



Research article

Reasons for choosing and completing nursing studies among incoming and outgoing students: A qualitative study

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ABSTRACT

Background: The shortage of nurses is causing instability and crisis in health systems and will continue. The WHO reinforced the importance of recruiting and retaining new students. Authors of various studies recommend the need to identify and understand the reasons for pursuing a nursing degree.

Objectives: To determine students' preference for nursing studies and to identify the reasons for choosing, continuing, and completing a bachelor's degree in nursing.

Design: Qualitative, descriptive study.

Participants: 106 nursing students at the University of Huelva (Spain) participated during their first year (2017) and final year (2021) of the nursing degree.

Methods: This study was conducted with the same group of students in two phases. Data were collected in writing in a document with open-ended questions and no maximum wordcount. The responses were analysed using content analysis.

Results: A total of 76.4 % of participants stated that nursing had been their first choice. The main reasons for choosing a nursing degree were associated with fulfilment, and a desire to help others and interact with them. The reasons for completing their studies were primarily related to an interest in providing professional care, showing a deeper and more concrete knowledge of nursing care work.

Conclusion: For most participants, nursing was their first choice due to a strong intrinsic motivation related to self-satisfaction in helping others. The reasons for completing this degree had extrinsic motivations linked to nursing activity in hospital. Areas such as management, teaching, or research were not interesting to our students. Knowing the causes of this lack of interest could help us attract them to these areas.

1. Introduction

In 2020, there were 27.9 million nurses in the world, representing 59 % of healthcare professionals (WHO, 2020). Globally, the public health crisis caused by the COVID-19 pandemic and a rapidly ageing population have reinforced the importance of nurses as a key component in healthcare systems (Buheji and Buhaid, 2020; Shun, 2021). The global shortage of nurses has been estimated at 5.9 million (WHO, 2020).

In the post-pandemic context, the International Council of Nurses (ICN, 2022a) warns of a possible shortage of 13 million nurses, linking this to not only the pandemic situation but also to other factors: an ageing nursing workforce, with 4.7 million nurses retiring over the next decade; poor working conditions with lack of protection, increased workload and low salaries; and the mass traumatisation of nurses by the COVID-19 pandemic, which could result in 2.5 million nurses leaving

the profession. This shortage of nurses will cause instability and crises in health systems that will be felt for years to come (ICN, 2022a; ICN, 2022b).

To reduce the shortage of nurses by 2030, the total number of nursing graduates would need to rise by an average of 8 % per year and the ability to recruit and retain new graduates must improve (WHO, 2020). Health systems and nations must strive to attract and retain nurses in the workforce and improve the domestic production of nurses to meet and exceed demand (WHO, 2021). In order to attract students, identifying and understanding the reasons for pursuing a nursing degree is important and has been reinforced in recent studies (Almutary and Al-Moteri, 2020; Macdiarmid et al., 2021b; Marznaki et al., 2021).

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2. Background

In Spain, access to nursing studies requires completion of a science baccalaureate or advanced vocational training, as well as passing an entrance examination organised by the regional government. This exam is used to set the minimum grade to gain access to university study. Access to a bachelor's degree in nursing usually requires a high grade. For instance, the minimum grade for entry to the 2021–2022 academic year was 11.779 out of the maximum of 14. The dropout rate from nursing studies is practically zero (Spanish Ministry of Universities, 2021). Around 10,000 new nurses graduate from Spanish universities each year (Spanish Ministry of Health, 2021).

After completing the bachelor's degree in nursing, students can enter the workforce rather quickly, but the working conditions in Spain are less than ideal (Spanish General Council of Nursing, 2020; Spanish Ministry of Health, 2021). Unemployment, job instability, and job precariousness have caused more than 20,000 Spanish nurses to emigrate for work (Spanish General Council of Nursing, 2020).

Despite current entry requirements and working conditions, nursing is one of the degree programmes with the highest demand in Spain. Demand to study the nursing degree exceeds the number of places available each year and many prospective nursing students are not admitted. Many countries are considering increasing the number of nursing students (Blay and Smith, 2020; Santos, 2022; Spurlock, 2020).

