Original Article

## Factors influencing nursing students' decision to choose nursing

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Background: Nurses are the "front line" staff in most health systems and their contribution is recognised as essential in meeting development goals and delivering safe and effective care (ICN, 2007). Nurses are in high demand not only in developed countries but also in developing countries like Malaysia. However, more than 70% of Malaysian hospitals currently do not have adequate nursing staff. At least 174,000 nurses need to be trained by 2020 to meet WHO's nurse-to-patient ratio of 1:200. The purpose of this study is to identify the main factors that influence the nursing students' decision to choose nursing as their career.

**Method:** A descriptive study guided by Self Determination Theory was used for this study. A 29-item questionnaire adapted from McCabe, Nowak and Mullen (2005) was distributed to all students in a nursing college (n=117).

Results: The five main reasons for choosing nursing as a career were "ability to help others", "training was provided on the job", "ability to work closely with people", "parental advice", and "accommodation was provided while training". The top three main domains that influenced the nursing students' decision to choose nursing as their career include "travel opportunities of nursing", "intrinsic attraction of nursing" and "immediacy of support on entry to nursing". A total of 19 (0.2%) will not choose nursing if given a chance. The main reasons were "want to take another course", "no time to spend with family" and "nursing is a stressful job".

**Conclusion:** The findings of this study provided valuable information regarding motivating factors which attract the current generation to join nursing. It is of concern that items representing nurses' image were not rated highly.

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Key words: career, extrinsic factors, intrinsic factors, nursing, student nurse

#### Introduction

Nurses are the "front line" staff in most health systems and their contribution is recognised as essential in meeting development goals and delivering safe and effective care (ICN, 2007). Nurses are not only responsible in helping to restore the health and alleviate the suffering for the patient, they are required to promote health and prevent illness to the people too. It is widely accepted that nursing as a career is viewed favourably by society as it offers job security, mobility and career (Mooney, Glacken & O'Brien, 2008).

However, health care is facing a crisis with the global shortage of nurses (WHO, 2006) and there are many studies in the past that suggested different reasons to address this issue, such as nurses' ageing profile (Roberts & Ward-Smith 2010), a decrease in recruitment of new people into the nursing profession (Borkowski *et al* 2007) and massive turnover (Hayes *et al* 2006). Nursing recruitment and retention is always an important topic, and this has led to an increased interest in motives for entering and exiting the nursing profession (Jirwe & Rudman, 2012).

According to U.S Department of Health and Human Services in 2007, nursing was the largest health care profession in the U.S, with more than 2.9 million registered nurses nationwide. However, according to the latest projections from the U.S Bureau of Labour Statistics, more than one million new nurses will be needed by 2016 in order to meet the nation's requirements. The current trends in number of nursing personnel in relation to population indicate an imbalance between industrialised and developing countries (Mooney, Glacken, & O'Brien, 2008). In Pakistan, it was reported that 13,132 nurses were produced each year in four provinces where the ratio came to 1 nurse per 3,175 patients (Ministry of Health of Pakistan, 2005). The nurse-to-patient ratio in Pakistan is obviously short as compared to the standards set by the World Health Organisation (WHO) whereby the recommended ratio is 1:200.

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Nurses are in high demand not only in developed countries but also in developing countries like Malaysia. However, more than 70% of Malaysian hospitals currently do not have adequate nursing staff (Bernama, 2011). In Malaysia, the shortage of nurses and doctors has been identified as a critical problem faced by public hospitals (Barnett *et al.*, 2010). The Malaysian nurseratio is 1:599 (Ministry of Health Malaysia, 2009) and at least 174,000 nurses need to be trained by 2020 to meet WHO's nurse-to-patient ratio (Barnett *et al.*, 2010).

Therefore, in order to attract more applicants into nursing especially those who are truly interested, there is a need to identify the factors influencing their decision. Hence, the purpose of this study is to identify the main factors that influence the nursing students' decision to choose nursing as their career.

