

Original Research

Stress, workplace bullying, and career decision of male nursing students: a qualitative inquiry of male undergraduate nursing students

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Abstract

Background: This study aims to understand and explore the relationships between stress, workplace bullying, and experiences of male nursing students in South Korea. A shortage of nursing professionals is currently a significant problem in the health and social care system. Although the government has established enrolment plans and scholarships for potential nursing students, long-term solutions still have not been found. The number of newly registered male nursing professionals is still significantly low. Based on the self-efficacy approach and social cognitive career and motivation theory, three research questions guided this study: (1) What are the sources of stress for male nursing students in South Korea? (2) How would male nursing students describe their position, role, and experience as male individuals in South Korea? (3) Do gender role, gender discrimination, gender bias, and gender inequality influence the experience of male nursing students in South Korea? Method: With the qualitative inquiry, 20 male nursing undergraduate students were invited. The results indicated that stress from the gender role, discrimination and social bias due to their gender and nursing students face stress, burnout, pressure, and gender bias, which may influence their career decision and long-term development. **Conclusion**: Therefore, government departments, university leaders, medical facilities managers, and human resource planners should take this study as the opportunity to reform and polish the government policies and regulations to answer the gender discrimination and bias in the health and social care profession.

Keywords: Human resource; Male nurse; Male nursing student; Medical staff; Registered nurse; Stress; Turnover; Workforce shortage; Workplace bullying

1. Introduction

The nursing profession is traditionally viewed as a female-dominated profession. Although men are welcome to join the profession, as many of the responsibilities are better suited to and many patients prefer [1], male nurses in certain clinical environments such as urology, female nurses are still the majority workers in this profession [2]. A recent report [3] indicated that the enrolment of nursing students had increased over the previous decade due to job demand and the encouragement of gender diversity. In 2019, 3460 nursing students completed their academic degree(s) at one of the 203 nursing colleges in South Korea. In 2020, among a total of 21,583 test-takers of the national nursing exam, 3179 or 14.9% of the qualified testers were men. In 2008, only 449 or 3.36% of the qualified testers were men [3]. The proportion of male qualified testers had significantly increased over the previous decade(s).

Traditionally, male nursing professionals (over 90%) usually encourage their male counterparts and secondary school students to join the nursing profession due to the profession's mission, the nature of social care, and long-term career shortages internationally [4]. A recent study [5] indicated that although South Korea had one of the highest numbers of fresh nursing university graduates per person, its number of active nursing professionals was relatively

low in the East Asian region. Although government agencies provide many scholarships for nursing degrees, the demand and patient-nurse ratio problems cannot be solved immediately [6].

A recent study [7] indicated that registered nurses experienced internal and external stress due to overloaded responsibilities, patient care, intensive workplace conditions, family responsibilities, financial problems, and biases from different channels [8]. Due to overloaded responsibilities and the high patient-health professional ratio(s), it is hard to maintain the quality of medical services and treatments as health and social care professionals need to take care of multiple duties simultaneously. The nursing profession is an interdisciplinary career pathway, which requires individuals to handle and understand multiple duties using various skills and abilities [9]. In other words, nursing professionals can use their knowledge and skills in different careers, such as health administration, communications, public relations, and even teaching. Another recent study [10] indicated that due to the relationship between stress and job satisfaction, an average of 16.9% of nursing professionals decided to leave the profession permanently (for other career pathways). Although some nursing professionals decided to stay in the health and social care profession, nearly 30% of newly graduated nursing professionals decided to



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switch to other clinical environments, such as school nursing profession.

To maintain current human resource and workforce levels and encourage new people to enter the nursing profession, particularly male nursing professionals [11], the South Korean government introduced some plans and improved workplace conditions in the public health system, such as working hour arrangements and flexible plans for families [12]. For example, a recent study [13] indicated that nursing colleges encouraged enrolment diversity (for male individuals). One method was to establish secondary school fairs to increase the sense of belonging and understanding of potential students. The results worked for a short period. However, enrolment decreased again as career fairs and scholarships for nursing colleges did not change the overloaded responsibilities and negative workplace conditions in the public health system [10].

Previous studies [14-16] indicated that pre-service male nursing professionals faced stress, bias, and burnout before starting their employment, particularly due to peer pressure and social misunderstanding. Another study also indicated that female co-workers and counterparts expected and assigned higher workloads to male nursing professionals and counterparts due to their gender [17]. For example, some studies [18–20] indicated that health administrators and department heads tended to assign male nursing professionals to overnight and labour-intensive shifts. Therefore, due to gender-oriented expectations and unfairness due to their gender roles, some male nursing professionals decided to leave the health career pathway altogether or switch to other positions within the public health system [21]. A recent study [22] investigated workplace conditions of a group of male nurses in South Korea. The results indicated that they experienced low occupational value, dissatisfaction with treatments, poor treatments and practical problems, and conflicts related to workplace conditions. They sought a relaxed and stable life. Therefore, many male nursing professionals may decide to leave their positions and seek other careers due to the social expectations regarding male individuals and groups in South Korea.