Several authors have highlighted the importance of identifying the reasons why students choose to study nursing. Generational changes, particularly those related to the millennial generation, have an impact on student recruitment and retention, and strategies cannot be the same for all students, as generational differences must be taken into consideration (McClain et al., 2021; Price et al., 2018). Understanding the reasons for choosing a nursing career enables academic institutions to tailor their nursing programmes to the needs and expectations of today's students, making them more attractive to them (Almutary and Al-Moteri, 2020; Macdiarmid et al., 2021a; Macdiarmid et al., 2021b; Price et al., 2018).

Previous studies with nursing students have focused on factors influencing career choice (Blay and Smith, 2020; Liaw et al., 2017; Marznaki et al., 2021). Other research has been designed to explore student expectations (Lindberg et al., 2020). Authors have focused on the relationship between reasons for choosing a nursing degree and other factors, such as the social status and image of nursing (Öncü et al., 2022), stereotypes of the nursing profession (Raymond et al., 2018), and the influence of students' gender on their career choice (Jamieson et al., 2019; Terry et al., 2020). However, no recent original research has been found that directly explores the reasons for choosing and completing a nursing degree. This gap in knowledge was also noted by other authors (Macdiarmid et al., 2021b).

The lack of current studies focusing on the reasons for choosing and completing a nursing degree, coupled with the great interest in the nursing profession in Spain, highlights the relevance of conducting this study among Spanish students. The aims were to determine student preferences for studying a bachelor's degree in nursing and to identify the reasons for choosing, continuing, and completing their nursing degree.

3. Materials and methods

3.1. Design

A qualitative descriptive design was considered the most appropriate for our aim since this design is particularly relevant when it is intended to discover and understand a process, a phenomenon, or the perspectives of the individuals which are the object of the research (Bradshaw et al., 2017). The study was conducted with the same group of students in two phases, at the commencement of their degree and at completion. The research adheres to the Consolidated Criteria for Reporting Qualitative

Studies guidelines by Tong et al. (2007).

3.2. Participants and setting

The participants were incoming students in the first year of the bachelor's degree in nursing at the University of Huelva in 2017 who completed their studies in 2021. The inclusion criteria were being of legal age (18 years old in Spain) and a new student in the bachelor's degree in nursing. The only exclusion criterion was transferring from another university, which would have entailed prior study of the bachelor's degree in nursing modules.

Of the 130 first-year students enrolled on the bachelor's degree in nursing at the University of Huelva in 2017, 110 (84.6 %) met the inclusion criteria and were invited to participate in the study. Of these, 106 (96.36 %) agreed to participate and were included in both phases of the study.

3.3. Dimensions and data collection

The data were collected in writing in a document with no maximum wordcount, in which students were asked an open-ended question each year. In their first year (2017), to explore and establish 'reasons why the students had chosen the bachelor's degree in nursing', we asked them *Why do you want to study for this degree?* In their fourth year (2021), to identify the 'reasons for pursuing and completing this degree', we asked them *Why did you do this degree?* On both occasions, another open-ended question was asked on the topic of student preferences (*Was the bachelor's degree in nursing your first-choice degree? If not, what was your first choice?*), as well as questions on their socio-academic details (age, sex, and pathway to accessing the degree in nursing).

The first data collection phase took place in the first week of classes in their first academic year (October 2017). The second data collection phase took place in the final week of classes in their fourth (final) academic year (May 2021), during the final session in the degree for these students.

3.4. Data analysis

Content analysis followed the steps described by Graneheim et al. (2017). Responses were transcribed verbatim. Two experienced researchers (CTM and MRP) independently carried out an iterative data familiarisation process by reading and re-reading the text excerpts, words or sentences, and the identification of the units of meaning that alluded to the reasons why respondents chose/completed the bachelor's degree in nursing. The units were then coded according to their content and compared according to their similarities, before being discussed and reviewed by the researchers, who reached a consensus on the final grouping of the codes into the emerging categories. Themes were sought by assigning codes and categories, then reviewed against the initial codes. The themes were confirmed, ensuring that they accurately reflected the data. During the analysis, we found that several codes repeatedly appeared together in student narratives. We analysed these relationships and based on the frequency of their repetitions, established where the interactions between the emerging categories were to be found.