#### Methods

## Study design, setting and sample

A descriptive research design was used to identify the motivating reasons for joining nursing. The survey was undertaken between January and February 2014 in a private nursing college in Klang Valley, Malaysia. The sampling method used was universal convenience sampling. All nursing students from semesters 1 till 6 (n = 117) who were enrolled in a 3-year Diploma in Nursing programme constituted the population of the study.

## Ethical considerations

The study was approved by the International Medical University Joint Committee on Ethics and Research. In order to ensure ethical clarity, prior arrangement was made to brief the students in the classroom regarding the nature and purpose of the study and to emphasise that their participation is of a voluntary nature. Informed consent was obtained directly from the students before commencement of the data collection.

#### Measurement and instrument

The data was collected based on a 34-item self-explanatory structured questionnaire. Section A, being the demographic section, comprises of four items that consisted of questions related to the participants' age, year of study, gender and ethnic. Section B comprised of 29 items with a four point Likert scale to indicate level of importance for each item. Responses ranged from 0 (not important) to 3 (very important). Section B was categorised into five domains: Part one comprised of eight items relating to intrinsic attraction of nursing; Part two consisted of seven items related to extrinsic rewards in nursing; Part three consisted of five items related to employment security over life in nursing, Part four and five consisted of three items each for immediacy of support on entry to nursing and influence of others in choosing nursing; Part six comprised of one item related to travel opportunities in nursing. Item number 28 requires the participants to answer "yes" or "no" to the question "If you can go back in time, will you still choose nursing?" If the response to item 28 is no, the respondents will be required to state their reason(s). The instrument was adapted from "Motivating Reasons in the Decision to Enter Nursing" developed by Rebecca McCabe, Margaret Nowak and Scott Mullen in 2005. Permission for the use of the instrument was obtained from the original author.

## Validity and reliability testing

The instrument was measured and tested for its status of validity and reliability to obtain a representative data. A pilot study was conducted with 10 students to determine the reliability of the questionnaire and validated by a panel of experts consisting of nursing lecturers for content validity. Cronbach's alpha coefficient of the questionnaire was 0.77 which illustrated an acceptable degree of internal reliability.

## Data analysis

Data were analysed using Predictive Analytics Software (PASW) version 19.0. Percentage, mean and standard deviation were used to describe the data.

## Results

## Demographic characteristics

As reported in Table 1, the majority of the respondents were the second year students (66.7%), 21 years old (24.8%), females (89.7%) and Malay (61.5%).

# Motivating Reasons in the Decision to Enter Nursing results

The five main intrinsic reasons for joining nursing were "The ability to help others" with a mean of 2.79 (SD = 0.41); items "ability to work closely with the people" and "ability to make a strong contribution to society" were second with mean scores of 2.50 (SD = 0.54 and 0.55 respectively) followed by item "nursing is a mentally challenging work" with a mean score of 2.44 (SD = 0.55). However, lower ratings were reported for the remaining reasons "community respects nurses" (M = 2.42, SD = 0.69), "interesting and challenging" (M = 2.38, SD = 0.56), "profession perceived to carry prestige" (M = 2.34, SD = 0.56) and "exciting work" (M = 2.2, SD = 0.67). The overall mean for intrinsic attraction of nursing domain is 2.45 (SD = 0.32).

Extrinsic reasons for joining nursing are represented by seven items, which consist of "flexible hours of work", "responsibility and autonomy in profession", "future earning potential", "opportunities of promotion and advancement", "opportunity for creativity and originality", "pleasant working conditions", and "time required to qualify for profession". It is interesting to find that "future earning potential" with mean score of 2.44 (SD = 0.53) and "responsibility and autonomy in profession" with mean of 2.41 (SD = 0.56) are the two

main extrinsic reasons to join nursing. This is followed by "opportunities for promotion and advancement" and "time required to qualify for profession' mean 2.25 (SD = 0.54). However, "opportunity for creativity and originality" with mean of 2.10 (SD = 0.56) and "flexible hours of work" with a mean score of 2.04 (SD = 0.71) were considered to be among the less popular reasons. The overall mean for this domain is 2.25 (SD = 0.36).