Male nursing professionals are essential to the health and social care profession. A group of male nursing faculty members [21] advocated that patients seek treatments and suggestions from male nursing professionals for cultural and religious reasons, particularly in the Asian region. For example, in some Muslim countries, only same-sex medical staff can provide treatments for their patients. Also, in some specialised departments, such as urology, male patients tend to select male medical staff for their treatment [23,24]. In order to decrease the high level of turnover and attrition, it is important to understand the experiences of male nursing professionals, particularly regarding the socio-cultural background and social expectations of residents in South Korea.

1.1 The purpose of the study

This study aims to understand and explore the relationships between stress, workplace bullying, and experiences of male nursing students in South Korea. A shortage of nursing professionals is currently a significant problem in the health and social care system. Although the government has established enrolment plans and scholarships for potential nursing students, long-term solutions still have not been found. The number of newly registered male nursing professionals, in particular, is still significantly low. Based on the self-efficacy approach and the social cognitive career and motivation theory, three research questions guided this study:

1. What are the sources of stress for male nursing students in South Korea?

2. How would male nursing students describe their position, role, and experiences as male individuals in South Korea?

3. Do gender role, gender discrimination, gender bias, and gender inequality influence the experience of male nursing students in South Korea?

1.2 Theoretical frameworks: self-efficacy and social cognitive career and motivation theory

1.2.1 Self-efficacy approach

Self-efficacy refers to the personal beliefs and understanding in individuals and groups' capacity to conduct the behaviours in order to create and exercise the performance attainments. Bandura [25] argued that self-confidence in the skills and capacities might play important roles based on individuals' motivation, behaviour, and social environment. The self-beliefs and self-evaluations positively and negatively impact many elements from personal experiences, including the goals and directions for which the individuals plan and exercise, the efforts to the personal goals, and the likelihood of achieving the personal goals based on the personal beliefs.

1.2.2 Social cognitive career and motivation theory

The social cognitive career and motivation theory (Fig. 1, Ref. [26]) was developed based on the guidelines from social cognitive career theory [27] and the selfefficacy approach [25]. The social cognitive career and motivation theory indicated that internal and external elements and factors influence individuals' motivations and decisionmaking processes. The internal factors refer to the psychological and internal factors with self-efficacy. Three elements were categorised, including academic interests, personal considerations, and achievements of education and career goals. The external factors refer to the social and external factors, including interests in career development, financial considerations, and surrounding environments and individuals. Fig. 1 outlines the social cognitive career and motivation theory. The researcher [26] argued that one or more than one element may influence individuals' motiva-

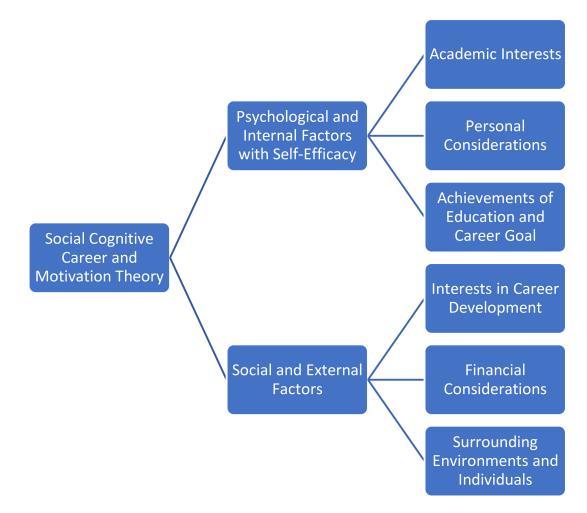


Fig. 1. Social cognitive career and motivation theory [26].

tions and decision-making processes in one of the abovementioned elements. The theory is useful to understand what elements and factors may influence individuals' behaviours.

2. Methods

2.1 Research design

The general inductive approach [28] has been employed to investigate this study. First, the study aimed to understand the current problems for male nursing students in South Korea. Therefore, the problems do not only concern a group of individuals in a targeted facility. In other words, the problems concern many male nursing students and nursing professionals in the health and social care profession. With the employment of the general inductive approach, the researcher could capture contemporary stories and ideas from a wider perspective. Three qualitative data collection tools have been employed, including semi-structured interview sessions, focus group activities, and member checking interview sessions. For more detail, please refer to section 2.3.

2.2 Recruitment and invitation

A total of 20 male nursing students completing their undergraduate nursing degrees in one of the nursing colleges in South Korea were invited. The purposive and snowball sampling strategies [29] were employed to recruit participants from different nursing colleges in South Korea. First, the researcher invited three participants who met the criteria for the study orally. Once the first three participants agreed with the study, the researcher sent the invitation, risk statement, protocol, procedure, and agreement form. One of the requirements from the invitation indicated that the participants should refer at least one potential participant for further development and recruitment. All agreed with the requirement.

Second, the researcher arranged the interview sessions for these three participants individually. Once the participants completed the first interview session, the participants had referred at least one potential participant (i.e., male undergraduate nursing degree students at one of the nursing colleges in South Korea) for the study. After several rounds of referrals, a total of 20 participants agreed to join.