Throughout this process, several meetings were held to allow all members of the team to discuss their findings and reach a reflective consensus. A descriptive analysis of the socio-academic data and the data on student preferences for studying the bachelor's degree in nursing was also carried out.

3.5. Trustworthiness

Rigour and trustworthiness were established using the criteria described by Lincoln and Guba (1985). To ensure the credibility and confirmability of the data and their interpretations we verified the

transcripts as accurate. An iterative familiarisation process was carried out with the data, and two researchers participated in identifying and coding units of meaning independently. In addition, all authors held several meetings during the coding and categorization process to give operational meaning and agree, unify, and limit the codes, categories, and themes.

To guarantee the dependability of this process, the researchers identified and reflected on their preconceived beliefs and opinions about the phenomenon under study, as a bracketing exercise (Polit and Beck, 2009). The steps of the codification, categorization, and thematic assignment can be accessed in the supplementary files. The researcher responsible for data collection had not been involved in the teaching or assessment of this group of students.

The participants showed a high degree of commitment as they were willing to be questioned again after four years. Their high response rate (96.36 %) could support the transferability of the findings. Authenticity was reflected in participant quotes and in the process of coding, categorising, and theme allocation.

3.6. Ethical considerations

To gain access to the students, the researcher responsible for data collection (CTM) introduced herself in the classroom sessions of the weeks described, informed students about the study objectives, the anonymity and confidentiality of their data, the voluntary nature of their participation, and the absence of any relationship between their participation and the module in which data collection took place. Students' written consent to participate was obtained using a standard informed consent form. The study was approved by the Andalusian Biomedical Research Ethics Committee (PID: Identidadenfermera; no. ref. 1564-N-20).

4. Findings

4.1. Socio-academic characteristics

With distribution by sex, 79.2 % of the 106 participants were female and 20.8 % were male. The mean age in 2017 was 19.8 years old and the mode was 18, with a minimum age of 18 and a maximum age of 42. Regarding their pathway to accessing the bachelor's degree in nursing, 56.6 % of the participants (n = 60) had completed the science baccalaureate, and 35.85 % (n = 38) had completed an advanced vocational training; 99 % of the latter had studied healthcare disciplines. The other pathways to the degree in nursing, mature students aged over 25 years old (n = 3) and another degree programme (n = 5), were barely represented. The data can be accessed in the supplementary material.

4.2. Preference for studying the bachelor's degree in nursing

Most participants (76.4 %) stated that nursing studies had been their first choice. The students who had not selected a nursing degree as their first choice (23.6 %, n = 25) had mostly chosen medicine (56 %, n = 14). There were a number of differences by sex: the degree programme was the first choice for 78.6 % of the women (ratio = 66yes:18no) but for only 68.1 % of the men (ratio = 15:7).

4.3. Reasons for choosing the bachelor's degree in nursing

In the analysis of the reasons for choosing a nursing degree, 227 units of meaning were identified and assigned to 61 different codes. Once they had been grouped, 13 categories emerged and were condensed into 5 themes. The codes, categories, and themes are presented in the supplementary files. The frequency with which the different reasons appear is also included, labelling them by order of appearance as primary reason in the narrative (n₁) and secondary reason in the narrative (n₂), including the absolute frequency (n) of each theme.

4.3.1. Personal interests

This theme covers the personal and intricate reasons for choosing a degree in nursing. It encompasses the following categories: fulfilment, vocation, predisposition, and desire to help others.

Fulfilment, understood as the participant's desire or aspiration to be part of the nursing profession and to provide care, was the category with the greatest presence of all. It was linked to narratives such as feeling good, wanting to help, care for and interact with people, and wanting to belong to the healthcare sector. Some quotes about this category were: P30 "Because I think it's wonderful and this profession will make me feel really good about myself"; P4 "Because I like the interaction with the patient" (Interaction with others); P7 "Because I like looking after people and healthcare is a field that appeals to me" (Interest in providing care – Healthcare setting).