With regards to employment security over life of nursing, the most important factor that influenced the respondents is "nursing skills in demand" with a mean of 2.43 (SD = 0.58) followed by job security, mean score 2.40 (SD = 0.53) and the ability to combine work and family commitment with mean of 2.31 (SD = 0.69). Majority of the respondents supported the fact that nursing was a good career for women and nursing provided the flexibility to leave the job and return later, with both items scoring a mean of 2.05 (SD = 0.88). The overall mean for this domain is 2.19 (SD = 0.44).

Items "training was provided on the job", the "ability to earn while studying" and "accommodation was provided while training" are among the items that are considered under immediacy support domain. The mean scores were  $2.53~(\mathrm{SD}=0.52)$  for "training was provided on the job"  $2.31~(\mathrm{SD}=0.74)$  for "ability to earn while studying" followed by "accommodation was provided while training" with mean of  $2.5~(\mathrm{SD}=0.64)$ . The overall mean for immediacy of support is  $2.19~(\mathrm{SD}=0.44)$ .

Parents was considered to be the most influential person in determining the students' decision with mean score 2.5 (SD = 0.55) followed by career advisers/teachers 'advice mean score 2.12 (SD = 0.73). The overall mean for this domain is 2.20 (SD = 0.54).

For travel opportunities, 56.4% rated this as "very important", 35% as "important" while 8.5% thought otherwise. Overall mean for this domain is 2.46 (SD = 0.70).

**Table I:** Demographic profile of students in a nursing college (n =117)

Characteristics	n (%)
Gender	
Female	105 (89.7)
Male	12 (10.3)
Age (years)	
19	11 (9.4)
20	56 (47.9)
21	29 (24.8)
22	20 (17.1)
26	1 (0.9)
Ethnicity	
Malay	72 (61.5)
Chinese	22 (18.8)
Indian	12 (10.3)
Others	11 (9.4)
Year of enrolment	
Year 1	15 (12.8)
Year 2	78 (66.7)
Year 3	24 (20.5)
TOTAL	117 (100)

Table II shows the mean values of the six domains where travel opportunities of nursing has the highest mean 2.46 (SD = 0.70) followed by intrinsic attraction to nursing 2.45 (SD = 0.32), immediacy support on entry to nursing 2.44 (SD = 0.49), "extrinsic rewards of nursing" 2.25 (SD = 0.36). Influence of others in choosing nursing 2.20 (SD = 0.54) and employment security over life of nursing 2.19 (SD = 0.44) respectively are the two lowest means as compared to the rest of the domains.

## If you can go back in time, will you still choose nursing?

Majority of the respondents (83.8%) revealed that they will still choose nursing if they can go back in time. The reasons given for those who had responded otherwise include "wanting to take other course" (57.9%), "no time to spent with family" (31.6%) and "nursing is a stressful job" (10.5%).

**Table II:** Comparison of means for the six domains (n = 117)

Domain	M ± SD
Travel opportunities of nursing	$2.46 \pm 0.70$
Intrinsic attraction to nursing	2.45 ± 0.32
Immediacy of support on entry to nursing	2.44 ± 0.49
Extrinsic rewards of nursing	2.25 ± 0.36
Influence of others in choosing nursing	2.20 ± 0.54
Employment security over life of nursing	2.19 ± 0.44