2.3 Data collection

Interview sessions, focus group activities, and member checking interview sessions were employed to collect and confirm the qualitative data from all parties. The semistructured, private, one-on-one, and virtual-based interview sessions [30] were employed. Due to the COVID-19 pandemic, the South Korean government encouraged all residents to reduce physical contact. Therefore, virtual-based interview sessions were conducted. During the interview session, the researcher asked questions about the participants' stress, burnout, experiences, and career decision. Each interview session lasted from 89 to 116 minutes.

After all participants completed their interview session, the researcher arranged the virtual-based focus group activities. Based on the participants, five in-depth focus group activities were formed (i.e., four participants per group). During the focus group activities, the researcher asked questions about stress, burnout, experiences, and career decision in a group discussion format. The participants took the autonomy for the discussion. Each focus group activity lasted from 123 to 145 minutes with one ten-minute break.

After all participants completed the data collection procedures, the researcher gathered the information based on each participant. The researcher sent the related information back to each participant for confirmation. Therefore, the member checking interview sessions were conducted for confirmation. Each participant confirmed and agreed with their qualitative data. Each member checking interview session lasted from 28 to 41 minutes. Please note all the interview sessions and focus group activities were digitally recorded with a recorder. Only voiced messages were marked. The participants agreed with this arrangement.

2.4 Data analysis

The researcher employed the data analysis procedure(s) from the grounded theory approach [31] for the data analysis. The grounded theory approach advocated that the researcher should employ the open-coding and axial-coding techniques for the data analysis and development. The following illustrated the procedures and the applications.

First, the researcher transcribed the voiced messages to written transcripts in order to categorise the directions and groups from the massive qualitative sharing and stories. Second, the researcher re-read the qualitative data multiple times in order to figure out the connections and themes. Third, the open-coding technique was used to narrow down the massive information to meaningful themes and subthemes. The researcher categorised over 20 themes and 15 subthemes as the first-level themes and subthemes from this stage. However, based on the guidelines of the grounded theory approach, further data analysis and development should be employed. Therefore, after the open-coding procedure, the researcher used the axial-coding technique to narrow down the information as the second-level themes and subthemes. As a result, two themes and four subthemes were yielded.

3. Results and findings

During the interview sessions, the participants all answered the same general open-ended and semi-structured questions about their working experiences, sources of stress, causes of burnout, and examples of discrimination and social bias due to their occupation and gender in the medical and social care environment. Although all had similar interests, experiences, and working environments in clinical and hospital environments, their lived stories, experiences, examples of discrimination and social bias, leadership, and patients were not the same. In other words, the researcher needed to gather their diverse lived stories and categorise the responses into groups and themes for reporting.

Except for military services, which may have gender restrictions, there are no gender limitations for potential medical professionals entering the field. However, due to conservative and narrow-minded notions and ideas regarding nursing professionals, many male registered nurses face different levels of stress, burnout, discrimination, and social bias due to their gender. In order to answer the research questions in a structured order, the following section is categorised into three themes and five subthemes based on the interview transcripts and information from the participants. Table 1 outlines the themes and subthemes of this study.

3.1 Stress: the sins of my gender

Stress refers to individuals' internal and external mental and physical conditions in response to situations and events in their environment. Although stress may cause both mental distress (e.g., depression) and physical conditions (e.g., itchiness or eating disorders), more than half of the negative responses tended to be about mental distress and psychological disorders [32]. In this study, all participants expressed different levels of mental stress and psychological disgrace due to the relationship between their gender and occupation (i.e., registered nurse) in South Korea (i.e., East Asian perspectives and practices were dominant). Based on the interview transcripts and data, most stressful sharing came from two major directions: the university environment, and the student clinics environment. One participant shared a uniquely stressful experience from his degree-seeking voyage in the university environment. The participant said:

We need to take foreign language courses with other classmates in different departments...some male classmates knew my major is nursing...they asked me to wear the dress but not pants... asked me to use the female restroom and wear makeup on my face as I am learning a female major... (Participant #15, Interview, 1st Year Student)

3.1	Stress: the sins of my gender
3.1.1	University environment: unpleasant stress from teachers and classmates
3.1.2	Student clinics environment: expectations and limited support
3.2	Discrimination and social biases: looked down on due to the relationship between gender and nursing position
3.2.1	Working environment: looked down on by co-workers due to nursing profession
3.2.2	Social environment: looked down on by patients, friends, and family members

3.1.1 University environment: unpleasant stress from teachers and classmates

All shared negative experiences of mental distress due to their gender in the university environment. First, all expressed that their classmates looked down on them because they were learning a female-dominated academic major and subject. For example, Participant #4 said:

Studying and working decisions are my own choice...but society always control our choice...my classmates in the physical therapy's department always ask me to switch my major to physical therapy as nursing is only for girls...I don't agree...but almost everyone in the faculty of medical sciences said the same thing all over the years... (Participant #4, Focus Group, 1st Year Student)

Some other participants also shared about similar situations during their university voyage. For example, Participant #14 shared that his classmates placed his face on a poster of a female dancer to laugh at his academic major and career decision. He said:

Some classmates don't really understand career decision is a personal decision...they like to judge people based on their own mind...perhaps the social expectation of what men and women should be...although I felt very negative and stressed as my classmates laughed me, I accepted that, and I was proud of my own decision... (Participant #14, Interview, 2nd Year Student)

Second, besides classmates and peers, many participants shared experiences of negative situations, stress, and mental distress due to arrangements made by their universities and course instructors during their university voyage. Students majoring in science, technology, engineering, and mathematics (STEM) programmes tend to be male due to social expectations regarding men and women. One participant explained:

All boys need to share why would we like to join the nursing profession as a male individual...but the counsellor never asked girls the same question(s)...it is a genderbiased question...and I can see that the counsellors and teachers always deal with male students differently...we are the neglected groups...I don't feel good during my university period in fact... (Participant #18, Interview, 2nd Year Student)

However, course instructors might not have enough awareness of how to balance materials, instructions, and

classroom management, as most course instructors have never experienced gender-oriented training. For example, one participant indicated that many course instructors did not understand how to manage discussion groups. As he explained:

We have 22 girls and four boys in our nursing cohort for four years...except for the military service period...our course instructor always assigned four boys together for most of our lessons...this is not a single case, but multiple cases for our university voyage...we were grouped and categorised as a male's learning cohort within the nursing cohort...it was so unpleasant as we were grouped (Participant #1, Interview 2nd Year Student)

Based on some of the stories and sharing from the participants, the researcher further asked about the career motivations and decision-making process of these groups of nursing students in the nursing college environment(s). Almost all of them re-considered their career pathways in the nursing profession due to the negative experiences in the nursing college environment. Many believed that the negative workplace and conditions (in the school environment) played an important role in their decision-making process. A story was captured:

...I had a very bad experience in nursing college already...I cannot imagine my long-term career development in the workplace environment...in the hospital and clinical environments...I did not feel the respectfulness from my future co-workers in school...how can I feel the respectfulness from my real co-workers in the hospital...many of my male classmates expressed the same concern because of the negative experience in our school... (Participant #5, Interview, 4th Year Student)

3.1.2 Student clinics environments: expectations and limited support

When the researcher asked questions about the experiences based on their classmates and lecturers' reactions and expectations, many shared negative stories and experiences. First, all participants indicated that male nursing students were expected to do all the labour and responsibilities while female counterparts did almost nothing. The unfairness and unbalanced workload always occurred during the entire programme's duration. The researcher captured a story:

... I understood that men have strong power ... but why

only male students? We are all fair and we are all students...both men and women can take the same responsibilities and duties...if our teachers told us those female students could take advantage of other men...the incorrect concepts will build up in this profession...the wrong gender equality will not be changed in the health industry... (Participant #10, Interview, 3rd Year Student)

When the researcher further asked about the unfairness in their classroom environment, all experienced some similar situations. A story was captured:

...we do not have any male professors, male models, and male patients in our student-run clinics...but we need to have the body demonstration, for example, we have to show our male body to our classmates...all boys refused as we have our rights...but our classmates and teachers needed us to take off our clothes for the body demonstration...it is ugly...I reported this to the university department...but no one could help us... (Participant #12, Interview, 3rd Year Student)

3.2 Discrimination and social biases: looked down on due to the relationship between gender and nursing position

Gender discrimination is not uncommon in many workplace environments, particularly in the health profession. In this case, the researchers focused on the relationships between discrimination and social biases due to gender and nursing positions. During the interview sessions and focus group activities, many participants expressed negative experiences due to their gender. For example, a fourth-year participant indicated that his clinical internship in the local hospital was negative and stressed, as the following:

...I did not expect anything from the internship...I wanted to learn something...and I wanted to see if I really like the nursing profession...during the first three weeks, my clinical supervisor did not teach anything to all male students...we only did cleaning and labouring jobs...but female students could learn a lot of things, such as medical record management...we told this situation to our university...the university took no actions... (Participant #2, Interview, 4th Year Student)

3.2.1 Workplace environment: looked down on by co-workers due to the nursing profession

First, all experienced the labouring works from their supervisor(s) and other experienced nursing professionals in the clinical environment. The researcher captured one story:

...I have to move all the materials and stuff from the storeroom to the treatment rooms...this was the only task that I did for the first three weeks...I learnt nothing, no medical knowledge, and no useful skills from the hospital...I was not here to learn moving...I wanted to learn something about medical management and treatment from my supervisor...how could I write the report and reflection for this in*ternship experience?...* (Participant #17, Focus Group, 4th Year Student)

Second, all participants also expressed their concerns and experiences from the in-service male nurses and nursing professionals from their interned hospital. Many observed and indicated the unfairness and bias from their male counterparts in the hospital, particularly the unfairness and labouring works. One story was captured:

...I told to many male nurses in the hospital...I wanted to know the daily works and duties from the male nurses...but the answers were very negative...many male nurses are planning to leave their position(s) once they received the offer from other professions [not the health and social care profession]...it is mainly because of the unfairness and overloaded responsibilities as male nurses and nursing professionals...I understood many bad news and histories from the health profession...I am thinking about...should I continue my nursing career pathway?... (Participant #20, Interview, 4th Year Student)

In short, the negative first-person experiences and stories from their counterparts in the clinical environments significantly impacted their self-efficacy [25] and motivation for career development [26] in the nursing profession.