Vocation covers narratives that explicitly mentioned the term or expressed a passionate, long-held desire to be a nurse. Samples of this category can be seen in the following quotes: P8 "Because I've wanted to do it for as long as I can remember and because I love working with people and helping them" (Interaction with others- Desire to help others); P97 "Because I'm passionate about nursing and I know it's my vocation, I can't imagine doing any other job" (Interest in providing care).

Predisposition encompasses narratives relating to a personal interest in caring for others. An example of this category was P34 "Because it's a career that's appealed to me since I was little, and I love seeing what nurses do on TV and at the hospital" (Social representation).

Desire to help others emerges from the narratives indicating a personal interest in helping others when choosing nursing, but it does not relate to providing care or to other references to the actions, interventions, areas, tasks, etc. involved in nursing. Quotes which reflected desire to help others were: P32 "To help people in an area they are unfamiliar with"; P59 "I think it's a wonderful profession where you give to others and you can experience immense personal gratification in exchange and I love the way you can look after people and make them better whenever it's possible" (Interest in providing care).

4.3.2. Perception of the nature of nursing

This theme represents aspects of nursing itself as reasons for choosing this degree, including interest in providing care; interacting with others; contributing to society; technical and practical skills. This theme was the second most represented among the participant responses.

Interest in providing care encompasses the narratives that directly expressed reasons relating to care provision and the desire to care for others. Some quotes in this category were: P42 "Because it's linked to care and patient attention" (Interaction with others); P78 "Because I'd like to work as a nurse in emergency and critical care".

Interaction with others, in this case patients, was explicitly stated in the narratives of the participants, for instance: P43 "I think the degree in Nursing prepares you to work very closely with patients" (Interest in providing care).

Contributing to society emerges from the narratives that highlighted the importance of nurses' work for the health of people and the community:: P30 "Because I'm going to do a job that really contributes to society".

The **technical and practical skills** possessed by nursing professionals were mentioned by one participant: P69 "I'd like to have a practical job and not have to do the same thing all the time".

4.3.3. Professional context

This theme focuses on aspects surrounding the nursing profession but are not explicitly part of it: The healthcare setting and career opportunities. This theme was much less represented than previous ones.

Healthcare context covers the narratives that mention participants' interest in the healthcare context: P56 "I want to study this degree because healthcare has always been the field that appeals to me most".

Career opportunities includes narratives expressing reasons related to professional opportunities, possibility of entering the labour market, and working conditions as a nurse: P79 "Because I like what this degree has to offer in terms of career opportunities and the broad range of jobs you can do with it".

4.3.4. Social influence

This theme includes the categories that mention reasons relating to the social context of nursing, such as how nursing and nurses are socially represented in the media and viewed through the lens of family ties with nursing and nurses.

The **social representation** category relates to the image of nursing and nursing professionals as a central component in the decision to study nursing: P34 "Because it's a career that's appealed to me since I was little, and I love seeing what nurses do on TV and at the hospital" (Predisposition).

The **family links** category emerges from two narratives in which the participants referred to the influence of their knowledge of nursing gleaned from their family ties to nursing professionals: P58 "I decided to study for this degree because my mum is also a nurse and she's talked a lot about the profession, since I was little".

4.3.5. Springboard to other disciplines

A single category, labelled springboard, encompasses the narratives in which the participants planned to study nursing as a vehicle to access other disciplines such as medicine or physiotherapy P61 "Because if I do the first year and I start Medicine next year, they'll recognise the modules I've done".

The categories that emerged in this dimension interacted and were

interlinked with one another. To illustrate these internal relationships, we developed Fig. 1, in which the categories are the central component and are presented by order of frequency. Categories are linked together by perpendicular lines, with the line colour matching the more frequent category of the two. The intersections of these lines show the number of narratives in which both categories are mentioned. The outlying box contains categories that have not appeared together with others. There is a noticeable correlation between the categories fulfilment and desire to help others (n = 21), as well as between fulfilment and interest in providing care (n = 11). It should also be noted that the fulfilment category was mentioned alongside almost every other category.

4.4. Reasons for continuing and completing the bachelor's degree in nursing

In the second data collection phase, when the students were in their fourth year of the bachelor's degree in nursing and were asked why they had continued and completed their studies, 234 units of meaning were identified and condensed into 83 codes. These were then grouped, producing 10 categories that were combined into 4 themes. See the supplementary files for the frequency with which the different reasons appear, labelled in order of appearance as primary reason in the narrative (n₁) or secondary reason (n₂), as well as the absolute frequency (n) of each theme.

