should advocate for equal opportunities for all genders in their profession.	4.23	1.06	Strongly Agree
17. Gender stereotypes impact the way nursing students are evaluated during clinical placements.	3.64	1.18	Agree

18. Nursing students' awareness of gender equality initiatives influences their perception of gender roles.	4.00	1.02	Agree	
19. Traditional gender roles create barriers to effective communication between nursing students and patients.	3.66	1.11	Agree	
20. Nursing students' perception of gender roles affects their mental health and well-being.	3.73	1.15	Agree	
Composite Mean	3.83	0.81	Agree	
Legend:	5.00 – 4.21	Strongly Agree	4.20 – 3.41	Agree
	3.40 – 2.61	Neutral	2.60 – 1.81	Disagree
	1.80 – 1.00	Strongly Disagree		

Table 3. Significant Relationship Between Demographic Profile and Level of Perception on Gender-Defined Roles in the Philippines

Chi Square Test		Chi value	P value	Decision	Remarks
Level of Perception of Nursing Students on Gender Defined Roles	Gender	237.484	0.000	Reject Ho	Significant
	Age	71.692	0.000	Reject Ho	Significant
	Year level	105.564	0.000	Reject Ho	Significant
	School type	402.736	0.000	Reject Ho	Significant

If $p - \text{value} > 0.05$ Level of Significance: Accept Ho: Not Significant

Table 4. The Challenges or Barriers on their Perceived Gender-Defined Role in the Philippines

Challenges or Barriers	Mean	SD	Interpretation
1. Gender stereotypes limit nursing students' career choices within the healthcare sector.	3.23	1.09	Neutral
2. Nursing students face pressure to conform to traditional gender norms from their families.	3.61	0.98	Agree
3. Gender biases affect nursing students' access to scholarships and educational opportunities.	2.93	1.17	Neutral
4. Nursing students often experience discrimination based on their gender during clinical training.	3.35	1.15	Neutral
5. Limited awareness about gender-related challenges hampers nursing students' ability to seek support.	3.63	1.06	Agree
6. Nursing students face challenges in finding mentors who understand and address gender-related issues.	3.47	1.07	Agree
7. Gender discrimination affects the mental health of nursing students.	4.09	1.07	Agree
8. Nursing students face resistance when advocating for gender equality within their academic institutions.	3.48	1.09	Agree
9. Gender-defined expectations affect nursing students' ability to express their opinions in academic settings.	3.63	1.08	Agree
10. Nursing students often lack resources to address gender-specific health issues affecting their peers.	3.48	1.05	Agree

11. Gender biases affect nursing students' confidence in their decision-making abilities.	3.71	1.05	Agree
12. Nursing students face challenges in balancing their gender roles within the context of cultural expectations.	3.67	1.02	Agree
13. Limited access to gender sensitivity training affects nursing students' ability to challenge stereotypes.	3.69	1.02	Agree
14. Nursing students' perceptions of gender roles are influenced by the media and popular culture.	3.75	1.06	Agree
15. Gender-defined roles create barriers to collaboration between male and female nursing students.	3.35	1.17	Neutral
16. Nursing students face stereotypes related to their appearance and demeanor in clinical settings.	3.64	1.05	Agree
17. Limited family support affects nursing students' ability to challenge traditional gender roles.	3.86	1.08	Agree
18. Gender-based expectations affect nursing students' participation in extracurricular activities.	3.51	1.12	Agree
19. Nursing students often lack awareness about legal protections against gender discrimination in education.	3.57	1.11	Agree
20. Gender-defined roles create obstacles to nursing students' professional networking opportunities.	3.52	1.08	Agree
Composite Mean	3.56	0.79	Agree

Legend: 5.00 – 4.21 Strongly Agree 4.20 – 3.41 Agree
3.40 – 2.61 Neutral 2.60 – 1.81 Disagree
1.80 – 1.00 Strongly Disagree