3.2.2 Social environment: looked down on by patients, friends, and family members

Male nursing students, in this case, experienced negative experiences and biases from different parties, such as their patients, friends, general public members, and even family members. Two stories in the clinical environments were captured:

...some patients in the lobby called me doctor...but I am not...I told them that I am a nursing student...but they called me little boy and asked me why not to study the medical doctor's programme...I told them I did not have enough points for the admission...they called me the loser... (Participant #3, Interview, 3rd Year Student)

...many nursing interned students needed to stand behind the supervisors...because we needed to learn the medical management and patients' services...but some patients just called me the nursing boy...they paid no respectfulness...they even asked me to stand in front of the nurses because I am a doctor...but I told them that I am a nursing student...the entire room looked at me and asked me why nursing...this was not happy... (Participant #6, Interview, 3rd Year Student)

From the perspective of social pressure due to their occupation, the researcher captured a story:

... I am unhappy...I could not make it to the physical therapist programme...my university admission exam only could take me to the nursing programme...my friends and my parents also felt bad because of my career decision...to the nursing programme...I am not sure should I enter the health industry or should I move to other industries...my parents asked me to join the business or emergency services



because no one will discriminate against me...because of my gender and the gender roles in other industries... (Participant #7, Interview, 1st Year Student)

4. Discussions

Selecting a career pathway and university major during the final year of secondary school is not an easy step for youths without working experience in the industry [33– 35]. Although school counsellors and teachers always provide suggestions, such suggestions may only cover a basic understanding due to their limited knowledge outside traditional school environments. When the researcher asked about their career decision and perspective regarding becoming a registered nurse as their life-long career, most participants expressed positive answers (due to the nature of the occupation and mission) [35–37]. Within the East Asian social context, occupations, gender roles, and personal behaviours are set and established in accordance with traditional practices and perspectives. Although nursing is a meaningful profession and occupation for both male and female individuals, the participants were subjected to stressful experiences from multiple channels [38-40].

According to the participants, gender played an important role in their university education [41]. Although such gender-oriented biases are not uncommon at the university level, especially since East Asian perspectives and social contexts always lead to social biases in teaching and learning environments, university lessons should have genderfree arrangements as subject matter, and knowledge transfer should not be limited based on gender [35,42]. Besides classmates and peers, many participants shared experiences of negative situations, stress, and mental distress due to arrangements made by their universities and course instructors during their university voyage. Research studies [42,43] indicate those female students have the same learning capacities and interests as male students. However, due to external elements, many women cannot or should not enrol in STEM programmes. The male nursing professionals in this study faced a similar situation due to their gender and social expectations. For example, nearly all expressed that their nursing department director needed to conduct counselling sessions with all students but asked them specifically to share why they wanted to study nursing as men.

In short, stress, mental health concerns, and negative experiences played important roles in the participants' selfefficacy, career motivations, and decision-making process [44]. Based on the self-efficacy approach [25], with the negative experiences, the individuals' experiences and personal beliefs were negative and low. Bandura argued that if individuals do not have any positive understanding and beliefs for the tasks, they are less likely to achieve the directions and goals (i.e., become male nurses and nursing professionals after university). Based on the social cognitive career and motivation theory [26], the researcher argued that the surrounding environments and individuals (i.e., classmates and nursing college environments) played important roles in the career motivations and decisionmaking process for the long-term career developments [45]. Although many received negative experiences, many will graduate with their undergraduate nursing college degree and programme. However, they are less likely to join the nursing profession after university.

Nursing students always need to conduct and complete many practicums, internships, field trips, and role-play experiences during their university voyage [46,47]. Such hands-on experiences may be conducted in real clinical environments or staged environments from student-run clinics. Based on the self-efficacy approach [25], many participants expressed their concerns and connections between the negative experiences and their level(s) of stress and mental concern(s). In fact, the unfairness in the student-run clinics played an important role in young adults' sense-making process. Although many do not have real-work experiences before their paid or non-paid-internships in the hospital, the sense of unfairness and negative workplace conditions had influenced their views about the health industry (in South Korea), particularly the gender differences.

Based on the participants' sharing, the unfairness, unbalanced workload, and negative workplace conditions played important roles in male nursing students' selfefficacy, mental health, career motivations, and decisionmaking process in the South Korean nursing profession. With the combination of the self-efficacy approach [25] and social cognitive career and motivation theory [26], both theories advocated that the likelihood of achievements will be negative if the individuals do not experience respectfulness. In this case, many expressed that they will not join the nursing profession after university based on their current experiences in the school and internship environments. In other words, the surrounding environments and individuals were one of the significant key points in the career motivations and decision-making process [23].

Gender discrimination [48–50] played an important role in the health profession. In this case, the researchers focused on the relationships between discrimination and social biases due to gender and nursing positions. A previous study [51] indicated that male nurses and nursing professionals face bias and unfairness due to their gender in the workplace environment. The unfairness may become one of the key points for turnover and attrition [21]. In this case, the participants also faced similar situations and unfairness due to their gender in the internship environment (i.e., workplace environment in the clinical background).