4.4.1. Personal interests

This theme remained intact, with the four categories identified when the students were in the first year. Once again, this was the main theme observed among the participants, appearing in 92 of the 106 narratives analysed.

Fulfilment maintained its meaning, i.e., the participant's desire or aspiration to become a professional nurse. This category was the

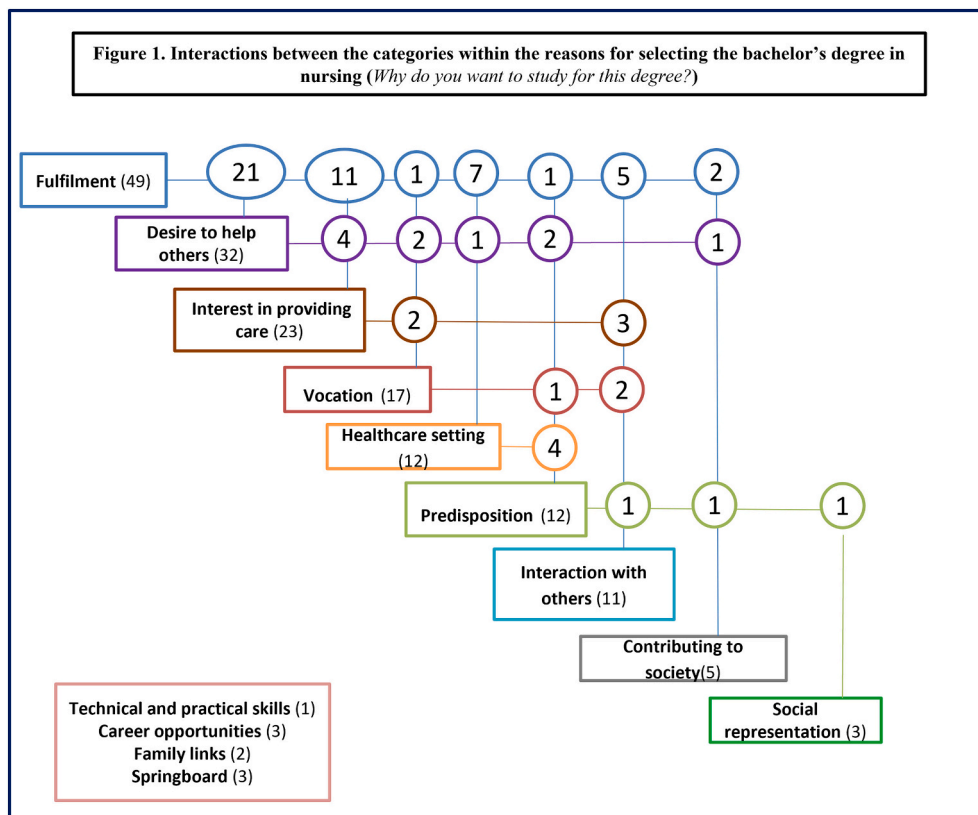


Fig. 1. Interactions between the categories within the reasons for selecting the bachelor's degree in nursing.

second most cited reason among students for continuing and completing the nursing degree. A quote in this category was: P46 “Because I always wanted to help others and for my life to make an impact on the world, and nursing is a good way to do that. I also like learning how the body works and how to care for it” (Desire to help others – Contributing to society - Knowledge –Interest in providing care).

Vocation, again understood as an explicit and passionate desire to become a nurse, as illustrated by quotes such as the following: P8 “Because I feel like I have a vocation for this profession, because I like caring and feeling fulfilled when I help other people” (Interest in providing care – Fulfilment – Desire to help others). The representation of this category as reason for continuing and completing the degree in nursing was slightly less than to choosing it.

Desire to help others included the narratives that indicated a personal interest in helping others, unrelated to caregiving, by continuing and completing a nursing degree. This category maintained its representation among participant quotes P60 “To be able to help patients and promote a new kind of nursing, much more focused on patients and their families” (Development of nursing profession).