#### Discussion

In this current study, it is apparent that the idea of helping others plays a significant role in influencing student nurses in their decision to choose nursing as a profession as this item has the highest mean in this study (M = 2.79, SD = 0.41). The notion of "desire to help others" remains as the most valid reason for people to take up nursing as their career choice (Dal, Arifoglu & Razi, 2008). Similar findings was also noted in a Swedish study by Jirwe and Rudman (2011) where 73.3 % of the nursing students stated that they choose nursing because they wanted to care and help others while another study done in India (Patidar et al, 2011) reported that 99.1% chose to enter nursing as this profession served as an opportunity to serve humanity. "Ability to work closely with people" (M = 2.50, SD = 0.54) is among the top main reasons under the umbrella of "intrinsic attraction to nursing"; this finding is further supported by Eley, Eley and Rogers-Clark (2010) where the majority of the respondents perceived that nursing provides them with the opportunity to work with people. It is clear from this study that "ability to make a strong contribution to the society" (M = 2.5, SD = 0.55) is also one of the popular choices for the student to choose nursing as a career, and a similar finding was reported in Australia (Eley, Eley & Rogers-Clark, 2010), where "sense of giving to the community" was ranked fifth out of 17 items. Item "interesting and challenging work" has a low mean (M = 2.38, SD = 0.56) and was placed among the five bottom of the list in this domain. This is similar to findings by Abd El Rahman and Abou Shousha (2013) where 44.6% do not consider nursing as a "challenging career". These findings contradict with the findings reported by McCabe, Nowak and Mullen in 2005 where 85.5% of the respondents felt that nursing is interesting and challenging work.

"Future earning potential" had the highest mean of 2.44 (SD = 0.53) among the items under extrinsic domain. This finding is similar to an Egyptian study done by Khamis Mohemmed and Ahmed El-Sayed (2013) where the respondents considered good salary as the most important reason for entering nursing. However, several studies reported otherwise where future earning potential was reported to be the least important motives in choosing nursing as a career (Dal et al, 2009; Cho et al, 2010; Diomidous et al, 2011; Natan & Becker, 2010; Eley, Eley & Rogers-Clark, 2010). Item on "opportunities for promotion and advancement" (M = 2.38, SD = 0.64) was rated positively. According to a Korean study by Cho et al (2010), only 5% perceived that "potential for self-development" influenced them in entering nursing education while Eley, Eley & Rogers-Clark (2010) reported that prospects for career progression" (29%) also produced the same results.

The item "Nursing skills always seemed to be in demand" (M = 2.43, SD = 0.58) was listed the highest for employment security over life of nursing category in this current study. McCabe, Nowak and Mullen (2005) also reported a similar finding. This is followed by the

item "job security" (M = 2.40, SD = 0.53) which was also reported in Korea (Cho *et al* (2010).

The item that has the highest mean for immediacy support on entry to nursing is "training was provided on the job" 2.53 (SD = 0.52) followed by "accommodation was provided while training" 2.50 (SD = 0.64), which is similar to the findings reported by McCabe, Nowak and Mullen (2005) where 68.4% and 63.3% agreed respectively. They also found that the importance attributed by these two factors reflected that younger generation wanted to live independently instead of depending on their family and other support.

Parents play a very important role in influencing their children's career decision in this study. This is supported by the finding of a study conducted in Ghana where a positive relationship between parental influence and the choice of nursing as a profession was reported (Mwini-Nyaledzigbor *et al*, 2014). However, several studies done in India and Pakistan reported otherwise (Patidar *et al*, 2011; Manzoor, Daud & Rahat Hashmi, 2010).

The item on travelling opportunities was rated highly by the respondents. Mwini-Nyailedzigbor *et al* (2014) found a positive correlation between travel intention and reason in choosing nursing. They indicated that once the student nurses are registered, they are eligible to register in any overseas country of their choice as the profession offers many opportunities to travel, to obtain diverse nursing experiences, and to care for people of different cultures.