Besides the experiences from the clinical environments and workplace conditions, the social environments, general public members, and family members also offered negative experiences and biases due to their gender and occupational development. Due to the traditional perspectives and Confucianism [52,53] in the East Asian region, people believe men should be the protagonists in workplace environments. However, due to the nature of the nursing profession, East Asian people and general public members do not recognise the hard works and responsibilities of the nursing profession [23]. Besides the clinical environments and the conversations from the patients, their friends and family members also questioned them about their career development, particularly men in the nursing profession. Some previous studies [21,54,55] indicated that family and social pressure played significant roles in male nursing students and nursing professionals' mental health and career decisions as many general public members do not recognise their works and responsibilities due to the relationship between gender and career pathways.

In short, in line with some previous studies [24,50,51], male nurses and nursing professionals decided to leave their positions or leave the nursing profession due to the stress and unfairness from different directions, such as workplace conditions, discrimination, pressure from the general public members etc. In line with the self-efficacy approach [25] and the social cognitive career and motivation theory [26], the researcher advocated that the stress, social pressure from the surrounding environments and individuals played important roles in the self-efficacy development, career motivations, and decision-making process of these groups of male nursing students in South Korea. Although the business environments welcome nursing students and nursing college graduates to join the business environments and industries due to their excellent skills and practical experiences, the mismatching of human resources and workforce management continued to harm the health and social care system.

5. Limitations and future research directions

Four limitations were categorised. First, discrimination and biases based on gender are not uncommon in other industries and professions, particularly in some career pathways with gender orientation, such as nursing and engineering. Therefore, based on the directions and proposals of this study, future research studies may expand the populations to other industries in order to capture and solve the social problems in the global communities.

Second, gendered discrimination and biases are not uncommon in South Korean university environments. Currently, the researcher collected data from a group of male nursing college students. However, university students from other colleges and departments may face similar discrimination and biases due to their gender, such as male students from the early childhood education department. Therefore, future researchers may investigate the social problems in other colleges and departments in order to cover individuals and groups with similar problems.

Third, the current human resources and workforce shortage for nurses and nursing professionals is hard. Although many nursing students received scholarships for their undergraduate degree in nursing, many decided to leave the profession after university due to discrimination and bias. Therefore, future research studies may further collect data from both male and female nursing students. In fact, female students' voices may be useful to discover the in-depth situations and problems in the health and social care profession. Therefore, further investigations will be encouraged.

Fourth, the current study only recruited 20 participants for the qualitative sharing. Although the stories from these 20 participants were rich, the small group and sampling cannot represent the whole social situation and problem in South Korea. Therefore, future research studies may employ the mixed methodology to gather both quantitative and qualitative voices and comments from male nursing students to upgrade and outline the holistic picture in the region.

6. Contributions to the practice

Three contributions to the practice were categorised. First, the human resource and workforce shortage of nursing professionals is one of the significant problems in many countries and regions, particularly for male nursing professionals. However, based on the current study results, male nursing students face stress, burnout, and pressure, which may influence their career decision. Therefore, government departments, university leaders, medical facilities managers, and human resource planners should take this study as the opportunity to reform and polish the government policies and regulations in order to answer the gender discrimination and bias in the health and social care profession.

Second, gender discrimination and bias happen in many professions and workplaces, particularly in some gender-oriented professions. The results of this study outlined the problems and gender discrimination in the health and social care profession. Government departments of human resources and gender equality should take this study as the blueprint to reform and polish the workplace conditions and gender policies. The improvements will be beneficial to all workers and professionals in different industries and sectors.

Third, university leaders, department heads, university lecturers, and education supervisors may take this opportunity to polish their current curriculum and instructions for both majorities and minorities. Although the current study focused on the problems in the nursing colleges, other faculties and colleges may have similar issues. Therefore, school professionals should continue to reform and polish the current school regulations.

7. Conclusions

In conclusion, gender, gender role, occupation, and social expectation are the main concerns and sources of stress for male nursing students in South Korea. Although the government departments and schools encouraged male students to join the nursing colleges, the gender bias and voices from the public members continued to influence their understanding, position, and psychological well-being. Although the general public members and society do not express acceptance due to gender bias and expectation, many expressed positive feelings and sharing because of their satisfaction, particularly being male nursing students for the public health system. However, many are looking forward the social equality and gender equality in the nursing profession. Nevertheless, gender-related issues exist in many communities and societies, prospective male nursing students should continue to pursue their achievements regardless the discrimination and bias. Otherwise, the human resources shortages will not be solved, and the public health system will continue to suffer from the limited workforce management.

Ethics approval and consent to participate

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Conflict of interest

The author declares no conflict of interest.