Predisposition encompasses narratives relating to a personal interest in caring for others, as illustrated by the following quote: P44 “Because I've always liked healthcare and being able to help people, acting as the first point of contact with patients” (Interest in providing care – Desire to help others).

4.4.2. Perception of the nature of nursing

Participant replies linked to a series of aspects of the nature of nursing rose from $n = 38$ in the first year to $n = 78$ in the fourth year. Two categories remained the same as in the choice of degree: interest in providing care and interaction with others. In addition, two new categories emerged: professional development and professional knowledge acquisition.

Interest in providing care. Quantitatively, the interest in providing care category showed a marked increase (from $n = 23$ in the first year to $n = 59$ in the fourth year), making it the most frequent of the 10 emergent categories. At the qualitative level, the narratives were more detailed, concise, and precise than in the first year. The following quotes illustrate how this category progressed: P25 “I think the nursing degree is the most closely related to patient care of all the health degrees”; P31 “I chose this degree because I've always admired nurses' role in the healthcare system and in homes”; P35 “I think it's a wonderful career in which we are able to apply techniques, procedures, and a holistic approach to people to promote and improve people's health”; P53 “Because of the need to offer quality care and to build and promote health in all its facets”; P65 “Because nursing is the basis of all care [...]”; P72 “It's a profession where your work is going to improve the quality of life of many people, both healthy and sick, and where you'll be able to support people at every stage in their lives [...]”.

Interaction with others

The desire to interact with patients is explicitly stated in the participant narratives included in this category. A participant explained the following: P28 “Because I'm very sociable, I like looking after people who need care. I feel responsible enough to teach others healthy habits, I like supporting people, listening to them” (Interest in providing care).

The **development of the nursing profession** category encompasses narratives in which the participants expressed broader aspirations than the mere exercise and knowledge of the nursing profession as a reason to continue and complete a nursing degree. Quotes in this category included: P60 “To be able to help patients and promote a new kind of nursing, much more focused on patients and their families” (Desire to help others); P72 “It also enables you to work in teaching and research in fields where there's still a lot to be studied”.

Knowledge includes the reasons for continuing and completing the nursing degree that are linked to the acquisition of professional nursing knowledge and the interest in acquiring this knowledge, as in the following quote: P27 “It's a combination of everything I like most: knowledge about physical, psychological and social health with a view to providing ongoing care for people. I love life and I find it fulfilling to help and care for others, to live healthily” (Interest in providing care – Interaction with other – Fulfilment).

4.4.3. Professional context

This theme contained a single category: **healthcare setting**, but it remained significant in relation to the desire to work in healthcare, without specifying the precise aspects. In quantitative terms, the frequency of appearance of this theme declined (from $n = 15$ in the first year to $n = 3$ in the fourth year). The following quote provides an example of this category: P77 “I was certain that I wanted to study a degree related to health. I was really drawn to nursing” (Predisposition – Healthcare setting – Interest in providing care).

4.4.4. Lesser of two evils

This theme is linked to a single category with the same label: lesser of two evils. It was represented by a single student, who expressed no reason for continuing and completing their studies. A quote of this category was: P77 “I was certain that I wanted to study a degree related to health. I was really drawn to nursing” (Predisposition – Healthcare setting – Interest in providing care).

Fig. 2 shows the categories that appear together in the participant narratives. This figure follows the same logic as Fig. 1 and uses the same colour categories. In this case, the greatest overlap is found between the categories interest in providing care and fulfilment ($n = 16$), as well as fulfilment and desire to help others ($n = 18$). The category with the most interrelationships in the fourth year was interest in providing care.

5. Discussion

The participants were mostly women aged 18–20, which corroborates the traditional tendency towards feminisation in the nursing profession, making it more attractive to women than to men. This is in line with data provided by the WHO (2020), which states that 90 % of nurses are women, as confirmed by numerous studies (Baker et al., 2021; Nogueira et al., 2021). The influence of gender on the profession may be negatively affecting the demand for access to the bachelor's degree in nursing (Baker et al., 2021; Cho and Jang, 2021; Teresa-Morales et al., 2022; Terry et al., 2020).