The top reason that influenced the nursing student to enter nursing is no longer the intrinsic motivation factor, instead "travel opportunities of nursing" has the highest mean among all the domains 2.46 (SD = 0.70), followed by intrinsic attraction of nursing 2.45 (SD = 0.32) and immediacy of support on entry to nursing 2.44 (SD = 0.49). This finding is in alignment with a study conducted by Mwini-Nyailedzigbor *et al.* (2014) where they found that there is a positive correlation between student nurses' intention to travel and their choice of the nursing profession. A total of 84% stated their intention

to travel, especially to more developed countries. A study by Patidar et al (2011) in India also showed that 66% of the respondents planned to go abroad after completing their studies with the majority of the students attracted to migrate to a foreign country in the hope of getting good professional opportunities and better quality of life. This finding is consistent with findings from a previous study done by Oates (2006) where a positive correlation between exodus of nurses to developed world and choice of nursing was indicated. Mwini-Nyaledzigbor et al (2014) reported that Australian and New Zealand nurses perceived that registered nurses belong to a profession that is "transportable" and in high demand. They indicated that being able to work and travel anywhere in overseas is a benefit that few professions provide. This finding is surprising as it is contrary with the previous researches that claimed that intrinsic factors (Natan & Becker, 2010) and altruism (Eley, Eley & Rogers-Clark, 2010) are still the top motives for nursing students to choose nursing as their career.

However, Eley, Eley and Rogers-Clark (2010) stated that it is generally accepted that Generation Y is different and wants more lifestyle choices than the previous generation. Johnson et al (2007) reported that the value of altruism in nursing students has generally declined in the past two decades. Gen Y nurses were also reported to demonstrate a high level of affective commitment towards nursing but they do not show a high level of continuance or normative commitment. It is questionable if they have long term career plans to remain in nursing (Jamieson, 2013). This explained why the top motives for student nurses in this study differ from the past studies. This is an important finding which challenges the traditional assumptions that intrinsic motivational factors that consist of altruism will lure the people to choose nursing as a career.

This study also revealed that 83.8% will still choose nursing if they can turn back time. This is in alignment with a study conducted in India by Patidar *et al* (2011) where their finding showed that the vast majority of the respondents (93.4%) will still choose nursing and are

not interested to change profession. This is consistent with the previous published research in Australia, (Pelletier et al, 2005) where similar results were reported. The reasons given by those who choose "no" (16.2%) in this study stated that they wanted to take other courses (57.9%), they want to spend more time with family (31.6%) and nursing is a stressful job (10.5%). Patidar et al (2011) also found that a significant number of undergraduate nursing students in his study perceived nursing as undignified and a profession that lacked respect. This explained why "opportunity for creativity and originality" is among the bottom of the list in this study. According to Cho et al (2010) the public image perceived that nursing is considered less attractive in the aspect of on-the-job independence as compared to physicians, physical therapists, and even high school teachers.

#### Limitations

The findings of this study may not be generalisable in view of the fact that it used data gathered from only one nursing school. Thus this may not be representative of student nurses from other institutions.

## Conclusion

This study is aimed at finding out the main reasons that influence the nursing students' decision to choose nursing as their career of choice. Surprisingly, the main domain that influenced the students in this study was the travelling opportunity, followed by intrinsic attraction of nursing. The main reason for nursing student to choose nursing is still "the ability to help others", a factor that has always been the reason for people to choose nursing for years. It also important to note that in contrary with past studies, few extrinsic motivational values have also emerged as the main reasons for nursing students to choose nursing, such as "training was provided on the job", "parental advice", "accommodation was provided while training", "opportunities to travel" as well as "future earning potential". It is clear that the items representing nurses' image ("the profession was perceived to carry prestige", "good career for women", "pleasant working condition" and "creativity and originality") were not rated highly by the respondents. It is evident that measures need to be taken to improve the nursing image among the public. Thus, the administrators and nurse educators in the nursing colleges need to educate the public on what nursing truly is. This misconception needs to be tackled from the grass root level as well, thus, collaboration with school counsellors is crucial to clarify the misconception that the students have regarding the nursing profession.

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