References

- [1] Dos Santos LM. The human resource and workforce shortage of male nurses and nursing professionals: The challenges in the Asian region. To be published in Journal of Men's Health. 2021. (in press)
- [2] Arif S, Khokhar S. A historical glance: Challenges for male nurses. JPMA. The Journal of the Pakistan Medical Association. 2017; 67: 1889–1894.
- Korea Sees Increase in Male Nurses. 2020. Available at: https:// www.koreatimes.co.kr/www/nation/2020/10/119_297611.html (Accessed: 1 August 2021).
- [4] Burnett M. MEN at WORK. Men in Nursing. 2007; 2: 41–49.
- [5] Lee M, Ju Y, Lim S. A study on the intent to leave and stay among hospital nurses in Korea: a cross-sectional survey. Journal of Nursing Management. 2020; 28: 332–341.
- [6] Gavine A, Carson M, Eccles J, Whitford HM. Barriers and facilitators to recruiting and retaining men on pre-registration nursing programmes in Western countries: a systemised rapid review. Nurse Education Today. 2020; 88: 104368.
- [7] Dwinijanti L, Adhikara M, Kusumapradja R. Job satisfaction and turnover intention among public sector nurses: Is workload and burnout the issue? Jurnal Ilmiah Bidang Akuntansi dan Manajemen. 2020; 17: 67–77.
- [8] Ashkenazi L, Livshiz-Riven I, Romem P, Grinstein-Cohen O. Male Nurses in Israel: Barriers, Motivation, and how they are

Perceived by Nursing Students. Journal of Professional Nursing. 2017; 33: 162–169.

- [9] Mohamed LK. First-career and second-career nurses' experiences of stress, presenteeism and burn-out during transition to practice. Evidence Based Nursing. 2019; 22: 85.
- [10] Lee E. Why newly graduated nurses in South Korea leave their first job in a short time? a survival analysis. Human Resources for Health. 2019; 17: 61.
- [11] Chen Y, Zhang Y, Jin R. Professional Identity of Male Nursing Students in 3-Year Colleges and Junior Male Nurses in China. American Journal of Men's Health. 2020; 14: 1557988320936583.
- [12] Kim J, Kim S, Park E, Jeong S, Lee E. Policy Issues and New Direction for Comprehensive Nursing Service in the National Health Insurance. Journal of Korean Academy of Nursing Administration. 2017; 23: 312–322.
- [13] Dos Santos LM. How does COVID-19 pandemic influence the sense of belonging and decision-making process of nursing students: The study of nursing students' experiences. International Journal of Environmental Research and Public Health. 2020; 17: 5603.
- [14] Chen S, Fu C, Li R, Lou J, Yu H. Relationships among Social Support, Professional Empowerment, and Nursing Career Development of Male Nurses. Western Journal of Nursing Research. 2012; 34: 862–882.
- [15] Brown B. Men in nursing: re-evaluating masculinities, reevaluating gender. Contemporary Nurse. 2009; 33: 120–129.
- [16] MacWilliams BR, Schmidt B, Bleich MR. Men in Nursing. American Journal of Nursing. 2013; 113: 38–44.
- [17] Kowalczuk K, Krajewska-Kułak E, Sobolewski M. Psychosocial hazards in the workplace as an aspect of horizontal segregation in the nursing profession. Frontiers in Psychology. 2018; 9: 2042.
- [18] Kluczyńska U. Motives for choosing and resigning from nursing by men and the definition of masculinity: a qualitative study. Journal of Advanced Nursing. 2017; 73: 1366–1376.
- [19] Wills N, Wilson B, Woodcock E, Abraham S, Gillum D. Appearance of Nurses and Perceived Professionalism. International Journal of Studies in Nursing. 2018; 3: 30.
- [20] Valizadeh L, Zamanzadeh V, Fooladi MM, Azadi A, Negarandeh R, Monadi M. The image of nursing, as perceived by Iranian male nurses. Nursing and Health Sciences. 2014; 16: 307–313.
- [21] Dos Santos LM. I teach nursing as a male nursing educator: The East Asian perspective, context, and social cognitive career experiences. International Journal of Environmental Research and Public Health. 2020; 17: 4327.
- [22] Kim I, Shim H. Subjectivity about Turnover Intention among Male Nurses in South Korea: a Q-Methodological Study. Asian Nursing Research. 2018; 12: 113–120.
- [23] Dos Santos LM. I am a nursing student but hate nursing: The East Asian perspectives between social expectation and social context. International Journal of Environmental Research and Public Health. 2020; 17: 2608.
- [24] Cottingham MD. The missing and needed male nurse: Discursive hybridisation in professional nursing texts. Gender, Work & Organization. 2019; 26: 197–213.
- [25] Bandura A. Self-efficacy mechanism in human agency. American Psychologist. 1982; 37: 122–147.
- [26] Dos Santos LM. Developing bilingualism in nursing students: Learning foreign languages beyond the nursing curriculum. Healthcare 2021; 9: 326.
- [27] Dos Santos LM. I want to teach in the regional areas: A qualitative study about teachers' career experiences and decisions in regional Australia. Journal of Educational and Social Research. 2021; 11: 32–42.
- [28] Thomas DR. A general inductive approach for analysing qual-

itative evaluation data. American Journal of Evaluation. 2006; 27: 237–246.