The participants displayed a strong preference for the nursing degree, demonstrating their implicit and intrinsic desire to study and become nurses. This preference was much stronger compared with other studies (Albar and Sivianes-Fernández, 2016; Mohsen et al., 2022). Other studies have linked this strong preference to greater job satisfaction, better image of the nursing profession, and a greater intention to remain in it (Messineo et al., 2019; Öncü et al., 2022). The participants decided to study this degree even though, in the Spanish context, the academic requirements for access are tough and the high demand for access to the degree leaves many students without a place each year. This does not coincide with other studies that argue low mandatory academic requirements are a reason for choosing the degree in nursing, both for entry and completion of studies (Alexander and Diefenbeck, 2020).

In their first year, participants' reasons for choosing a nursing degree were linked to a desire to feel good by helping others, coinciding with Macdiarmid et al. (2021b). Our participants' vocational image of the profession portrays it as a professional activity that contributes to society and provides personal satisfaction. This view of the profession—limited to the hospital care setting, as shown in their first year—could be because participants started the degree with a stereotypical, idealised, and inaccurate perception of the profession influenced

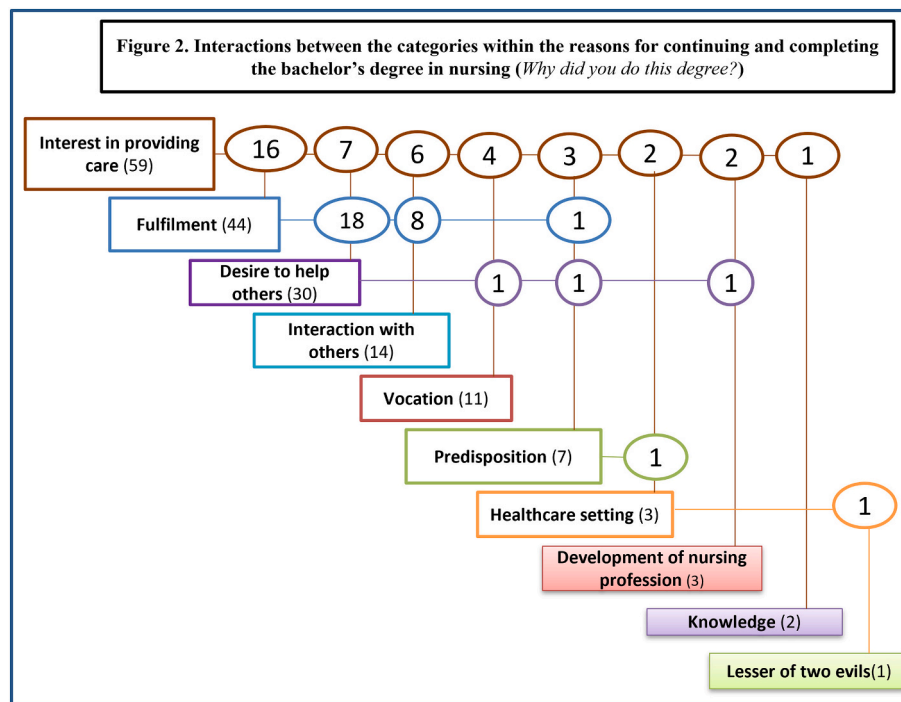


Fig. 2. Interactions between the categories within the reasons for continuing and completing the bachelor's degree in nursing.

by the social image of nursing (Hoeve et al., 2017; Rabie et al., 2021). Several stated that the image of nursing projected in the media had attracted them to pursue the bachelor's degree in nursing, which is consistent with other studies (Hoeve et al., 2017; Mohsen et al., 2022). However, in other studies, the misconception of the nature of nurses' work was a minor reason for choosing this degree or even a reason for not choosing it (Elmorshedy et al., 2020; Marznaki et al., 2021; Rabie et al., 2021). The differences between the reality of nursing and the idealised image of the profession may lead newly graduated nurses to quit their jobs (Allen et al., 2022).

In both the first and fourth year, it was found that the influence of relatives and previous contact with the hospital environment did not stand out among the reasons for choosing and completing their studies. These data do not match those obtained by Lindberg et al. (2020), who showed that these aspects can interfere, either positively or negatively, in choosing the bachelor's degree in nursing. Similarly, we found that career opportunities, working conditions, and job security were hardly represented among our participants, whereas these were among some of the primary reasons for choosing this degree according to other studies (Liaw et al., 2016; Raymond et al., 2018; Suluhan et al., 2020). In addition, some of our participants had chosen nursing as a conduit to other studies, which is in line with Liaw et al. (2016).

In their fourth year, the association between fulfilment and a desire to help others was maintained but based on the notion of helping in a professional capacity. This variation may be the result of their academic background and clinical placements in healthcare facilities, an aspect also mentioned in several studies (Liaw et al., 2016; Raymond et al., 2018; Hoeve et al., 2017). References to interest in providing care were predominant and exceeded other motives such as fulfilment. Their rationale described the professional activities of the nursing discipline to a broader extent, but showed a vision limited to the hospital care setting. This perspective reflects a perception of nursing that is limited to providing care for others, which has also been identified in other studies (Liaw et al., 2016; Suluhan et al., 2020). Raymond et al. (2018) referred to it as clinical roles, which include: undertaking clinical procedures, treating people, monitoring people, and saving lives.

At no point were reasons given related to the nature of the profession

with regards to aspects such as management, teaching, or research. This view of the profession as limited to the hospital care setting is shown again during their fourth year in the week prior to becoming professionals. This finding is worrying, as it shows that over the course of the bachelor's degree in nursing, students have not continued their nursing studies thanks to the generation and transmission of new knowledge, nor through the leadership of care management on any level. It appears that the students have not integrated research, teaching, and management as fundamental components of care delivery and their desire to help others. This situation is not exclusive to Spain: the absence of research, teaching, and management vocations in the field of nursing has also been reported by authors in the United States (Bette, 2022; Byrd, 2022; Jarosinski et al., 2022). The WHO (2021) has stated that the shortages of qualified faculty to educate nurses, particularly at the bachelor's degree level and above, is a global problem.

These results suggest that strategies need to be developed to project a more comprehensive image of the nursing profession that encompasses competences, pathways for development, research, leadership, and participation in health policies, helping to decouple the profession from traditional values such as vocation and altruism. This would mean exposure to real professional and academic development opportunities for nurses in traditional and social media, including series and films, to destabilise the gender stereotypes that keep men out of nursing and limit women's professional development.

Nursing schools could be more proactive in their recruitment and promotion days, making them a meeting point for leading professionals from different areas of nursing and science baccalaureates, students, and teachers. This would increase the prior knowledge of the profession held by future students, career advisors, and families, while painting a more realistic, mature portrait of nursing. The recruitment of students and their future self-concept and professional self-esteem could be positively affected. It would become a feedback loop that, at the same time, expands on their own vision of growth and career development opportunities as nurses. Also, nursing schools may need to redirect their programmes towards the needs of society today and make them more attractive to prospective students. This would bring students closer to these areas, which at present, are largely unknown to the population, as

they do not feature among the reasons for continuing and completing a bachelor's degree in nursing.

6. Conclusions

The bachelor's degree in nursing was the first-choice degree programme for more than two-thirds of the participating students, who were mostly women. They exhibited strong intrinsic motivation related to self-satisfaction in helping others as the main reason for this decision. However, the reasons for completing this degree were characterised by extrinsic motivations, such as those linked to the inherent components of professional nursing activity in a hospital care setting. The reasons for choosing and completing their studies did not include an interest in or desire to pursue areas such as management, teaching, or research.

Participants completed their studies with a reductionist and limited vision of nursing, as well as of their own future professional development. Here, we identified an important area for future research that will enable us to explore the causes of this limited vision to establish strategies to attract students and recent graduates to practice nursing outside of the hospital care setting, where the lack of nurses is unmistakable.

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CRediT authorship contribution statement

Cristina Teresa-Morales: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. **Margarita Rodríguez-Pérez:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. **Juan Diego Ramos-Pichardo:** Data curation, Formal analysis, Funding acquisition, Investigation, Software, Validation.

Declaration of competing interest

None.

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Appendix A. Supplementary data

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