- [29] Merriam SB. Qualitative research: A guide to design and implementation. John Wiley and Sons: New Jersey. 2009.
- [30] Seidman I. Interviewing as qualitative research: A guide for researchers in education and the social sciences. Teachers College Press: New York. 2006.
- [31] Strauss A, Corbin JM. Basics of qualitative research: Grounded theory procedures and techniques. Sage: Thousand Oaks. 1990.
- [32] Murat M, Köse S, Savaşer S. Determination of stress, depression and burnout levels of front-line nurses during the COVID-19 pandemic. International Journal of Mental Health Nursing. 2021; 30: 533–543.
- [33] Kendricks K, Arment A, Nedunuri K, Lowell C. Aligning best practices in student success and career preparedness: An exploratory study to establish pathways to STEM careers for undergraduate minority students. Journal of Research in Technical Careers. 2019; 3: 27–48.
- [34] Han S, Borgonovi F, Guerriero S. What motivates high school students to want to be teachers? The role of salary, working conditions, and societal evaluations About occupations in a oomparative perspective. American Educational Research Journal. 2018; 55: 3–39.
- [35] Dos Santos LM. Female mechanical engineering students' career decisions and development: A case study of university undergraduate students. Journal of Educational and Social Research. 2021; 11: 1.
- [36] Stringer KJ, Kerpelman JL. Career Identity Development in College Students: Decision Making, Parental Support, and Work Experience. Identity. 2010; 10: 181–200.
- [37] Falco LD, Summers JJ. Improving Career Decision Self-Efficacy and STEM Self-Efficacy in High School Girls: Evaluation of an Intervention. Journal of Career Development. 2019; 46: 62–76.
- [38] Ogawa R. Care and Migration Regimes in Japan, Taiwan, and Korea. Gender, Care and Migration in East Asia. 2018; 181– 204.
- [39] Tao Y. Earnings of Academic Scientists and Engineers: Intersectionality of Gender and Race/Ethnicity Effects. American Behavioral Scientist. 2018; 62: 625–644.
- [40] Lee JK, Park H. Measures of Women's Status and Gender Inequality in Asia: Issues and Challenges. Asian Journal of Women'S Studies. 2011; 17: 7–31.
- [41] Azadi A, Valizadeh L, Zamanzadeh V, O'Connor T, Negarandeh R, Taghinejad H. Maintaining Equilibrium: Socialization and Gendered Identities of Iranian Male Nurses. the Journal of Men'S Studies. 2017; 25: 223–244.

- [42] Botella C, Rueda S, López-Iñesta E, Marzal P. Gender diversity in STEM disciplines: A multiple factor problem. Entropy. 2019; 21: 30.
- [43] Booy C, Jansen N, Joukes G, Van Schaik E. Trend analysis gender in higher STEM Education. National Expert Organisation Girls/Women and Science/Technology. 2012.
- [44] Finstad G, Ariza-Montes A, Giorgi G, Lecca L, Arcangeli G, Mucci N. The JDCS model and blue-collar bullying: Decent working conditions for a healthy environment. International Journal of Environmental Research and Public Health. 2019; 16: 3411.
- [45] Kronsberg S, Bouret J, Brett A. Lived experiences of male nurses: Dire consequences for the nursing profession. Journal of Nursing Education and Practice. 2017; 8: 46–53.
- [46] Wallace J. Nursing Student Work-Study Internship Program: an Academic Partnership. The Journal of Nursing Education. 2017; 55: 357–359.
- [47] Lee GA, Fitzgerald L. A clinical internship model for the nurse practitioner programme. Nurse Education in Practice. 2009; 8: 397–404.
- [48] Yi JS, Kim H. Factors related to presenteeism among South Korean workers exposed to workplace psychological adverse social behavior. International Journal of Environmental Research and Public Health. 2020; 17: 3472.
- [49] Hong J. Effects of Ethnic Identity on the Relationship between Mental Health and Perceived Discrimination among Ethnic Return Migrants: the Case of Korean Chinese Return-Migrated to South Korea. Journal of Immigrant and Minority Health. 2019; 21: 522–532.
- [50] Aynaci G, Gulmez H. Looking at male nurse discrimination among nursing students with O'Connor's finger dexterity: Future of gender discrimination. Journal of Men's Health. 2019; 15: 27.
- [51] Abrahamsen B. Career development and masculinities among male nurses. NORA - Nordic Journal of Feminist and Gender Research. 2004; 12: 31–39.
- [52] Kim K O. The reproduction of Confucian culture in contemporary Korea: An anthropological study. Confucian traditions in East Asian modernity: moral education and economic culture in Japan and the four mini-dragons. 1996; 202–227.
- [53] Cho L, Yama M. Tradition and change in the Asian family. East-West Center University of Hawaii Press: USA. 1994.
- [54] Moore M, Xie Y, Davis P, Scarbrough A. Shortage of male nursing students: The experience of a growing nursing program. Journal of Men's Health. 2020; 16: e9–e17.
- [55] Herakova LL. Nursing Masculinity: Male Nurses' Experiences through a Co-Cultural Lens. Howard Journal of Communications. 2012; 23: 332–350.